



R32 **MULTI V<sup>TM</sup> S**  
WITH  
**LGRED<sup>°</sup>**  
**OUTDOOR UNIT  
ENGINEERING MANUAL**



Variable Refrigerant Flow  
Heat Pump Outdoor Unit  
2.0 Tons



Variable Refrigerant Flow  
(Heat Pump or Heat Recovery Combination)  
Outdoor Units 3.0, 4.0, and 5 Tons

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This document is for design purposes only.**

A summary list of safety precautions is on page 4.

**For more technical materials such as submittals, indoor unit engineering manuals, catalogs, installation, owner's, and service manuals, visit [www.lghvac.com](http://www.lghvac.com).**

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR® criteria. Ask your contractor for details or visit [www.energystar.gov](http://www.energystar.gov).

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# TABLE OF SYMBOLS

|                                                                                                  |                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | Indicates that this appliance uses a flammable refrigerant. If the refrigerant leaks and is exposed to an external ignition source, there is a risk of fire.     |
|  <b>DANGER</b>  | Indicates a hazardous situation that, if not avoided, <b>WILL RESULT IN DEATH OR SERIOUS INJURY</b> . <sup>1</sup>                                               |
|  <b>WARNING</b> | Indicates a hazardous situation that, if not avoided, <b>COULD RESULT IN DEATH OR SERIOUS INJURY</b> . <sup>1</sup>                                              |
|  <b>CAUTION</b> | Indicates a hazardous situation that, if not avoided, <b>COULD RESULT IN MINOR OR MODERATE INJURY</b> . <sup>1</sup>                                             |
| <b>NOTICE</b>                                                                                    | Indicates information considered important, but not hazard-related; indicates situations that may result in equipment or property damage accidents. <sup>1</sup> |
|                 | This symbol indicates an action that should not be performed.                                                                                                    |

<sup>1</sup>Signal words, symbols, and definitions taken from American National Standards Institute (ANSI) Z535.6. See <https://www.ansi.org/> for more information.



## R32 Refrigerant

LG Electronic split system heating and air conditioning (HVAC) products now contain R32 refrigerant. While R32 refrigerant is slightly flammable, it has a higher efficiency, a lower Global Warming Potential (GWP) value, and is more environmentally friendly than R410A.

R32 Ozone Depletion Potential (ODP) Value: 0.

R32 Global Warming Potential (GWP) Value: 675.

The amount of refrigerant depends on outdoor unit to indoor unit configuration. All refrigerant piping system components (copper piping, joints, and other fittings) must be selected and installed to conform with Refrigeration Safety Regulation standards. Use LG Air Conditioner Technical Solution (LATS) Software to verify the refrigerant amount needed for each installation.

### WARNING

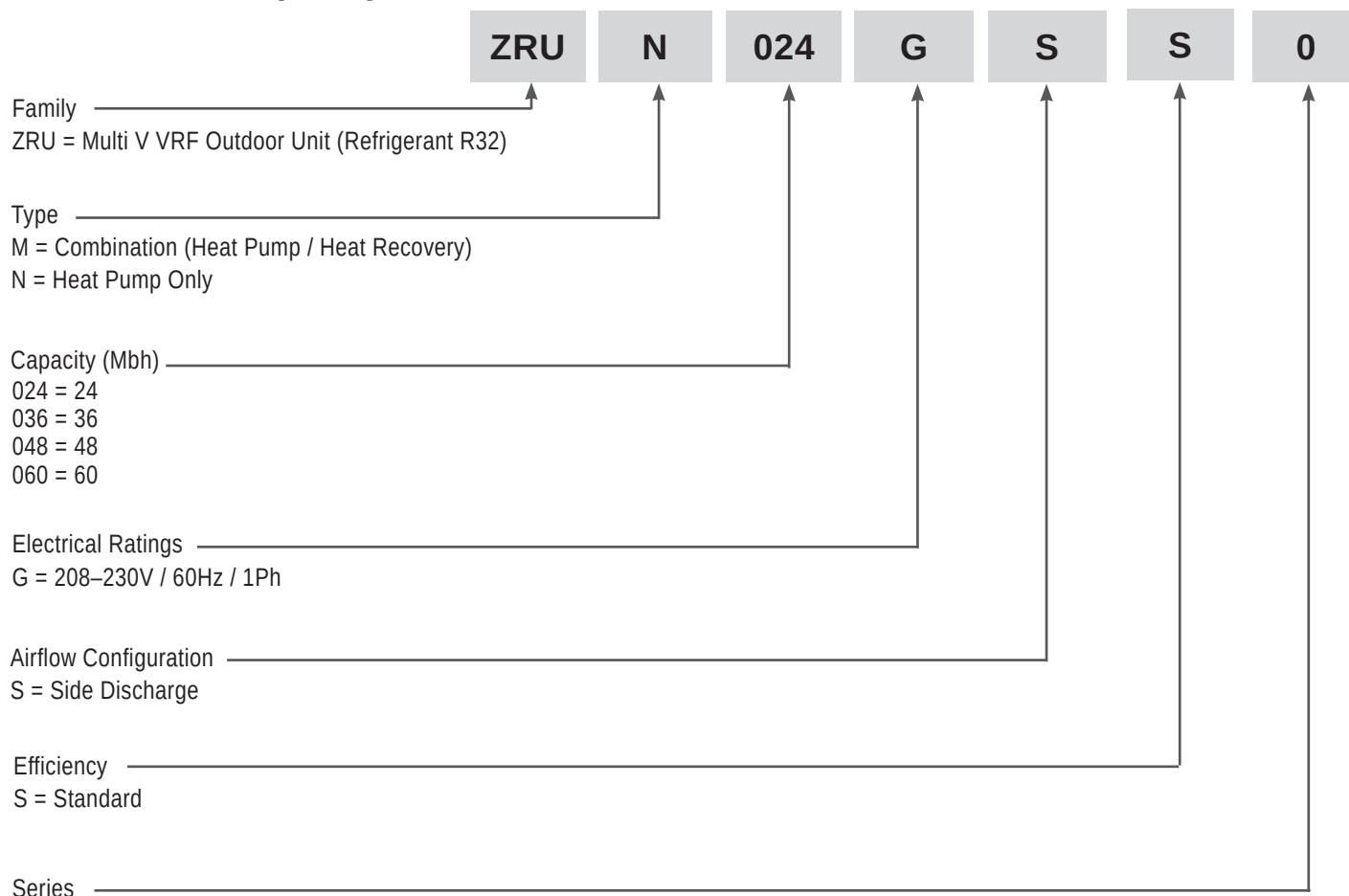
- This HVAC system contains fluorinated greenhouse gases in the form of R32 refrigerant.  Do not leak refrigerant gas into the atmosphere.
- Only use R32 as the refrigerant in these HVAC systems. If other substances are added, it may cause an explosion.
- R32 refrigerant is slightly flammable. When handled properly, it does not leak. If the refrigerant leaks in the installation area and comes in contact with a flame, it may generate a fire and / or harmful gas.
- If a leak occurs, immediately turn off any combustion devices, ventilate the installation area, and contact the dealer / contractor where the HVAC unit was purchased.  Do not operate the unit until the refrigerant leaked is repaired.

### CAUTION

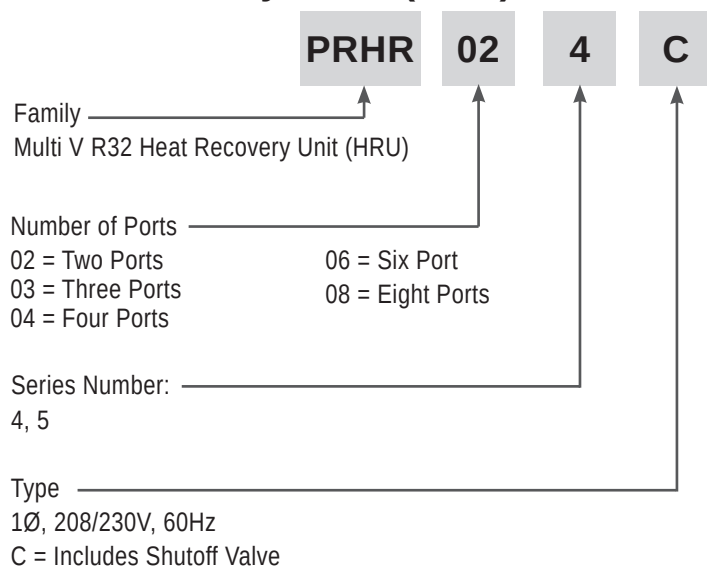
- Piping wall thickness must comply with all applicable local, state, and federal regulations for the design pressures listed by the manufacturer.  Unapproved piping must not be used.
- To prevent piping from softening,  do not heat the piping more than necessary.



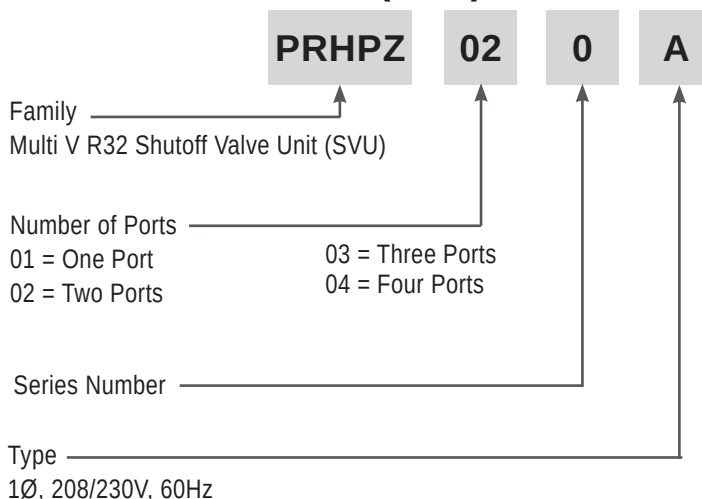
## Outdoor Units (ODU)



## Heat Recovery Units (HRU)



## Shutoff Valve Units (SVU)



# LG AIR CONDITIONER TECHNICAL SOLUTION (LATS)



## LG Air Conditioner Technical Solution (LATS) Software

A properly designed and installed refrigerant piping system is critical to the optimal performance of LG air-conditioning systems. To assist engineers, LG offers, free of charge, LG Air Conditioner Technical Solution (LATS) software—a total design solution for LG air conditioning systems. Contact your LG Rep for the best software program for your application.

### NOTICE

To reduce the risk of designing an improper applied system or one that will not operate correctly, LG requires that LATS software be used on all projects.

### Formats

LATS is available to LG customers in two user interfaces: LATS HVAC and LATS Revit. Both LATS formats are available through [www.myLGHVAC.com](http://www.myLGHVAC.com), or contact an LG Sales Representative.

LATS HVAC is a Windows®-based application that aids engineers in designing LG Variable Refrigerant Flow (VRF), Multi F / Multi F MAX, Single-Zone, DOAS, and Energy Recovery Ventilator (ERV) systems.

\*Windows® is a registered mark of Microsoft® Corporation.

LATS Revit integrates the LG LATS program with Revit® software\*\*. It permits engineers to layout and validate LG VRF, Multi F / Multi F MAX, Single-Zone, and DOAS directly into Revit drawings.

\*\*Revit® is a registered mark of Autodesk, Inc.

### Features

All LG product design criteria have been loaded into the program, making LATS simple to use: double click or drag and drop the component choices. Build systems in Tree Mode where the refrigerant system can be viewed. Switch to a Schematic diagram to see the electrical and communications wiring.

LATS software permits the user to input region data, indoor and outdoor design temperatures, modify humidity default values, zoning, specify type and size of outdoor units and indoor units, and input air flow and external static pressure (ESP) for ducted indoor units.

The program can also:

- Import building loads from a separate Excel file.
- Present options for outdoor unit auto selection.
- Automatically calculate component capacity based on design conditions for the chosen region.
- Verify if the height differences between the various system components are within system limits.
- Provide the correct size of each refrigerant piping segment and LG Y-Branches and Headers.
- Adjust overall piping system length when elbows are added.
- Check for component piping limitations and flag if any parameters are broken.
- Factor operation and capacity for defrost operation.
- Calculate refrigerant charge, noting any additional trim charge.
- Suggest accessories for indoor units and outdoor units.
- Run system simulation.

### NOTICE

Features depend on which LATS program is being used, and the type of system being designed. Contact your LG representative for the best software program for your application.

### NOTICE

Any field changes, such as re-routing, shortening or lengthening a pipe segment, adding or eliminating elbows and/or fittings, re-sizing, adding, or eliminating indoor units, changing the mounting height, or moving the location of a device or fitting during installation must be done with caution and ALWAYS VERIFIED in LATS SOFTWARE BEFORE supplies are purchased or installed. Doing so will lead to a more profitable installation, reduce the potential for rework, and will reduce the potential for multiple visits to the job site to complete the system set up.

Figure 1: LATS Example (Tree Diagram; Illustrative Purposes Only. System will Vary Depending On Model).



## LATS Generates a Complete Project Report

LATS software also generates a report containing project design parameters, cooling and heating design data, system component performance, and capacity data. The report includes system combination ratio and refrigerant charge calculations; and provides detailed bill of material, including outdoor units, indoor units, control devices, accessories, refrigerant pipe sizes segregated by building, by system, by pipe size, and by pipe segments. LATS can generate an Excel GERP report that can be imported into the LG SOPS pricing and ordering system.

## Proper Design to Install Procedure

LG encourages a two report design-to-install-procedure. After the design engineer determines building / zone loads and other details, the engineer opens the LATS program and inputs the project's information. When the design is complete, the "Auto Piping" and "System Check" functions must be used to verify piping sizes, limitations, and if any design errors are present. If errors are found, engineers must adjust the design, and run Auto Piping and System Check again. When the design passes the checks, then the engineer prints out a project "Shop Drawing" (LATS Tree Diagram) and provides it to the installing contractor. The contractor must follow the LATS Tree Diagram when building the piping system, but oftentimes the design changes on the building site:

- Architect has changed location and/or purpose of room(s).
- Outdoor unit cannot be placed where originally intended.
- Structural elements prevent routing the piping as planned.
- Air conditioning system conflicts with other building systems (plumbing, gas lines, etc.).

The contractor must mark any deviation from the design on the Shop Drawing, including as-built straight lines and elbows. This "Mark Up" drawing must be returned to the design engineer or Rep, who must input contractor changes into the LATS file. (Copy the original LATS software file, save and rename as a separate file, and modify all piping lengths by double-clicking on each length and editing information.) Like the shop drawing, the Auto Piping and System Check must also be run on this new "As Built" drawing. The design engineer or Rep must then provide the final As Built file to the contractor. The Mark Up version must be compared to the As Built version for:

- Differences in pipe diameter(s). If incorrect diameters have been installed, the piping must be changed out. If pipe diameters have changed, check if Y-Branches will also need to be changed.
- Changes to outdoor unit and indoor unit capacities. Capacities changes will impact line length changes.
- Additional refrigerant charge quantity ("Trim Charge"). Trim charge will change if piping lengths and diameters change. The As Built version must reflect installed piping lengths to ensure correct trim charge.

All documents submitted by the contractor, as well as the Shop Drawing and the As Built Drawing files must be provided for commissioning purposes. Model and serial numbers for all system components must also be submitted. If the steps previously detailed are not followed, and all documents are not provided to the commissioning agent, the project runs the risk of not being commissioned and voiding any limited warranty LG offers on the equipment.

## NOTICE

**Any field changes, such as re-routing, shortening or lengthening a pipe segment, adding or eliminating elbows and/or fittings, re-sizing, adding, or eliminating indoor units, changing the mounting height, or moving the location of a device or fitting during installation must be done with caution and ALWAYS VERIFIED in LATS SOFTWARE BEFORE supplies are purchased or installed. Doing so will lead to a more profitable installation, reduce the potential for rework, and will reduce the potential for multiple visits to the job site to complete the system commissioning.**

# REFRIGERANT CHARGE WORKSHEET

Multi V S System R32 Refrigerant Charge Calculator (lbs.)



| <b>System Tag or ID:</b> |                                                                                                                                   | <b>Job Name:</b> _____        |             |          |                        |              |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------|----------|------------------------|--------------|
|                          |                                                                                                                                   | <b>Project Manager:</b> _____ |             |          | <b>Date:</b> _____     |              |
| Line #                   | Description                                                                                                                       | Chassis I.D.                  | Size        | Quantity | CF (Ref.) <sup>1</sup> | Total (lbs.) |
| 1                        | Linear feet of 1/4" liquid line tubing <sup>2</sup>                                                                               | —                             | —           |          | 0.013                  |              |
| 2                        | Linear feet of 3/8" liquid line tubing <sup>2</sup>                                                                               | —                             | —           |          | 0.036                  |              |
| 3                        | Linear feet of 1/2" liquid line tubing <sup>2</sup>                                                                               | —                             | —           |          | 0.069                  |              |
| 4                        | Linear feet of 5/8" liquid line tubing <sup>2</sup>                                                                               | —                             | —           |          | 0.103                  |              |
| 5                        | Linear feet of 3/4" liquid line tubing <sup>2</sup>                                                                               | —                             | —           |          | 0.158                  |              |
| 6                        | Linear feet of 7/8" liquid line tubing <sup>2</sup>                                                                               | —                             | —           |          | 0.210                  |              |
| 7                        | Linear feet of 1" liquid line tubing <sup>2</sup>                                                                                 | —                             | —           |          | 0.284                  |              |
| 8                        | Standard + Art Cool Mirror                                                                                                        | SJ                            | 5k to 15k   |          | 0.44                   |              |
| 9                        | Standard + Art Cool Mirror                                                                                                        | SK                            | 18k to 24k  |          | 0.51                   |              |
| 10                       | Standard                                                                                                                          | SR                            | 30k to 36k  |          | 1.08                   |              |
| 11                       | 1-Way Cassette                                                                                                                    | TC                            | 7k to 18k   |          | 0.42                   |              |
| 12                       | 2-Way Cassette                                                                                                                    | TS                            | 18k to 24k  |          | 0.62                   |              |
| 13                       | 4-Way 2' x 2' Cassette                                                                                                            | TR                            | 5k to 7k    |          | 0.33                   |              |
| 14                       | 4-Way 2' x 2' Cassette                                                                                                            | TR                            | 9k to 12k   |          | 0.46                   |              |
| 15                       | 4-Way 2' x 2' Cassette                                                                                                            | TQ                            | 15k to 18k  |          | 0.57                   |              |
| 16                       | 4-Way 3' x 3' Cassette                                                                                                            | TA                            | 7k to 48k   |          | 1.23                   |              |
| 17                       | High Static Ducted                                                                                                                | M2                            | 7k to 24k   |          | 0.64                   |              |
| 18                       | High Static Ducted                                                                                                                | M3                            | 28k         |          | 1.10                   |              |
| 19                       | High Static Ducted                                                                                                                | B8                            | 36k to 96k  | □        | 1.83                   |              |
| 20                       | Mid Static Ducted                                                                                                                 | M2                            | 36k to 42k  | □        | 0.95                   |              |
| 21                       | Mid Static Ducted                                                                                                                 | M3                            | 48k         | □        | 1.10                   |              |
| 22                       | Low Static Ducted, Low Static Ducted Bottom Return                                                                                | L1                            | 7k to 9k    |          | 0.26                   |              |
| 23                       | Low Static Ducted, Low Static Ducted Bottom Return                                                                                | L2                            | 12k to 18k  |          | 0.37                   |              |
| 24                       | Low Static Ducted, Low Static Ducted Bottom Return                                                                                | L3                            | 24k         |          | 0.49                   |              |
| 25                       | Vertical / Horizontal Air Handling Unit                                                                                           | NA                            | 12k to 30k  |          | 0.86                   |              |
| 26                       | Vertical / Horizontal Air Handling Unit                                                                                           | NB                            | 36k to 48k  |          | 1.68                   |              |
| 27                       | Vertical / Horizontal Air Handling Unit                                                                                           | NC                            | 54k to 60k  |          | 1.68                   |              |
| 28                       | Floor Standing                                                                                                                    | CE (U)                        | 7k to 15k   |          | 0.31                   |              |
| 29                       | Floor Standing                                                                                                                    | CF (U)                        | 18k to 24k  |          | 0.68                   |              |
| 30                       | Heat Recovery Units (HRU): PRHR024C, 034C, 044C                                                                                   | —                             | —           |          | 1.0                    |              |
| 31                       | Heat Recovery Units (HRU): PRHR065C, 085C                                                                                         | —                             | —           |          | 2.0                    |              |
| 32                       | ADDITIONAL Refrigerant Charge Required (Sum of lines 1 – 31)                                                                      |                               |             |          |                        |              |
| 33                       | Outdoor Unit Factory Refrigerant Charge<br>(Choose One) (lbs.)                                                                    | 33A                           | ZRUN024GSS0 | 24,000   |                        | 3.3          |
|                          |                                                                                                                                   | 33B                           | ZRUM036GSS0 | 36,000   |                        | 6            |
|                          |                                                                                                                                   | 33C                           | ZRUM048GSS0 | 48,000   |                        | 6            |
|                          |                                                                                                                                   | 33D                           | ZRUM060GSS0 | 60,000   |                        | 6.9          |
| 34                       | Total FACTORY Outdoor Unit (ODU) Refrigerant Charge (Sum of factory refrigerant charges for all ODUs in the system)               |                               |             |          |                        |              |
| 35                       | TOTAL SYSTEM CHARGE<br>Sum of ADDITIONAL Refrigerant Charge Required (line 32) and Total FACTORY ODU Refrigerant Charge (line 34) |                               |             |          |                        |              |

<sup>1</sup>CF (Ref.) = Correction Factor for Refrigerant Charge. <sup>2</sup>For refrigerant charge purposes, consider only the liquid line; ignore the vapor line(s).

# HEAT PUMP ODU PRODUCT DATA

**Mechanical Specifications on page 10**

**General Data on page 11**

**Electrical Data on page 12**

**Dimensions on page 13**

**Center of Gravity / Corner Weights on page 14**

**Wiring Diagram on page 15**

**Refrigerant Flow Diagrams on page 17**

**Acoustic Data on page 20**

**Accessories on page 22**

## Multi V S with LGRED<sup>®</sup> Heat Pump Only Out- door Units

### General

LG Multi V S with LGRED Variable Refrigerant Flow (VRF) 24,000 Btu/h outdoor unit operates as a Heat Pump system. The outdoor unit is connected to the indoor units with a single refrigerant piping system using factory designed and supplied Y-branches, Headers, and has integrated controls. The system is capable of being designed for minimum piping and maximum design flexibility.

LG components are manufactured in a facility registered to ISO 9001 and ISO 14001, which is a set of standards applying to environmental protection set by the International Organization for Standardization (ISO). The units are Electrical Testing Laboratories (ETL) listed and bear the ETL label. All internal wiring is in accordance with the National Electrical Code (NEC).

### Temperature Ranges

Multi V S with LGRED 24,000 Btu/h systems can operate in heating only mode (i.e., all indoor units in heating mode) from -13°F to 61°F outdoor ambient wet bulb. Heat Pump systems can operate in cooling mode from 23°F to 122°F outdoor ambient dry bulb. Optional low ambient cooling kit extends the cooling only operating range (i.e., all indoor units in cooling mode) down to -9.9°F.

### Casing / Frame

Outdoor units are constructed with galvanized enamel paint. Each frame has a removable inspection panel to allow access to service tool connection, DIP switches, auto addressing, and error code display without removing the entire front panel. The entire front panel of the outdoor unit is removable for maintenance. Outdoor unit frames are completely factory assembled, piped and wired. Outdoor unit includes a built-in base pan heater.

### Refrigerant System

The refrigeration system consists of a single refrigeration circuit and uses R32 refrigerant. The outdoor unit is provided with factory installed components, including a refrigerant strainer, check valves, oil separator, accumulator, four-way reversing valve, electronic controlled expansion valve (EEV), high and low side charging ports, high pressure safety switch, service valves, and interconnecting piping. Also included is an integral subcooler assembly consisting of a double spiral tube type subcooling heat exchanger and EEV providing refrigerant subcooling modulation up to 23°F.

### Compressors

All 1-phase 24,000 Btu/h outdoor unit frames are equipped with one hermetic digitally controlled inverter driven scroll compressor to modulated capacity (variable from 10 to 150Hz, modulate in 1.0 Hz increments).

### Outdoor Unit Coil

The outdoor unit coils are of a nonferrous construction with louvered aluminum fins on copper tubing, and are protected by a metal guard. Coil fins have a factory applied corrosion resistant Black Coated Fin™ and hydrophilic coating.

### Fans and Motors

Outdoor unit frames include one direct drive, variable speed propeller type fan. All fan motors have inherent protection, permanently lubricated bearings, and are variable speed with a maximum speed up to 850 rpm for cooling and 850 rpm for heating. Raised guards are provided to limit contact with moving parts. Outdoor units have horizontal discharge airflow.

Figure 2: ZRUN024GSS0 Heat Pump Outdoor Unit.



### Electrical

Outdoor units are available in 208-230V 60Hz, 1-phase power supply. The units include over/under-voltage protection.

### Controls

Outdoor units are factory wired with necessary electrical control components, integral microprocessors, printed circuit boards, thermistors, sensors, terminal blocks, and power lugs. The control circuit between the indoor units, heat recovery unit(s) (heat recovery systems only) and the outdoor unit is an RS-485 daisy chain communication bus. The cable is two conductor, twisted, stranded and shielded, 18 AWG. Microprocessor-based algorithms provide component protection, soft-start capability, refrigeration system pressure, temperature, defrost, and ambient control.

### Refrigerant Leak Detector

Multi V indoor units have a built-in leak detector sensor to detect any refrigerant leaks.

### Shut-off Valve

LG single port shutoff valve (PRHPZ010A; sold separately) is available as an accessory.



Table 1: Heat Pump Only Specifications.

| Model Number                                          |         | 2.0 Ton<br>ZRUN024GSS0                                         |
|-------------------------------------------------------|---------|----------------------------------------------------------------|
| <i>Cooling Performance</i>                            |         |                                                                |
| Rated Cooling Capacity (Btu/h) <sup>1</sup>           |         | 24,000                                                         |
| <i>Heating Performance</i>                            |         |                                                                |
| Rated Heating Capacity (Btu/h) <sup>1</sup>           |         | 27,000                                                         |
| ENERGY STAR / Cold Climate                            |         | Yes / Yes                                                      |
| <i>Operating Range</i>                                |         |                                                                |
| Cooling (°F DB) <sup>2</sup>                          |         | 23 to 122                                                      |
| Heating (°F WB)                                       |         | -13 to +61                                                     |
| <i>Compressor</i>                                     |         |                                                                |
| Inverter Type / Quantity                              |         | Hermetically Sealed Scroll / 1                                 |
| Oil / Type                                            |         | PVE / FW68L                                                    |
| <i>Fan (Side Discharge)</i>                           |         |                                                                |
| Type                                                  |         | Propeller                                                      |
| Motor Output (kW) x Qty.                              |         | 0.124 x 1                                                      |
| Motor / Drive                                         |         | Brushless Digitally Controlled / Direct                        |
| Operating Range (RPM)                                 | Cooling | 0 to 850                                                       |
|                                                       | Heating | 0 to 850                                                       |
| Maximum Air Volume (CFM)                              |         | 2,119                                                          |
| <i>Unit Data</i>                                      |         |                                                                |
| Refrigerant Type                                      |         | R32                                                            |
| Refrigerant Control/Location                          |         | EEV / Indoor Unit                                              |
| Max. Number Indoor Units / System <sup>3</sup>        |         | 4                                                              |
| Sound Pressure dB(A) <sup>4</sup> (Cooling / Heating) |         | 50 / 52                                                        |
| Net Unit Weight (lbs.)                                |         | 148                                                            |
| Shipping Weight (lbs.)                                |         | 167                                                            |
| Communication Cables <sup>5,6</sup>                   |         | 2 x 18                                                         |
| External Static Pressure (in. w.g.)                   |         | 0.08                                                           |
| <i>Heat Exchanger</i>                                 |         |                                                                |
| Material and Fin Coating                              |         | Copper Tube / Aluminum Fin and Black Coated Fin™ / Hydrophilic |
| Rows / Fins per inch                                  |         | 2 / 14                                                         |
| <i>Piping<sup>7</sup></i>                             |         |                                                                |
| Liquid Line Connection (in., OD)                      |         | 3/8 Flare                                                      |
| Vapor Line Connection (in., OD)                       |         | 5/8 Flare                                                      |
| Factory Charge lbs. of R32                            |         | 3.3                                                            |

<sup>1</sup>Rated capacity is certified under AHRI Standard 210/240. See [www.ahrinet.org](http://www.ahrinet.org) for information.

<sup>2</sup>Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

<sup>3</sup>The System Combination Ratio must be between 50–130%.

<sup>4</sup>Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

<sup>5</sup>Communication cable between ODU, IDUs, and Central Controller must be a minimum of 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the ODU chassis only. ⚡ Do not ground the ODU to IDUs communication cable at any other point. Wiring must comply with all applicable local and national codes.

<sup>6</sup>Power wiring is field provided, solid or stranded, and must comply with all local and national codes. See page 11 for detailed electrical data.

<sup>7</sup>LG requires that LATS software be used on all projects to ensure correct line sizing. Designer must verify the shop drawing design against the as built design using LATS. Contractor must also use LG manufactured Y-Branch and Header Kits only.

<sup>8</sup>Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R32 refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

Electrical Data

Table 2: Heat Pump Only Outdoor Unit Electrical Data Table.

| Nominal<br>Tons | Unit Model No. | Phase | Hertz | Voltage | Voltage Range<br>(Min. to Max.) | Compressor |            | Condenser Fan Motor(s) |            | MCA  | MOP |
|-----------------|----------------|-------|-------|---------|---------------------------------|------------|------------|------------------------|------------|------|-----|
|                 |                |       |       |         |                                 | Quantity   | Motor Amps | Fan Qty.               | Amps       |      |     |
|                 |                |       |       |         |                                 |            | RLA        |                        | FLA x Qty. |      |     |
| 2.0             | ZRUN024GSS0    | 1     | 60    | 208-230 | 187~253                         | 1          | 20.5       | 1                      | 0.7 x 1    | 26.4 | 30  |

Voltage tolerance is ±10%.

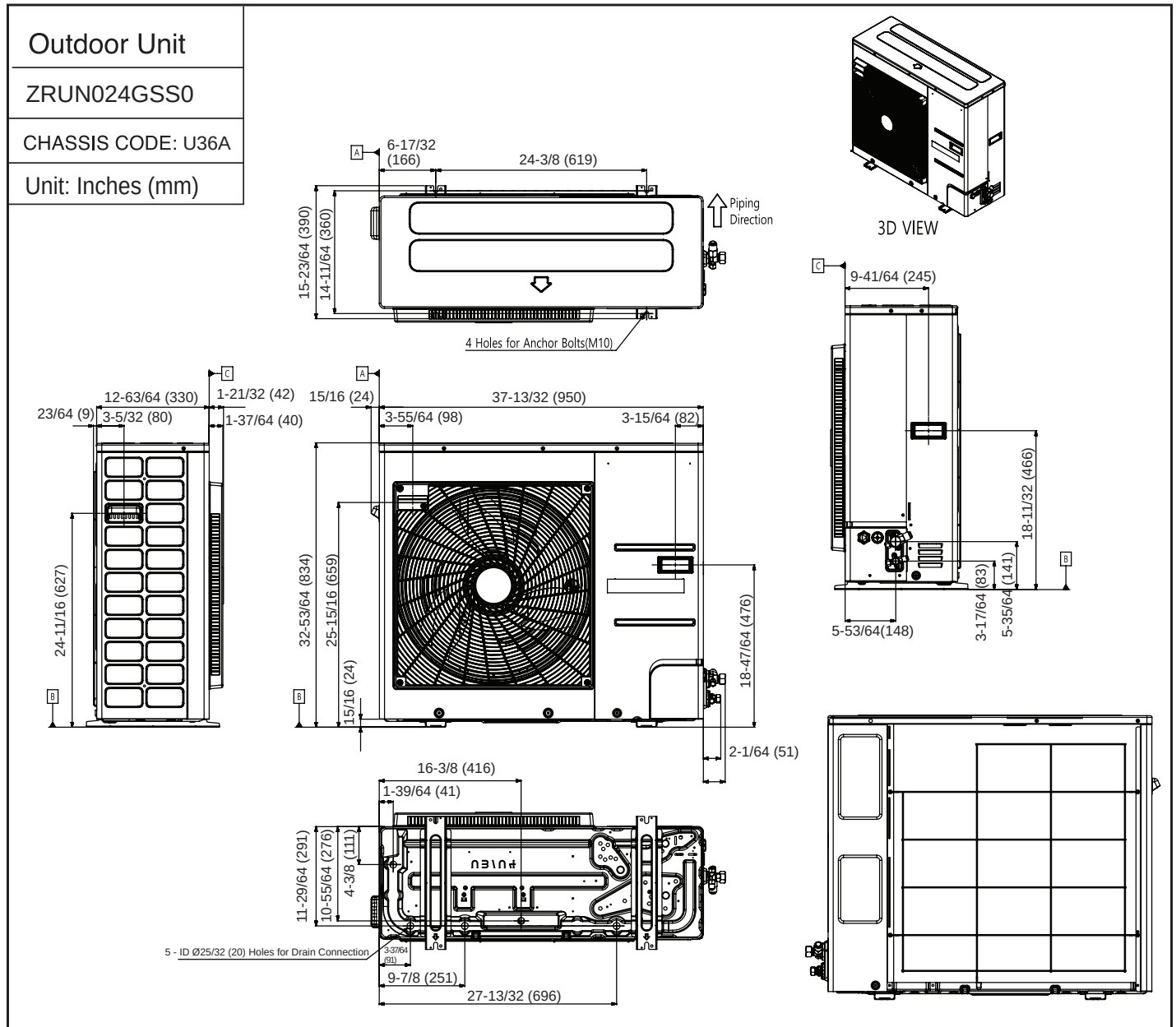
Maximum allowable voltage unbalance is 2%.

MCA = Minimum Circuit Ampacity.

Maximum Overcurrent Protection (MOP) is calculated as follows: (Largest motor FLA x 2.25) + (Sum of other motor FLA) rounded down to the nearest standard fuse size.

RFA = Recommended Fuse Amps.





# CENTER OF GRAVITY / CORNER WEIGHTS



ZRUN024GSS0

Figure 3: ZRUN024GSS0 Heat Pump Only Outdoor Unit Center of Gravity / Corner Weights.

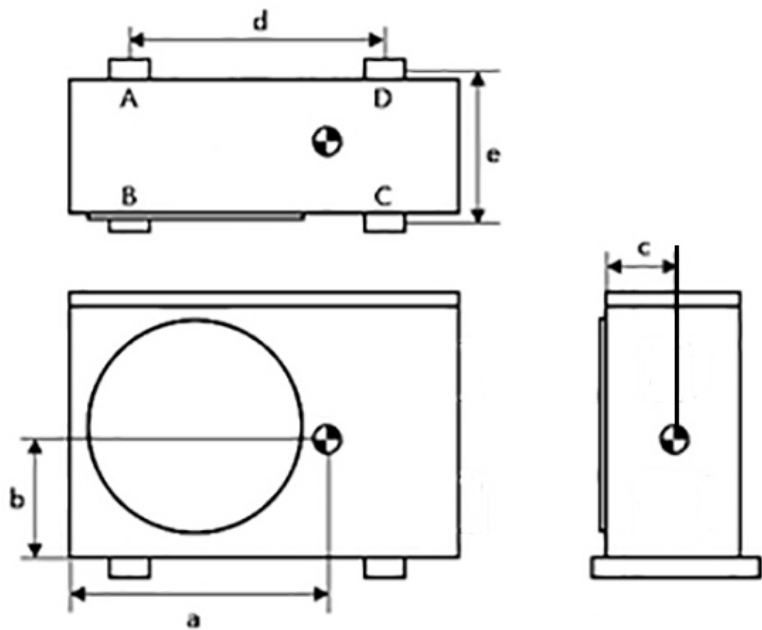
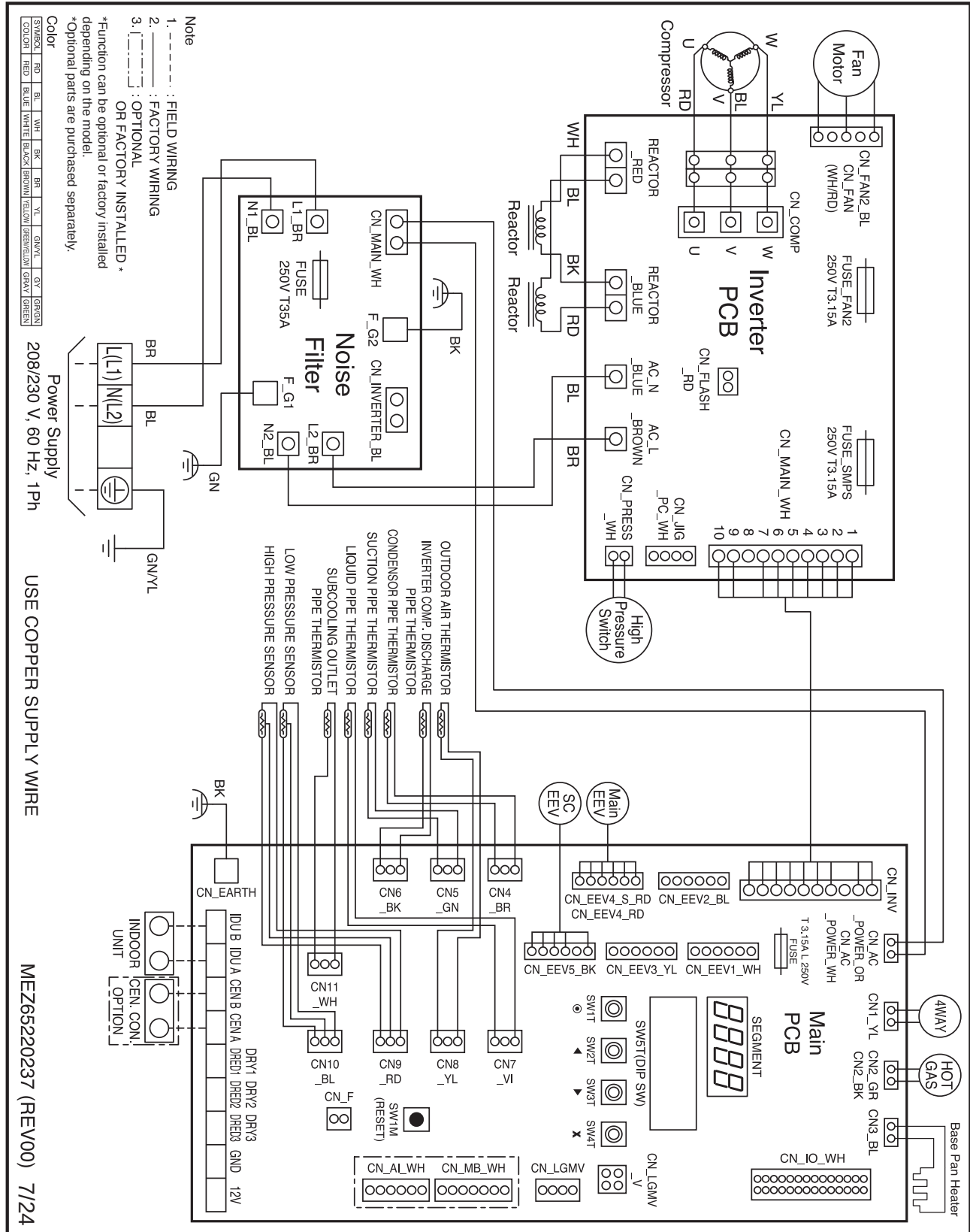


Table 3: ZRUN024GSS0 Heat Pump Only Outdoor Unit Center of Gravity and Corner Weight Specifications.

| Model No.   | Frame | Weight (lb.) |     | Center of Gravity (in.) |          |         | Leg (in.) |         | Corner Weight (lb.) |      |      |      |
|-------------|-------|--------------|-----|-------------------------|----------|---------|-----------|---------|---------------------|------|------|------|
|             |       | Shipping     | Net | a                       | b        | c       | d         | e       | A                   | B    | C    | D    |
| ZRUN024GSS0 | U36A  | 167          | 148 | 23-7/32                 | 12-19/32 | 5-29/32 | 24-13/32  | 14-3/16 | 20.4                | 26.5 | 53.7 | 47.4 |



Figure 4: ZRUN024GSS0 Heat Pump Only Outdoor Unit Wiring Diagram.



# WIRING DIAGRAM

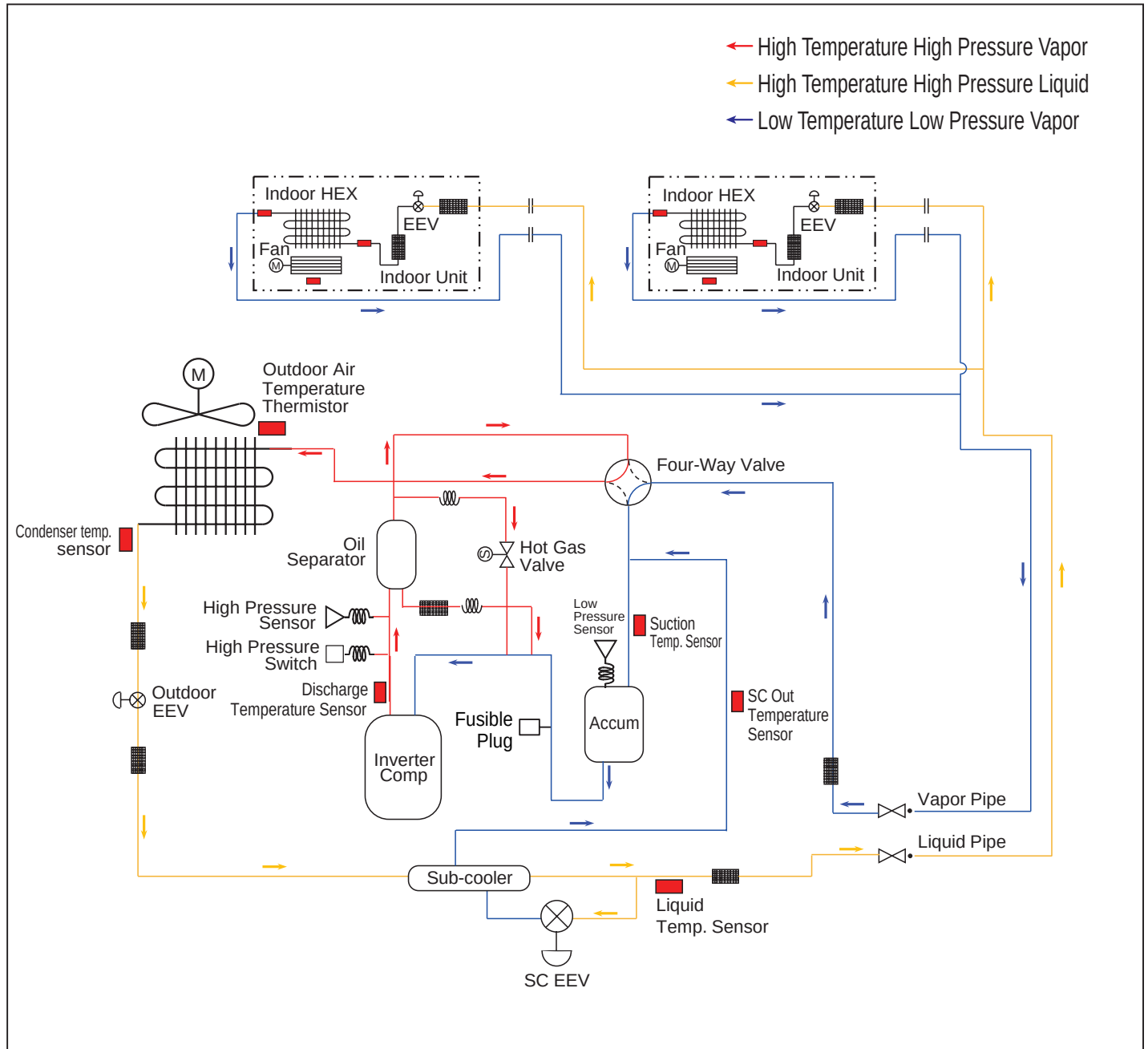
ZRUN024GSS0

Table 4: ZRUN024GSS0 Heat Pump Only Outdoor Unit Wiring Diagram Legend.

| Terminal                        | Description                                              |
|---------------------------------|----------------------------------------------------------|
| <i>Main PCB</i>                 |                                                          |
| CN INV                          | Inverter Communication Connector                         |
| CN AC POWER OR / CN AC POWER WH | Power to the PCB                                         |
| CN1 YL                          | 4-way Valve Connection on the Terminal                   |
| CN2 GN / CN2 BK                 | Hot Gas Connection                                       |
| CN3 BL                          | Base Pan Heater Connection                               |
| CN LGMV                         | Connection for LGMV                                      |
| CN EARTH                        | Earth                                                    |
| CN10 BL                         | Low Pressure Sensor Connection                           |
| CN11 WH                         | Subcooling Outlet Pipe Thermistor Connection             |
| CN9 RD                          | High Pressure Sensor Connection                          |
| CN8 YL                          | Outdoor Air Thermistor Connection                        |
| CN7 VI                          | Liquid Line Thermistor Connection                        |
| CN6 BK                          | Inverter Compressor Discharge Pipe Thermistor Connection |
| CN5 GN                          | Suction Pipe Thermistor Connection                       |
| CN4 BR                          | Condenser Pipe Thermistor Connection                     |
| CN EEV5 BK                      | Subcooling EEV                                           |
| CN EEV4 S RD / CN EEV4 RD       | Main EEV                                                 |
| <i>Inverter PCB</i>             |                                                          |
| CN FAN2 BL / CN FAN(WH/RD)      | Fan Motor                                                |
| CN MAIN WH                      | Main PCB Communication Connector                         |
| CN PRESS WH                     | High Pressure Switch                                     |
| CN FLASH RD                     | EEPROM Connection                                        |
| <i>Noise Filter</i>             |                                                          |
| CN INVERTER BL                  | AC Power to Inverter                                     |

Figure 5: ZRUN024GSS0 Cooling Operation Refrigerant Flow Diagram.

## Cooling Operation



|         |                 |                    |                |              |
|---------|-----------------|--------------------|----------------|--------------|
| Remarks | Pressure Sensor | Temperature Sensor | Solenoid Valve | SVC Valve    |
|         | Pressure Switch | EEV                | Strainer       | Fusible Plug |

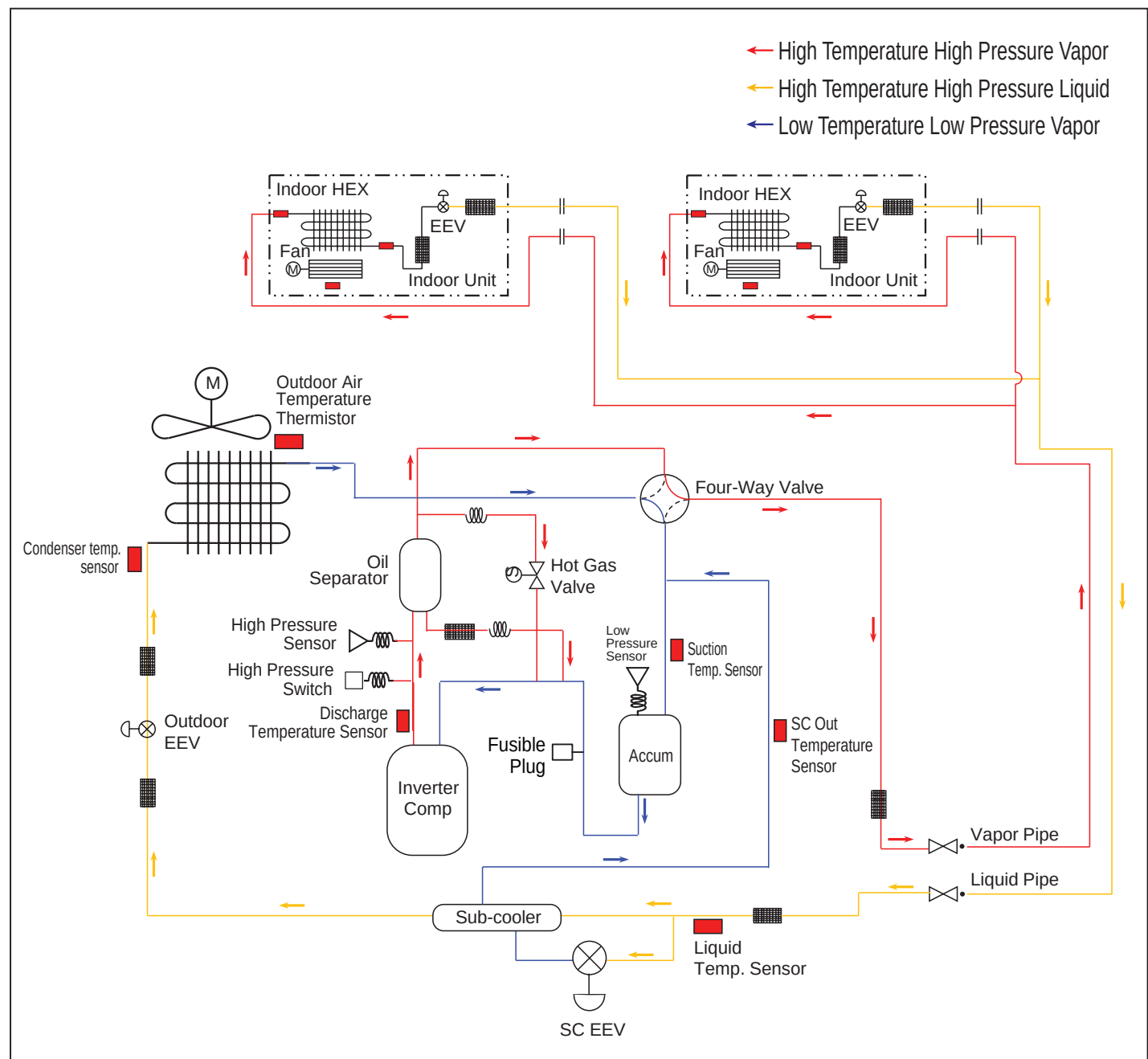
# REFRIGERANT FLOW DIAGRAMS



## ZRUN024GSS0 Heating Operation

Figure 6: ZRUN024GSS0 Heating Operation Refrigerant Flow Diagram.

### Heating Operation

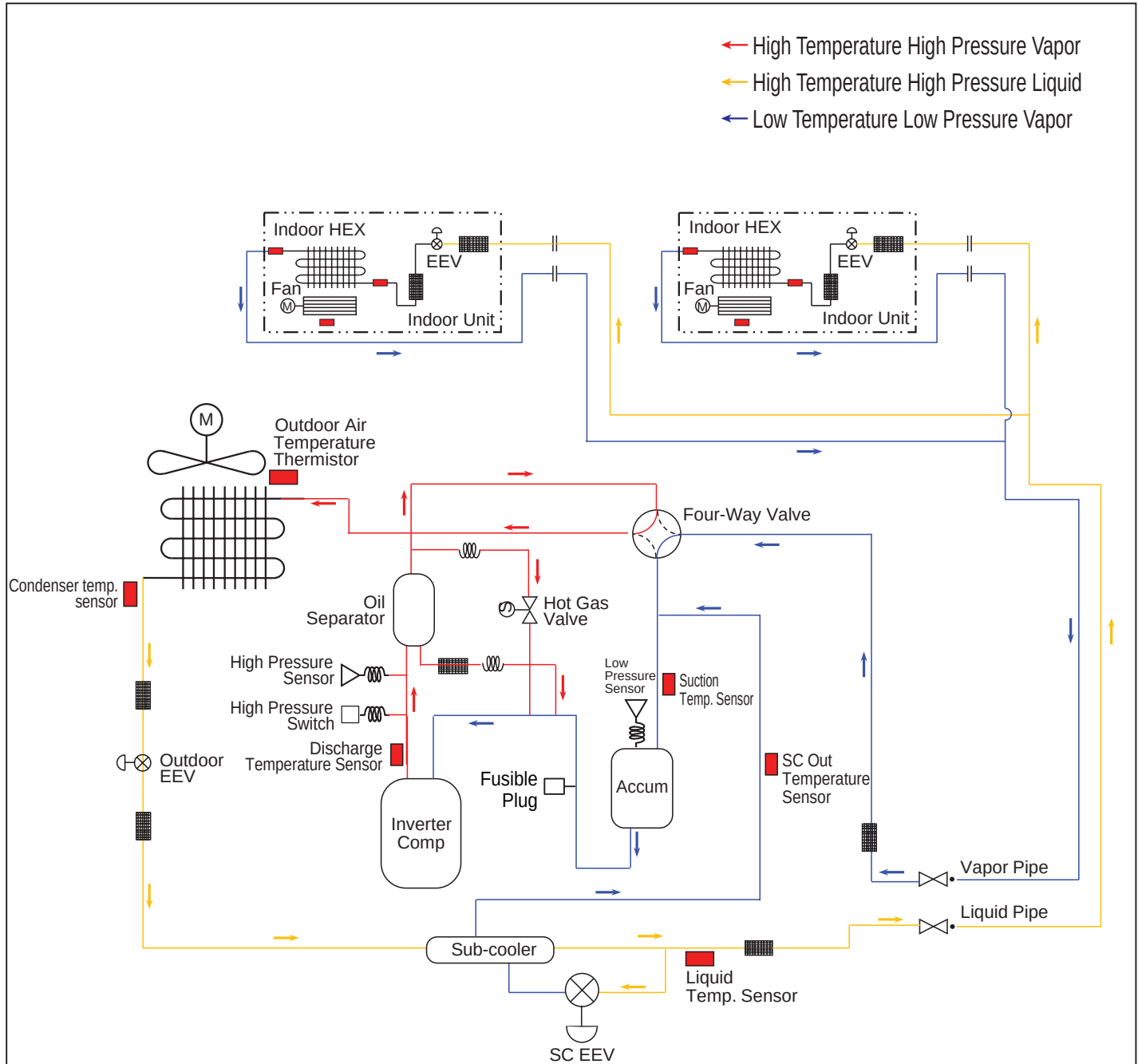


|         |                 |                    |                |              |
|---------|-----------------|--------------------|----------------|--------------|
| Remarks | Pressure Sensor | Temperature Sensor | Solenoid Valve | SVC Valve    |
|         | Pressure Switch | EEV                | Strainer       | Fusible Plug |



Figure 7: ZRUN024GSS0 Oil Return / Defrost Operation Refrigerant Flow Diagram.

## Oil Return / Defrost Operation



|         |                 |                    |                |              |
|---------|-----------------|--------------------|----------------|--------------|
| Remarks | Pressure Sensor | Temperature Sensor | Solenoid Valve | SVC Valve    |
|         | Pressure Switch | EEV                | Strainer       | Fusible Plug |

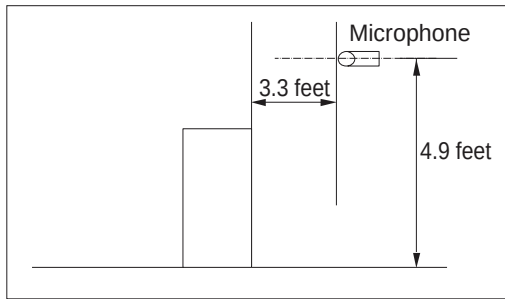


# ACOUSTIC DATA

## Sound Pressure Levels



Figure 8: ZRUN024GSS0 Heat Pump Only Outdoor Unit Sound Pressure Level Measurement Location.



- Measurement taken 4.9' above finished floor, and at a distance of 3.3' from face of fan discharge.
- Measurements taken with no attenuation and units operating at full load normal operating condition.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of particular area in which the equipment is installed.
- Sound levels are measured in dB(A)±3.
- Tested in anechoic chamber per ISO Standard 3745.
- Off-Peak Operation: Logic takes advantage of lower outdoor ambient temperatures and limits the outdoor unit fan speed during nighttime operation to lower the unit sound level.

Table 5: ZRUN024GSS0 Heat Pump Only Outdoor Unit Sound Pressure Levels (dB[A]).

| Model No.   | Cooling | Heating |
|-------------|---------|---------|
| ZRUN024GSS0 | 50      | 52      |

Figure 9: ZRUN024GSS0 Heat Pump Only Outdoor Unit Cooling and Heating Sound Pressure Level Diagrams.

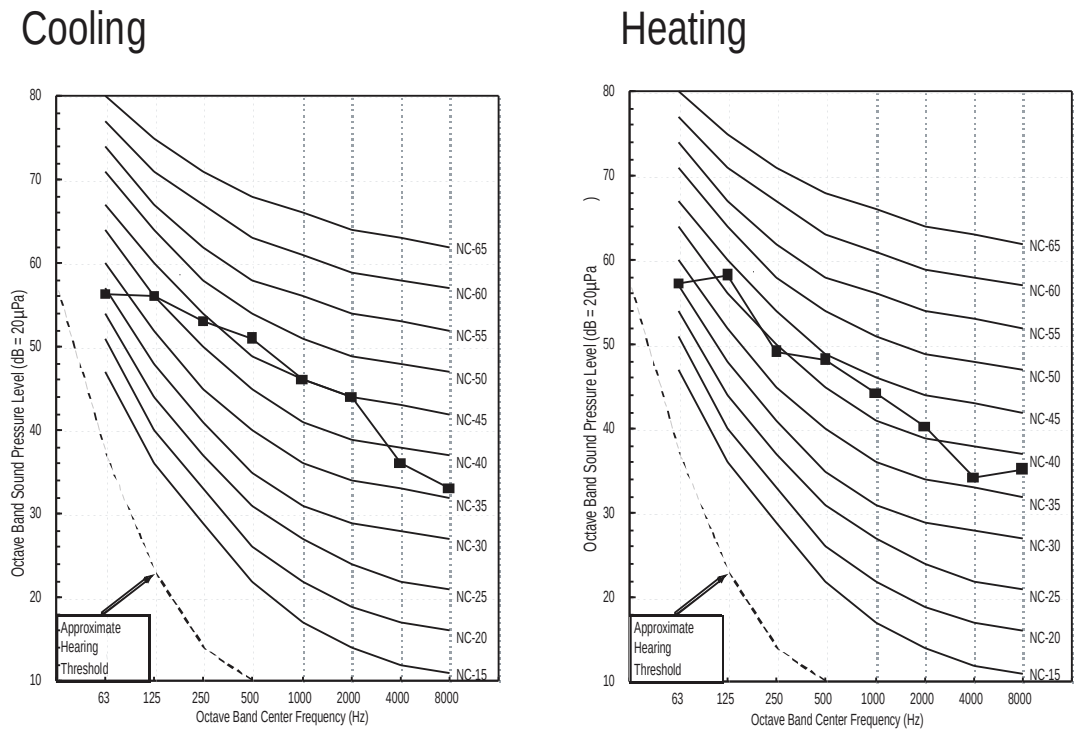
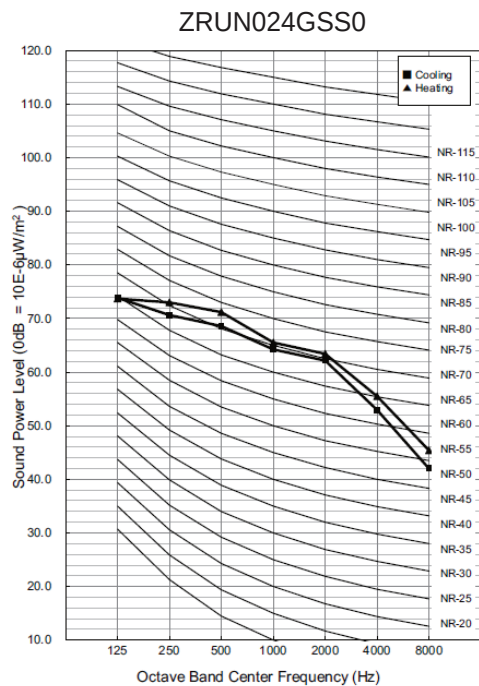


Table 6: ZRUN024GSS0 Heat Pump Only Outdoor Unit Sound Power Levels (dB[A]).

| Model No.   | Sound Power Levels (dB[A]) |         |
|-------------|----------------------------|---------|
|             | Cooling                    | Heating |
| ZRUN024GSS0 | 67                         | 70      |

- Data is valid under diffuse field conditions.
- Data is valid under nominal operating conditions.
- Sound power level is measured using rated conditions, and tested in a reverberation room per ISO 3741 standards.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of particular area in which the equipment is installed.
- Reference acoustic intensity: 0dB = 10E-6μW/m<sup>2</sup>

Figure 10: ZRUN024GSS0 Heat Pump Only Outdoor Unit Sound Power Level Diagram.



(Unit: Inch [mm])

(Unit: Inch [mm])

## Headers

Unit: Inch

| Models              | Vapor pipe | Liquid pipe |
|---------------------|------------|-------------|
| 4 branch<br>ARBL054 |            |             |
| 7 branch<br>ARBL057 |            |             |
| 4 branch<br>ARBL104 |            |             |
| 7 branch<br>ARBL107 |            |             |

## Low Ambient Wind Baffle Kit

(ZLABGP04A)

Optional low ambient baffle kits allow for Multi V S outdoor unit operation down to -9.9°F in cooling mode.

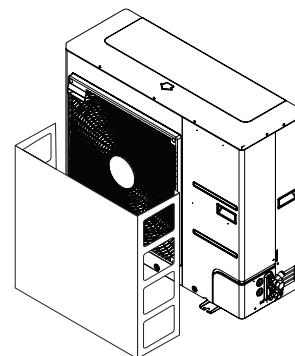
Includes:

- 20 Gauge Paint Grip Wind Baffle in Soft Dove Grey
- Four (4) Zinc-Plated Pan-Head Phillips Screws, #8 x 1/2"

Use one (1) ZLABGP04A kit with the 2-ton ZRUN024GSS0.

Contact an LG Sales Representative for more information.

Figure 11: Low Ambient Wind Baffle Kit.



## LG Monitoring View (LGMV) Diagnostic Software and Cable

LG Monitoring View (LGMV) is a maintenance and troubleshooting tool for Multi V™ air conditioning systems. LGMV formats are available for computer or mobile phone use.

The main screen for LGMV allows the user to view the following real time data:

- Actual inverter compressor speed
- Target inverter compressor speed
- Actual outdoor fan speed
- Target outdoor unit fan speed
- Actual superheat
- Target superheat
- Actual subcooler circuit superheat
- Target subcooler circuit superheat
- Main EEV position
- Subcooling EEV position
- Inverter compressor current transducer value
- Outdoor air temperature
- Actual high pressure/saturation temperature
- Actual low pressure/saturation temperature
- Suction temperature
- Inverter compressor discharge temperature
- Constant speed compressor discharge temperature
- Front outdoor coil pipe temperature
- Back outdoor coil pipe temperature
- Liquid line pipe temperature
- Subcooler inlet temperature
- Subcooler outlet temperature
- Average indoor unit (IDU) pipe temperature
- Inverter compressor operation indicator light
- Four-way reversing valve operation indicator light
- Pressure graph showing actual low pressure and actual high pressure levels
- Error code display
- Operating mode indicator
- Target high pressure
- Target low pressure
- PCB (printed circuit board) version
- Software version
- Installer name
- Model no. of outdoor units
- Site name
- Total number of connected indoor units
- Communication indicator lights
- Indoor unit capacity
- Indoor unit operating mode
- Indoor unit fan speed
- Indoor unit EEV position
- Indoor unit room temperature
- Indoor unit inlet pipe temperature
- Indoor unit outlet pipe temperature
- Indoor unit error code

Additional screens can be accessed by tabs on the main screen

### 1. Cycleview: Graphic of internal components including

- Compressors showing actual speeds
- EEVs
- Indoor Units
- Liquid injection valves
- Temperature and pressure sensors
- Four-way reversing valve
- Outdoor fans showing status and speeds

### 2. Graph:

Full screen graph of actual high and low pressures and high and low pressure limits. A sliding bar enables user to go back in time and view data.

### 3. Control IDU: Enables user to turn on all IDUs default setpoints of 86°F in heat mode or 64°F in cool mode.

### 4. Setting: Converts metric values to imperial values.

### 5. Making Data: Recording of real time data to a separate file created to be stored on the user's computer.

### 6. Loading Data: Recorded data from a saved ".CSV" file can be loaded to create an LGMV session.

### 7. Electrical Data: Screen is changed to show the following:

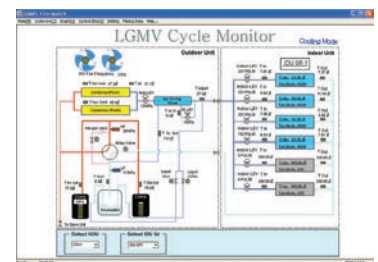
- Inverter compressor
- Amps / Volts / Power Hz
- Inverter control board fan Hz
- Constant compressor
- Current transducer value
- Phase

In lieu of connecting to the outdoor unit, user has the option to connect to the indoor unit with a connector kit. When connected through the indoor unit, user will not be able to record data.

This software can be used to both pre-set-up new systems and troubleshoot existing systems. LGMV data can be recorded to a ".CSV" file and emailed to an LG representative to assist with diagnostic evaluations.

**LGMV is available in different formats. Contact your LG Sales Representative for system requirements and for more information.**

Figure 12: Sample Cycleview (Computer View Example).



## ThinQ

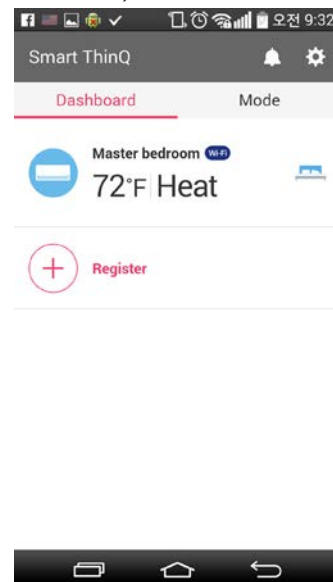
LG ThinQ is a built-in Wi-Fi module, along with a free smart phone app that provides monitoring and remote control capabilities for use with certain LG indoor units. The app has the following features and benefits:

- Sign in to the app using LG credentials, or using Google<sup>®</sup> or Facebook<sup>®</sup> login credentials. Users only have to log in to the app once; the app remembers login details for subsequent logins.
- View current temperature settings of the air conditioning unit and change temperature, fan speed, and air flow direction from anywhere in the house or at a remote location (through the use of wireless connection). Multiple users can control the household air conditioning unit remotely.
- Monitor filter usage of the unit.
- Set up weekly schedules to start and stop air conditioner activity.
- Set up the unit to run in different Modes, depending on the user's schedule. Set up specific temperatures for when the user is home, away on vacation, or sleeping.
- Troubleshoot problems, and view tips on general maintenance of the system using the Smart Diagnosis function.

*\*Google is a registered trademark of Google Inc.; Facebook is a registered trademark of Facebook.*

**Contact your LG Sales Representative or visit [www.lghvac.com](http://www.lghvac.com) for system requirements, how to download the app, a user's manual, or other information.**

Figure 13: Example of an LG Smart ThinQ Screen (appearances may differ depending on version of software).



# COMBINATION (HEAT PUMP / HEAT RECOVERY) ODU PRODUCT DATA

**Mechanical Specifications on page 28**

**General Data on page 29**

**Electrical Data on page 30**

**Dimensions on page 31**

**Center of Gravity / Corner Weights on page 32**

**Wiring Diagrams on page 33**

**Refrigerant Flow Diagrams on page 35**

**Acoustic Data on page 42**

**Accessories on page 46**



## Multi V S with LGRED<sup>®</sup> Combination Outdoor Units

### General

The LG Multi V S with LGRED Variable Refrigerant Flow (VRF) combination outdoor unit is a unified frame and can be configured to operate both as a Heat Pump system or a Heat Recovery System. The outdoor unit is connected to the indoor units with a single refrigerant piping system using factory designed and supplied Y-branches, Headers, and/or Heat Recovery Units, and have integrated controls.

The system is capable of being designed for minimum piping and maximum design flexibility. Each Heat Recovery Unit piping port is independently capable of operating in either heating or cooling mode regardless of the mode of other piping ports on the same heat recovery unit or in the system. The Heat Recovery Unit is capable of changing mode of individual indoor units or zones (cooling to heating or heating to cooling). LG components are manufactured in a facility registered to ISO 9001 and ISO 14001, which is a set of standards applying to environmental protection set by the International Organization for Standardization (ISO). The units are Electrical Testing Laboratories (ETL) listed and bear the ETL label. All internal wiring is in accordance with the National Electrical Code (NEC).

### Temperature Ranges

#### Heat Pump Configuration

In Heat Pump configuration, the system can operate in heating only mode (i.e., all indoor units in heating mode) from -13°F to 61°F outdoor ambient wet bulb. Heat Pump systems can operate in cooling mode from 23°F to 122°F outdoor ambient dry bulb. Optional low ambient cooling kit extends the cooling only operating range (i.e., all indoor units in cooling mode) down to -9.9°F. See the Multi V S with LGRED Installation Manual for DIP switch settings to change from Heat Pump operation to Heat Recovery operation, or from Heat Recovery operation to Heat Pump operation.

#### Heat Recovery Configuration

In Heat Recovery configuration, the system can operate in heating only mode (i.e., all

indoor units in heating mode) from -13°F to +61°F outdoor ambient wet bulb. Heat Recovery systems can operate in cooling only mode from 23°F to 122°F outdoor ambient dry bulb. Optional low ambient cooling kit extends cooling only operation range (i.e., all indoor units in cooling mode) down to -9.9°F. Heat Recovery Synchronous cooling based operation range is 14°F to 81°F outdoor ambient dry bulb; Synchronous heating based operation range is 14°F to 61°F wet bulb. See the Multi V S with LGRED Installation Manual for DIP switch settings for Heat Recovery and Heat Pump operation.

### Casing / Frame

Outdoor units are constructed with galvanized enamel paint. Each frame has a removable inspection panel to allow access to service tool connection, DIP switches, auto addressing, and error code display without removing the entire front panel. The entire front panel of the outdoor unit is removable for maintenance. Outdoor unit frames are completely factory assembled, piped and wired. Outdoor unit includes a built-in base pan heater.

### Refrigerant System

The refrigeration system consists of a single refrigeration circuit and uses R32 refrigerant. The outdoor unit is provided with factory installed components, including a refrigerant strainer, check valves, oil separator, accumulator, four-way reversing valve, electronic controlled expansion valve (EEV), high and low side charging ports, high pressure safety switch, service valves, and interconnecting piping. Also included is an integral subcooler assembly consisting of a double spiral tube type subcooling heat exchanger and EEV providing refrigerant subcooling modulation up to 23°F.

### Compressors

All 1-phase combination outdoor unit frames are equipped with one hermetic digitally controlled inverter driven scroll compressor to modulated capacity (variable from 10 / 12 up to 160Hz, modulate in 1.0 Hz increments).

### Outdoor Unit Coil

The outdoor unit coils are of a nonferrous construction with louvered aluminum fins on copper tubing, and are protected by a metal

guard. Coil fins have a factory applied corrosion resistant Black Coated Fin™ and hydrophilic coating.

### Fans and Motors

Outdoor unit frames include one direct drive, variable speed propeller type fan. All fan motors have inherent protection, permanently lubricated bearings, and are variable speed with a maximum speed up to 750 rpm. Raised guards are provided to limit contact with moving parts. Outdoor units have horizontal discharge airflow.

### Electrical

Outdoor units are available in 208-230V 60Hz, 1-phase power supply. The units include over/under-voltage protection.

### Controls

Outdoor units are factory wired with necessary electrical control components, integral microprocessors, printed circuit boards, thermistors, sensors, terminal blocks, and power lugs. The control circuit between the indoor units, heat recovery unit(s) (heat recovery systems only) and the outdoor unit is an RS-485 daisy chain communication bus. The cable is two conductor, twisted, stranded and shielded, 18 AWG. Microprocessor-based algorithms provide component protection, soft-start capability, refrigeration system pressure, temperature, defrost, and ambient control.

### Refrigerant Leak Detector

Multi V indoor units have a built-in leak detector sensor to detect any refrigerant leaks.

### Shut-off Valve

LG single port shutoff valve (PRHPZ010A; sold separately) is available as an accessory.

Figure 14: Combo (HP / HR) Outdoor Unit.



Table 7: Combination (Heat Pump / Heat Recovery) Outdoor Unit Specifications.

| Model Numbers                                                 |         | 3.0 Ton                                                        | 4.0 Ton                        | 5.0 Ton                        |
|---------------------------------------------------------------|---------|----------------------------------------------------------------|--------------------------------|--------------------------------|
|                                                               |         | ZRUM036GSS0                                                    | ZRUM048GSS0                    | ZRUM060GSS0                    |
| Cooling Performance                                           |         |                                                                |                                |                                |
| Nominal Cooling Capacity (Btu/h) <sup>1</sup>                 |         | 36,000                                                         | 48,000                         | 60,000                         |
| Rated Cooling Capacity (Btu/h) <sup>2</sup>                   |         | 36,000                                                         | 48,000                         | 60,000                         |
| Heating Performance                                           |         |                                                                |                                |                                |
| Nominal Heating Capacity (Btu/h) <sup>1</sup>                 |         | 42,000                                                         | 54,000                         | 67,000                         |
| Rated Heating Capacity (Btu/h) <sup>2</sup>                   |         | 42,000                                                         | 54,000                         | 67,000                         |
| Operating Range                                               |         |                                                                |                                |                                |
| Cooling (°F DB) <sup>3</sup>                                  |         | 23 to 122                                                      |                                |                                |
| Heating (°F WB)                                               |         | -13 to +61                                                     |                                |                                |
| Synchronous — Cooling Based (°F DB)                           |         | 14 to 81                                                       |                                |                                |
| Synchronous — Heating Based (°F WB)                           |         | 14 to 61                                                       |                                |                                |
| Compressor                                                    |         |                                                                |                                |                                |
| Inverter Type / Quantity                                      |         | Hermetically Sealed Scroll / 1                                 | Hermetically Sealed Scroll / 1 | Hermetically Sealed Scroll / 1 |
| Oil / Type                                                    |         | PVE / FW68L                                                    | PVE / FW68L                    | PVE / FW68L                    |
| Fan (Side Discharge)                                          |         |                                                                |                                |                                |
| Type                                                          |         | Propeller                                                      | Propeller                      | Propeller                      |
| Motor Output (kW) x Qty.                                      |         | 0.124 x 2                                                      | 0.124 x 2                      | 0.124 x 2                      |
| Motor / Drive                                                 |         | Brushless Digitally Controlled / Direct                        |                                |                                |
| Operating Range (RPM)                                         | Cooling | 0~750                                                          | 0~750                          | 0~750                          |
|                                                               | Heating | 0~700                                                          | 0~700                          | 0~700                          |
| Maximum Air Volume (CFM)                                      |         | 2 x 2119                                                       | 2 x 2119                       | 2 x 2119                       |
| Unit Data                                                     |         |                                                                |                                |                                |
| Refrigerant Type                                              |         | R32                                                            | R32                            | R32                            |
| Refrigerant Control/Location                                  |         | EEV / Indoor Unit                                              | EEV / Indoor Unit              | EEV / Indoor Unit              |
| Max. Number Indoor Units / System <sup>4</sup>                |         | 6                                                              | 8                              | 12                             |
| Sound Pressure dB(A) <sup>5</sup>                             |         | 50 / 52                                                        | 53 / 54                        | 57 / 59                        |
| Net Unit Weight (lbs.)                                        |         | 257                                                            | 257                            | 267                            |
| Shipping Weight (lbs.)                                        |         | 286                                                            | 286                            | 296                            |
| Communication Cables <sup>6,7</sup>                           |         | 2 x 18                                                         | 2 x 18                         | 2 x 18                         |
| External Static Pressure (in. w.g.)                           |         | 0.08                                                           | 0.08                           | 0.08                           |
| Heat Exchanger                                                |         |                                                                |                                |                                |
| Material and Fin Coating                                      |         | Copper Tube / Aluminum Fin and Black Coated Fin™ / Hydrophilic |                                |                                |
| Rows / Fins per inch                                          |         | 2 / 14                                                         | 2 / 14                         | 3 / 14                         |
| Piping / Connections for Heat Recovery Operation <sup>8</sup> |         |                                                                |                                |                                |
| Liquid Line Connection (in., OD)                              |         | 3/8 Braze                                                      | 3/8 Braze                      | 3/8 Braze                      |
| Low Pressure Vapor Line Connection (in., OD)                  |         | 3/4 Braze                                                      | 3/4 Braze                      | 3/4 Braze                      |
| High Pressure Vapor Line Connection (in., OD)                 |         | 5/8 Braze                                                      | 5/8 Braze                      | 5/8 Braze                      |
| Piping / Connections for Heat Pump Operation <sup>8</sup>     |         |                                                                |                                |                                |
| Liquid Line Piping / Connection (in., OD)                     |         | 3/8 Braze                                                      | 3/8 Braze                      | 3/8 Braze                      |
| Vapor Line Piping / Connection (in., OD)                      |         | 5/8 Braze                                                      | 5/8 Braze                      | 3/4 Braze                      |
| Factory Charge lbs. of R32                                    |         | 6                                                              | 6                              | 6.9                            |

<sup>1</sup>Nominal capacity applied with non-ducted indoor units, and is rated 0 ft. above sea level with 25 ft. of refrigerant line per indoor unit and a 0 ft. level difference between outdoor and indoor units. All capacities are net with a Combination Ratio between 95–105%.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB) and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and 59°F wet bulb (WB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

<sup>2</sup>Rated capacity is certified under AHRI Standard 20/240. See [www.ahrinet.org](http://www.ahrinet.org) for information.

<sup>3</sup>Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

<sup>4</sup>The System Combination Ratio must be between 50–130%.

<sup>5</sup>Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

<sup>6</sup>Communication cable between ODU, IDUs/Heat Recovery Units, and Central Controller must be a minimum of 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the ODU chassis only. ⚠ Do not ground the ODU to IDUs/Heat Recovery Units communication cable at any other point. Wiring must comply with all applicable local and national codes.

<sup>7</sup>Power wiring is field provided, solid or stranded, and must comply with all local and national codes. See page 29 for detailed electrical data.

<sup>8</sup>LG requires that LATS software be used on all projects to ensure correct line sizing. Designer must verify the shop drawing design against the as built design using LATS. Contractor must also use LG manufactured Y-Branch and Header Kits only.

<sup>9</sup>Take appropriate actions at the end of HVAC equipment life to recover, recycle, reclaim or destroy R32 refrigerant according to applicable regulations (40 CFR Part 82, Subpart F) under section 608 of CAA.

## Electrical Data

Table 8: Combination Outdoor Unit Electrical Data Table.

| Nominal Tons | Unit Model No. | Phase | Hertz | Voltage | Voltage Range (Min. to Max.) | Compressor |            | Condenser Fan Motor(s) |            | MCA  | MOP |
|--------------|----------------|-------|-------|---------|------------------------------|------------|------------|------------------------|------------|------|-----|
|              |                |       |       |         |                              | Quantity   | Motor Amps | Fan Qty.               | Amps       |      |     |
|              |                |       |       |         |                              |            | RLA        |                        | FLA x Qty. |      |     |
| 3.0          | ZRUM036GSS0    | 1     | 60    | 208-230 | 187~253                      | 1          | 24         | 2                      | 0.5 x 2    | 31   | 40  |
| 4.0          | ZRUM048GSS0    |       |       |         |                              | 1          | 24         | 2                      | 0.5 x 2    | 31   | 40  |
| 5.0          | ZRUM060GSS0    |       |       |         |                              | 1          | 25.5       | 2                      | 0.5 x 2    | 32.9 | 40  |

Voltage tolerance is  $\pm 10\%$ .

Maximum allowable voltage unbalance is 2%.

MCA = Minimum Circuit Ampacity.

Maximum Overcurrent Protection (MOP) is calculated as follows: (Largest motor FLA x 2.25) + (Sum of other motor FLA) rounded down to the nearest standard fuse size.

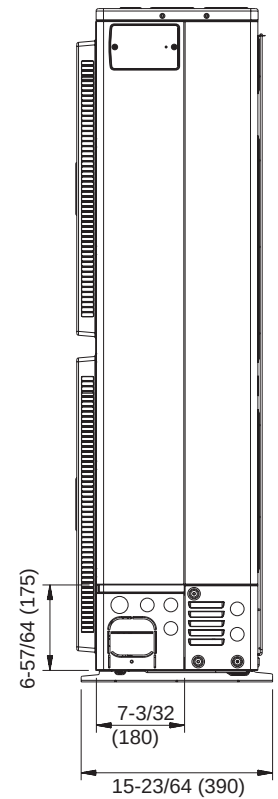
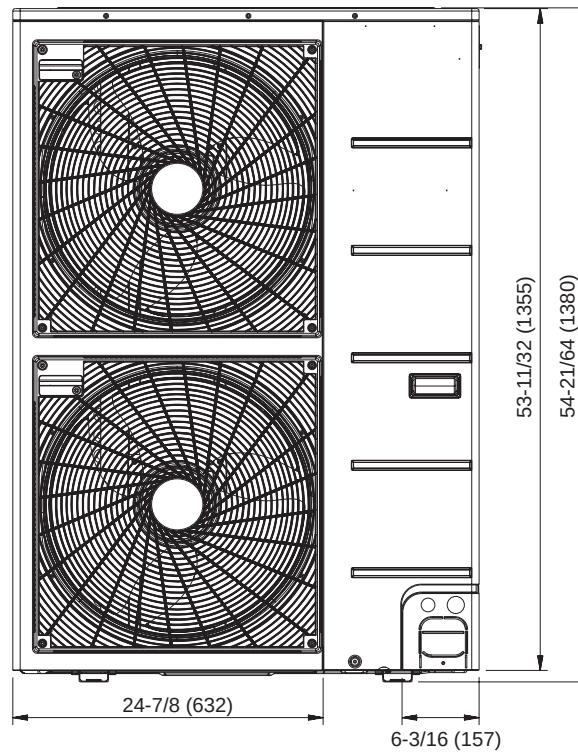
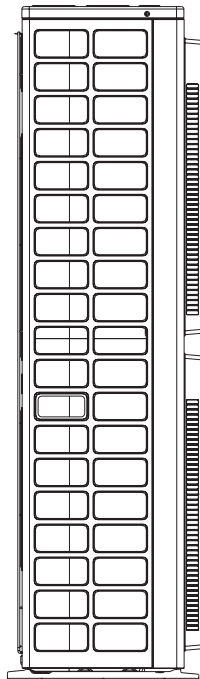
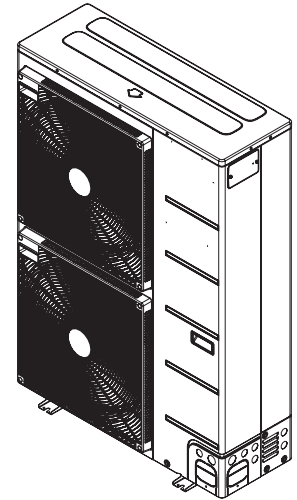
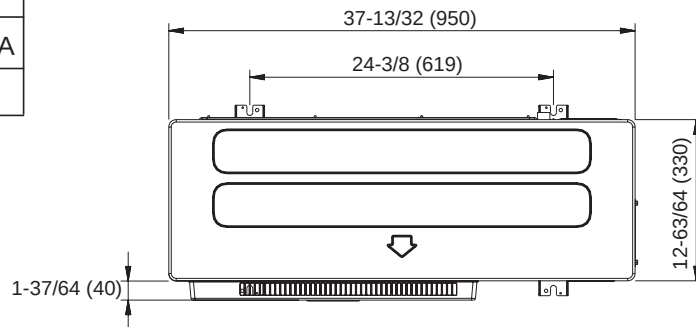
RFA = Recommended Fuse Amps.

## Outdoor Unit

ZRUM036GSS0,  
ZRUM048GSS0,  
ZRUM060GSS0

CHASSIS CODE: U60A

Unit: Inches (mm)



# CENTER OF GRAVITY / CORNER WEIGHTS

ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0

Figure 15: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Combination Outdoor Unit Center of Gravity / Corner Weights.

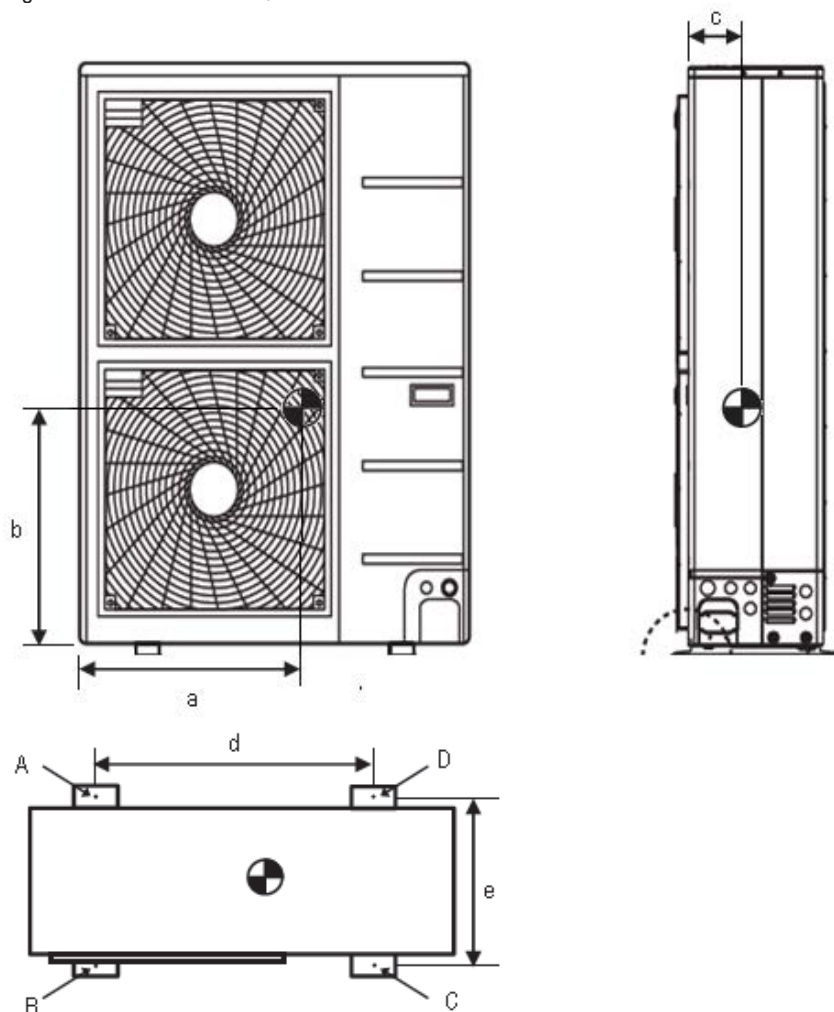
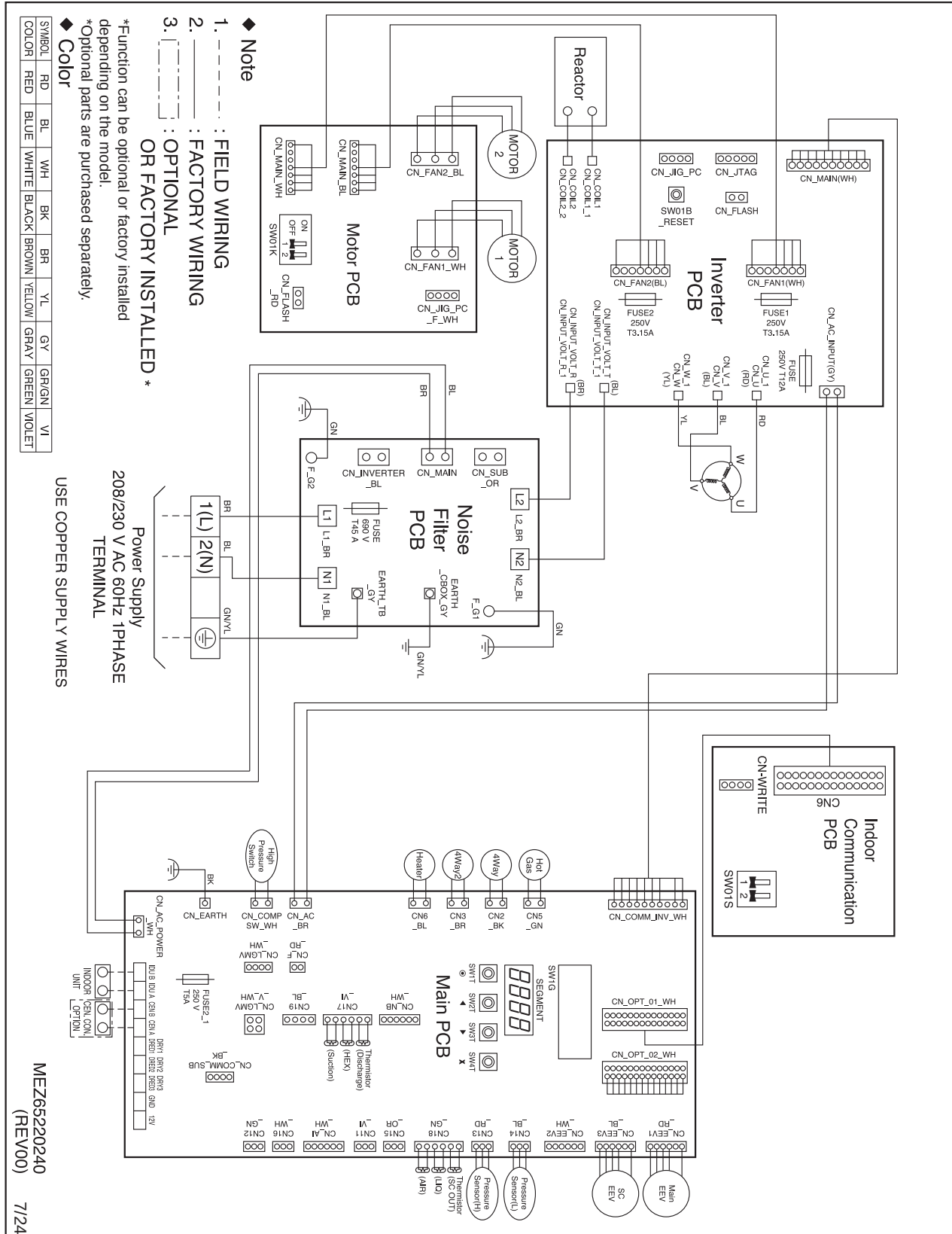


Table 9: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Combination Outdoor Unit Center of Gravity and Corner Weight Specifications.

| Model Nos.  | Frame | Weight (lb.) |     | Center of Gravity (in.) |          |       | Leg (in.) |         | Corner Weight (lb.) |      |       |       |
|-------------|-------|--------------|-----|-------------------------|----------|-------|-----------|---------|---------------------|------|-------|-------|
|             |       | Shipping     | Net | a                       | b        | c     | d         | e       | A                   | B    | C     | D     |
| ZRUM036GSS0 | U60A  | 286          | 257 | 27-7/32                 | 21-15/32 | 6-5/8 | 24-13/32  | 14-3/16 | 17.2                | 19.6 | 92.3  | 80.8  |
| ZRUM048GSS0 | U60A  | 286          | 257 | 27-7/32                 | 21-15/32 | 6-5/8 | 24-13/32  | 14-3/16 | 17.2                | 19.6 | 92.3  | 80.8  |
| ZRUM060GSS0 | U60A  | 296          | 267 | 27-7/32                 | 21-15/32 | 6-5/8 | 24-13/32  | 14-3/16 | 21.6                | 24.6 | 115.7 | 101.2 |

Figure 16: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Combination Outdoor Unit Wiring Diagram.





# WIRING DIAGRAM

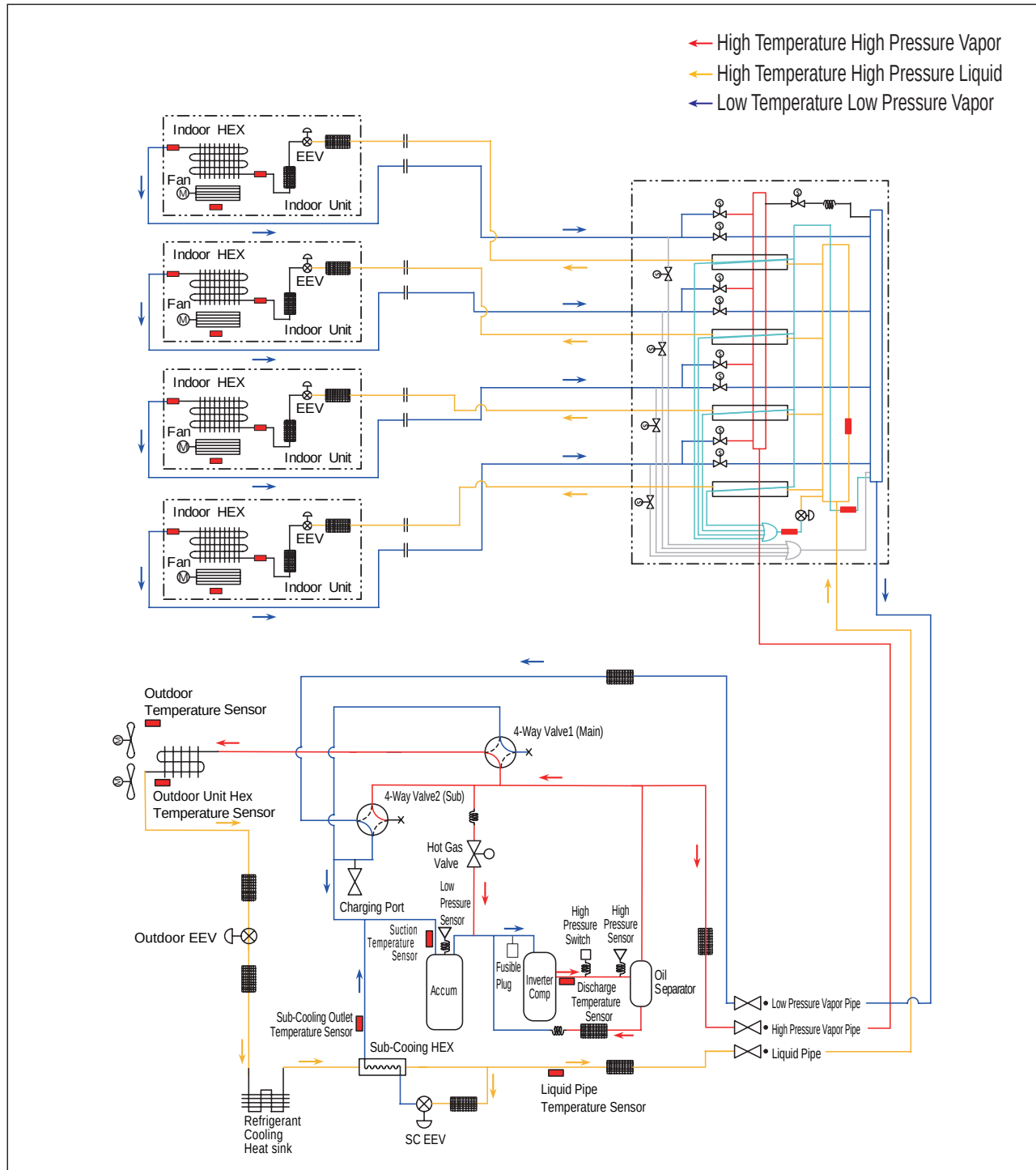
ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0

Table 10: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Combination Outdoor Unit Wiring Diagram Legend.

| Terminal                            | Description                                                             |
|-------------------------------------|-------------------------------------------------------------------------|
| <b>Main PCB</b>                     |                                                                         |
| CN COMM INV WH                      | Communication Terminal Block                                            |
| CN OPT 01 WH                        | Optional PCB Communication Connector                                    |
| CN OPT 02 WH                        | Optional PCB Communication Connector                                    |
| CN EEV1 RD                          | Main EEV Connection                                                     |
| CN EEV3 BL                          | Sub Cooling EEV Connection                                              |
| CN14 BL                             | Low Pressure Sensor Connection                                          |
| CN13 RD                             | High Pressure Sensor Connection                                         |
| CN18 GN                             | Subcooling Outlet Pipe Thermistor Connection                            |
| CN COMM SUB BK                      | Communication for Sub                                                   |
| CN AC POWER WH                      | Power to the PCB                                                        |
| CN EARTH                            | Earth                                                                   |
| CN COMP SW WH                       | High Pressure Switch                                                    |
| CN LGMV WH                          | Connection to LGMV                                                      |
| CN LGMV V WH                        | Additional Connection to LGMV                                           |
| CN17 VI                             | Thermistor Connection for Discharge Suction and HEX                     |
| CN AC BR                            | Connection between Main PCB and Inverter PCB                            |
| CN6 BL                              | Connection to Base Pan Heater                                           |
| CN3 BR                              | Connection to Second 4-way Valve                                        |
| CN2 BK                              | Connection to First 4-way Valve                                         |
| CN5 GN                              | Connection to Hot Gas                                                   |
| <b>Indoor Communication PCB</b>     |                                                                         |
| CN6                                 | Main PCB Communication Connector                                        |
| CN-WRITE                            | Communication Debugging Port                                            |
| SW01S                               | DIP Switch Setting                                                      |
| <b>Inverter PCB</b>                 |                                                                         |
| CN MAIN(WH)                         | Main PCB Communication Connector                                        |
| CN AC INPUT(GY)                     | AC Power Input                                                          |
| CN U 1 / CN U(RD)                   | Connection to Compressor                                                |
| CN V 1 / CN V(BL)                   | Connection to Compressor                                                |
| CN W 1 / CN W(YL)                   | Connection to Compressor                                                |
| CN INPUT VOLT T / CN INPUT VOLT T 1 | Power Input (T)                                                         |
| CN INPUT VOLT R / CN INPUT VOLT R 1 | Power Input (R)                                                         |
| CN COIL2 / CN COIL2 2               | Connection to Reactor                                                   |
| CN COIL1 / CN COIL1 1               | Connection to Reactor                                                   |
| CN FAN2(BL)                         | Communication and Power Input of Fan Motor 2                            |
| CN FLASH                            | EEPROM Connection                                                       |
| <b>Motor PCB</b>                    |                                                                         |
| CN FAN2 BL                          | Communication and Power Input of Fan Motor 2 (Motor PCB - Motor 1)      |
| CN FAN1 WH                          | Communication and Power Input of Fan Motor 1 (Motor PCB - Motor 2)      |
| CN FLASH RD                         | Connection for Flashing Motor                                           |
| CN MAIN WH                          | Communication and Power Input of Fan Motor 1 (Motor PCB - Inverter PCB) |
| CN MAIN BL                          | Communication and Power Input of Fan Motor 2 (Motor PCB - Inverter PCB) |
| <b>Noise Filter</b>                 |                                                                         |
| EARTH CBOX GY                       | Ground                                                                  |
| EARTH TB GY                         | Ground                                                                  |
| CN INVERTER BL                      | Connection between Noise Filter and inverter PCB                        |
| CN MAIN                             | Connection to Main PCB                                                  |

Figure 17: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Heat Recovery - Cooling Mode Refrigerant Flow Diagram.

## Heat Recovery – Cooling Mode



|         |                 |                    |                |              |
|---------|-----------------|--------------------|----------------|--------------|
| Remarks | Pressure Sensor | Temperature Sensor | Solenoid Valve | SVC Valve    |
|         | Pressure Switch | EEV                | Strainer       | Fusible Plug |



# REFRIGERANT FLOW DIAGRAMS

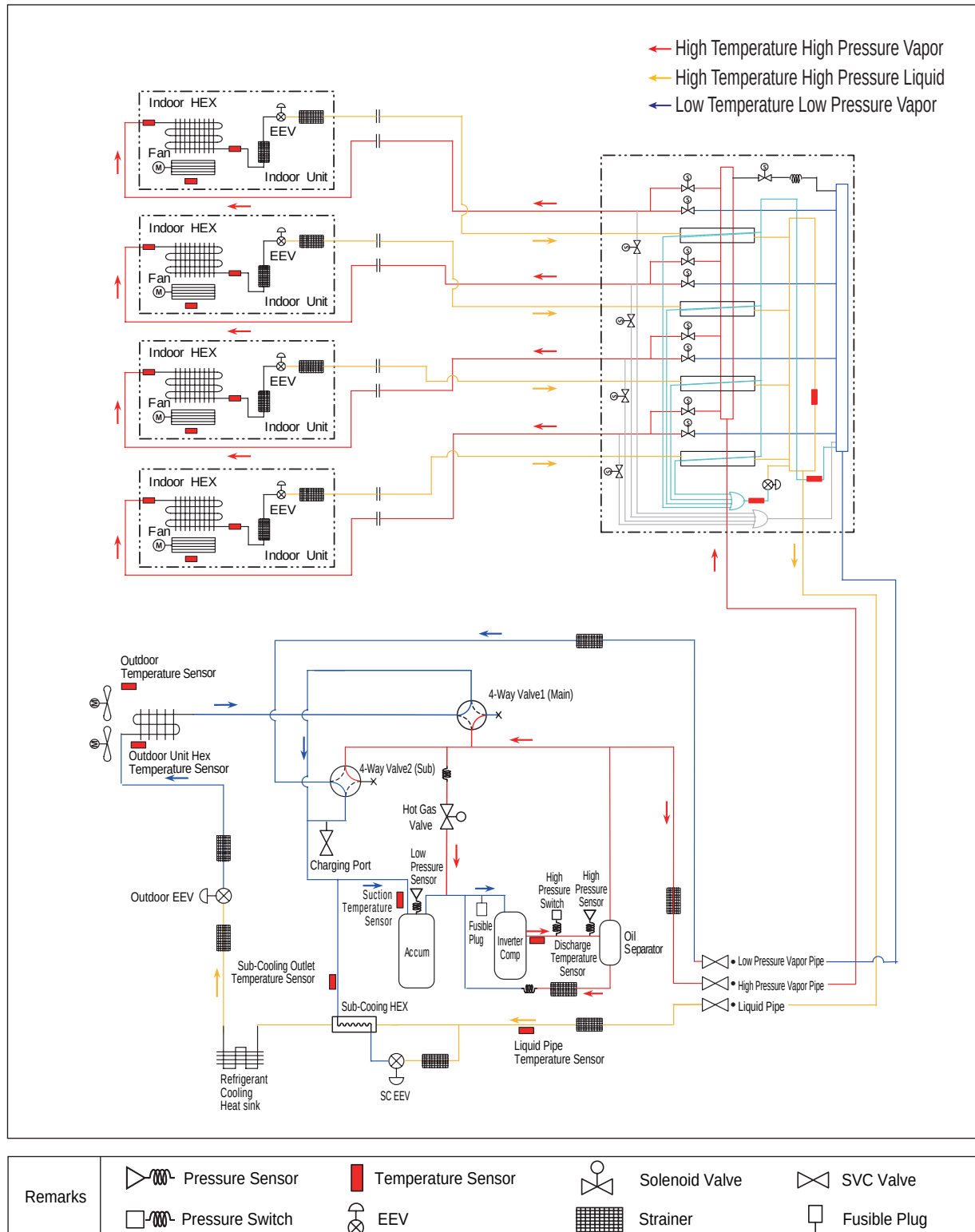
ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0

Heat Recovery - Heating Mode

**MULTI V<sup>TM</sup>**  
WITH  
**LGRED<sup>®</sup>**

Figure 18: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Heat Recovery - Heating Mode Refrigerant Flow Diagram.

## Heat Recovery – Heating Mode



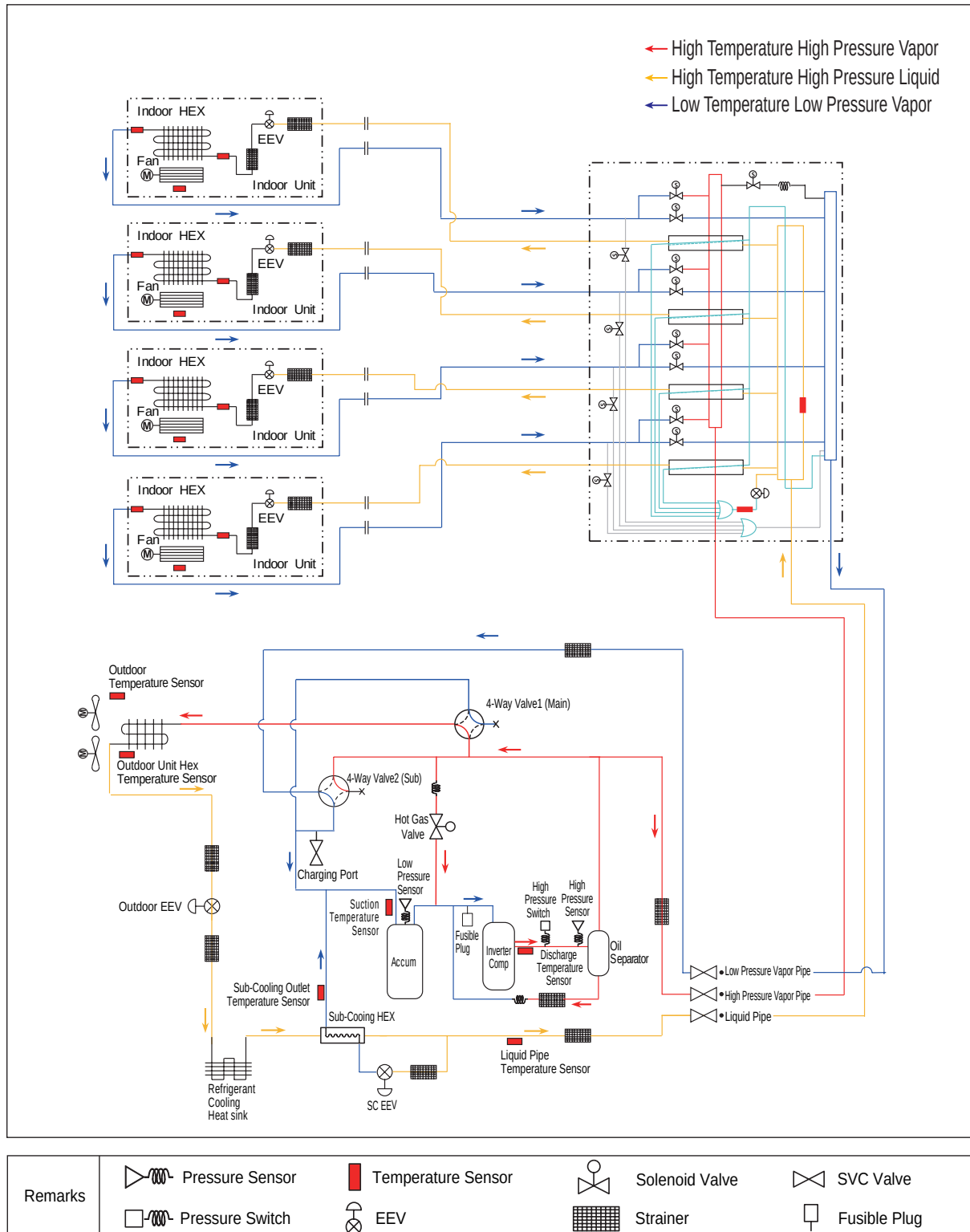
# REFRIGERANT FLOW DIAGRAMS

ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0

Heat Recovery - Oil Return and Defrost Operation

Figure 19: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Heat Recovery - Oil Return and Defrost Operation Refrigerant Flow Diagram.

## Heat Recovery – Oil Return and Defrost Operation



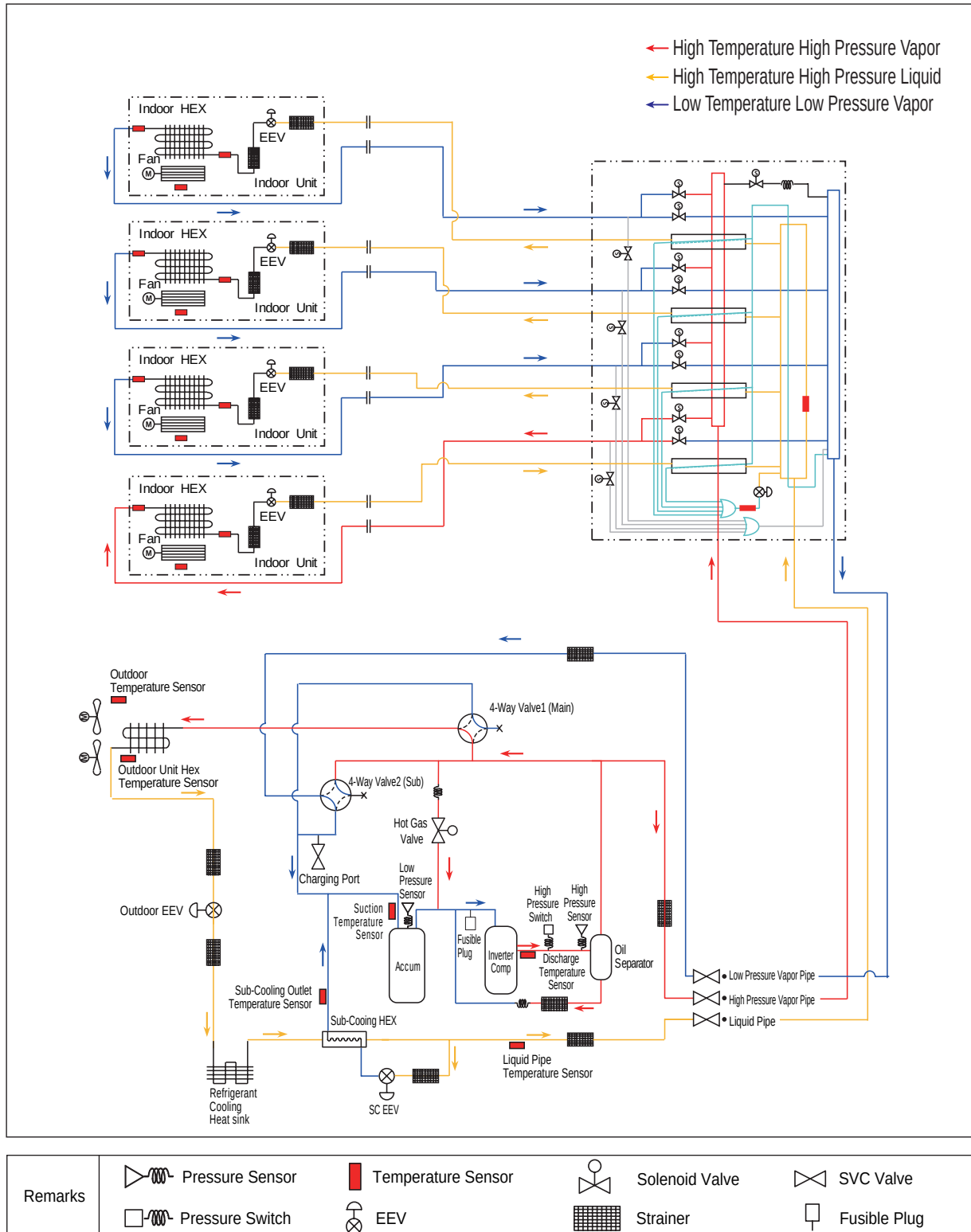
# REFRIGERANT FLOW DIAGRAMS

ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0

Heat Recovery - Cooling-based Simultaneous Operation



Figure 20: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Heat Recovery - Cooling-based Simultaneous Operation Refrigerant Flow Diagram.  
**Heat Recovery – Cooling-based Simultaneous Operation**



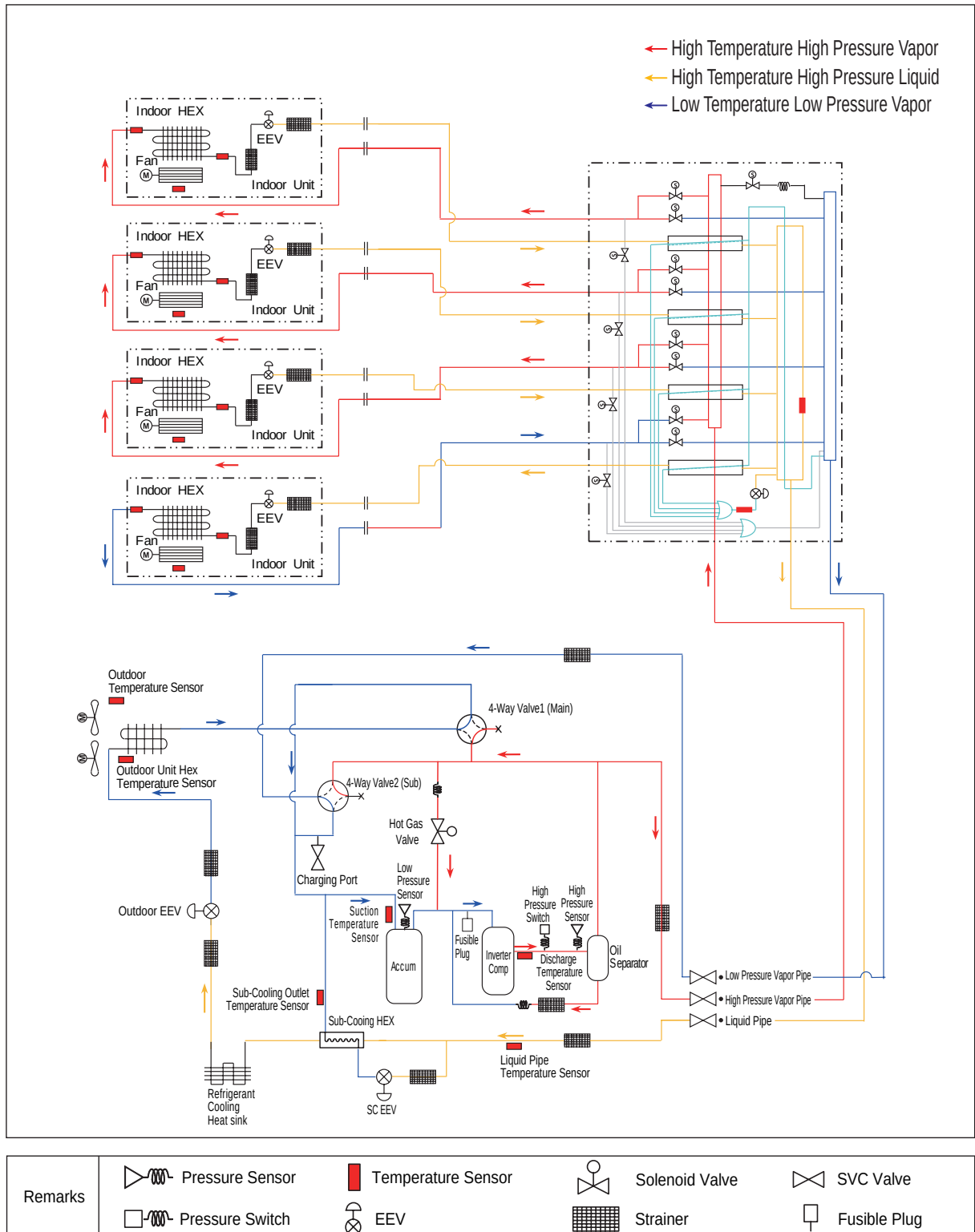
# REFRIGERANT FLOW DIAGRAMS

## ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0

### Heat Recovery - Heating-based Simultaneous Operation

Figure 21: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Heat Recovery - Heating-based Simultaneous Operation Refrigerant Flow Diagram.

### Heat Recovery – Heating-based Simultaneous Operation



# REFRIGERANT FLOW DIAGRAMS

ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0

Heat Recovery - Balanced Simultaneous Operation



Figure 22: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Heat Recovery - Balanced Simultaneous Operation Refrigerant Flow Diagram.  
**Heat Recovery – Balanced Simultaneous Operation**

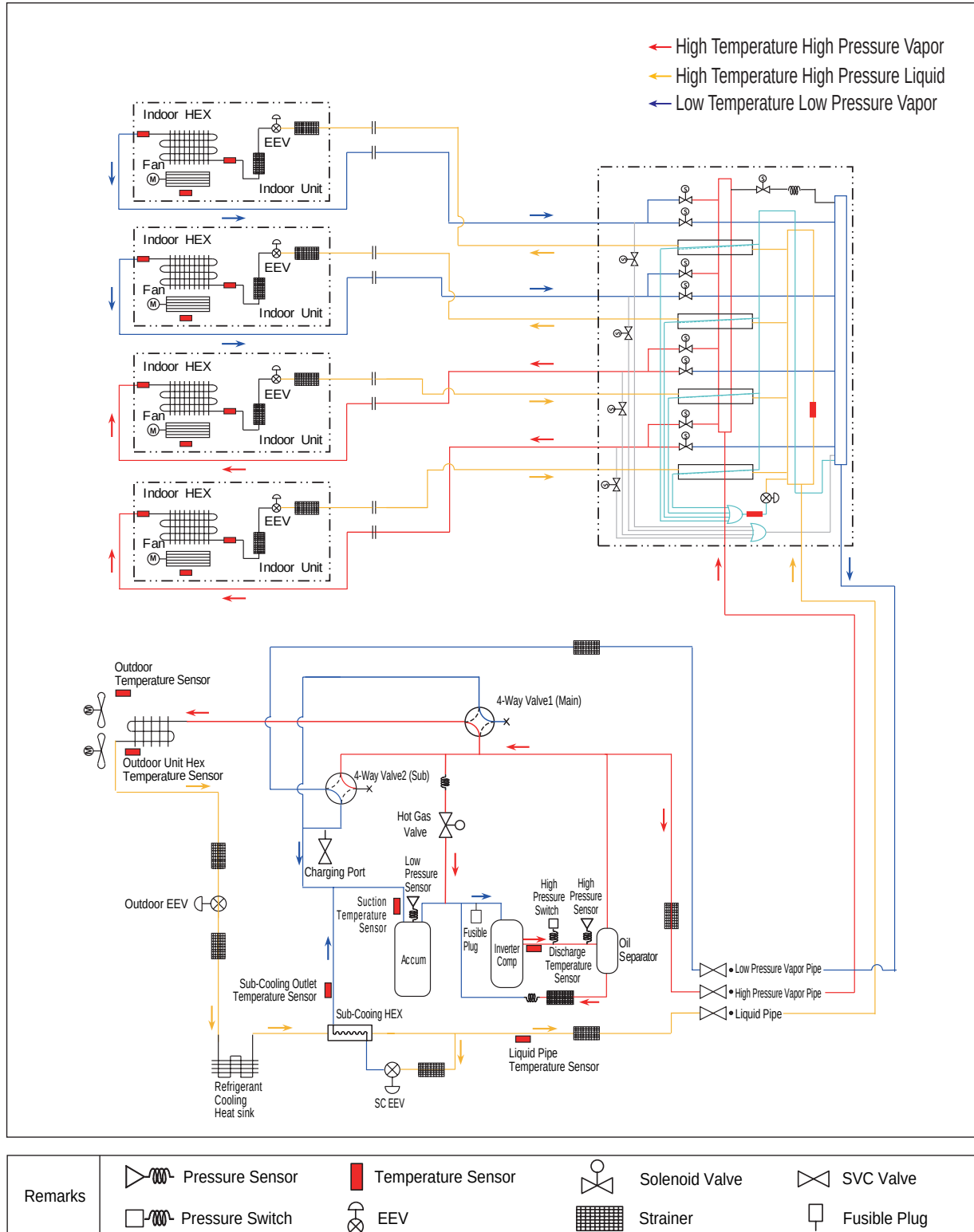
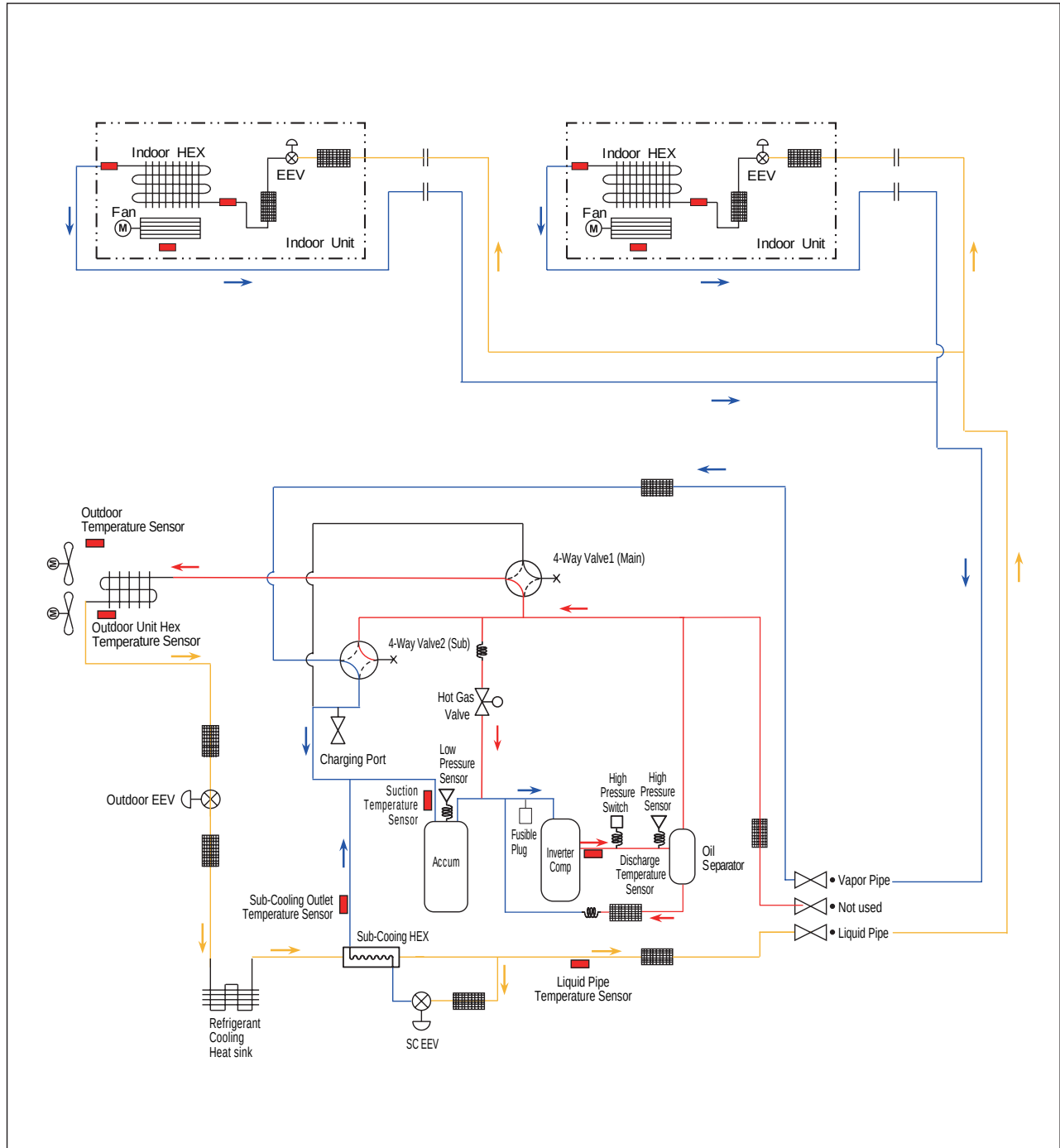


Figure 23: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Heat Pump - Cooling Mode Refrigerant Flow Diagram.

## Heat Pump – Cooling Mode



|         |                 |                    |                |              |
|---------|-----------------|--------------------|----------------|--------------|
| Remarks | Pressure Sensor | Temperature Sensor | Solenoid Valve | SVC Valve    |
|         | Pressure Switch | EEV                | Strainer       | Fusible Plug |

# REFRIGERANT FLOW DIAGRAMS

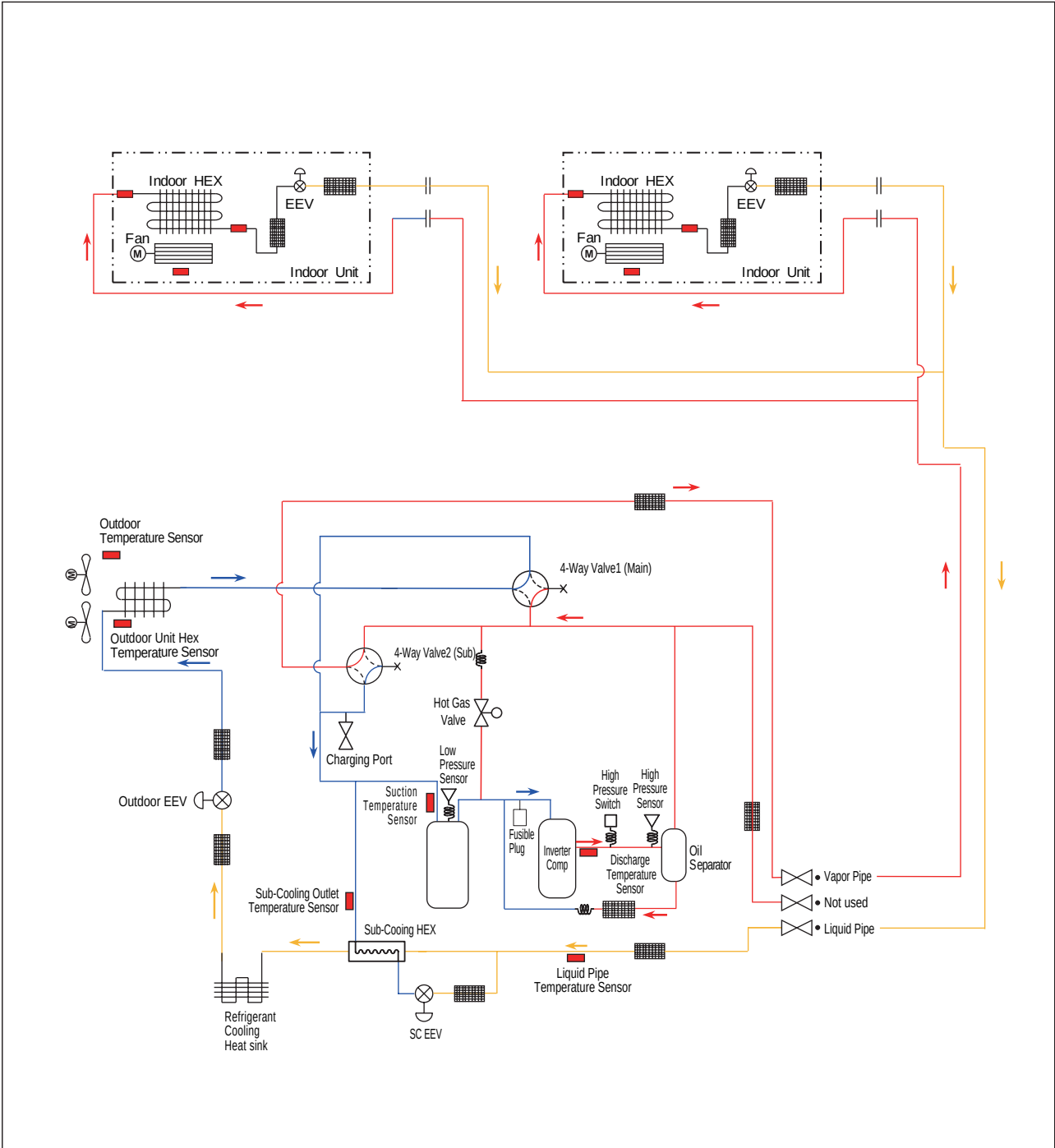


ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0

Heat Pump - Heating Mode

Figure 24: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Heat Pump - Heating Mode Refrigerant Flow Diagram.

## Heat Pump – Heating Mode

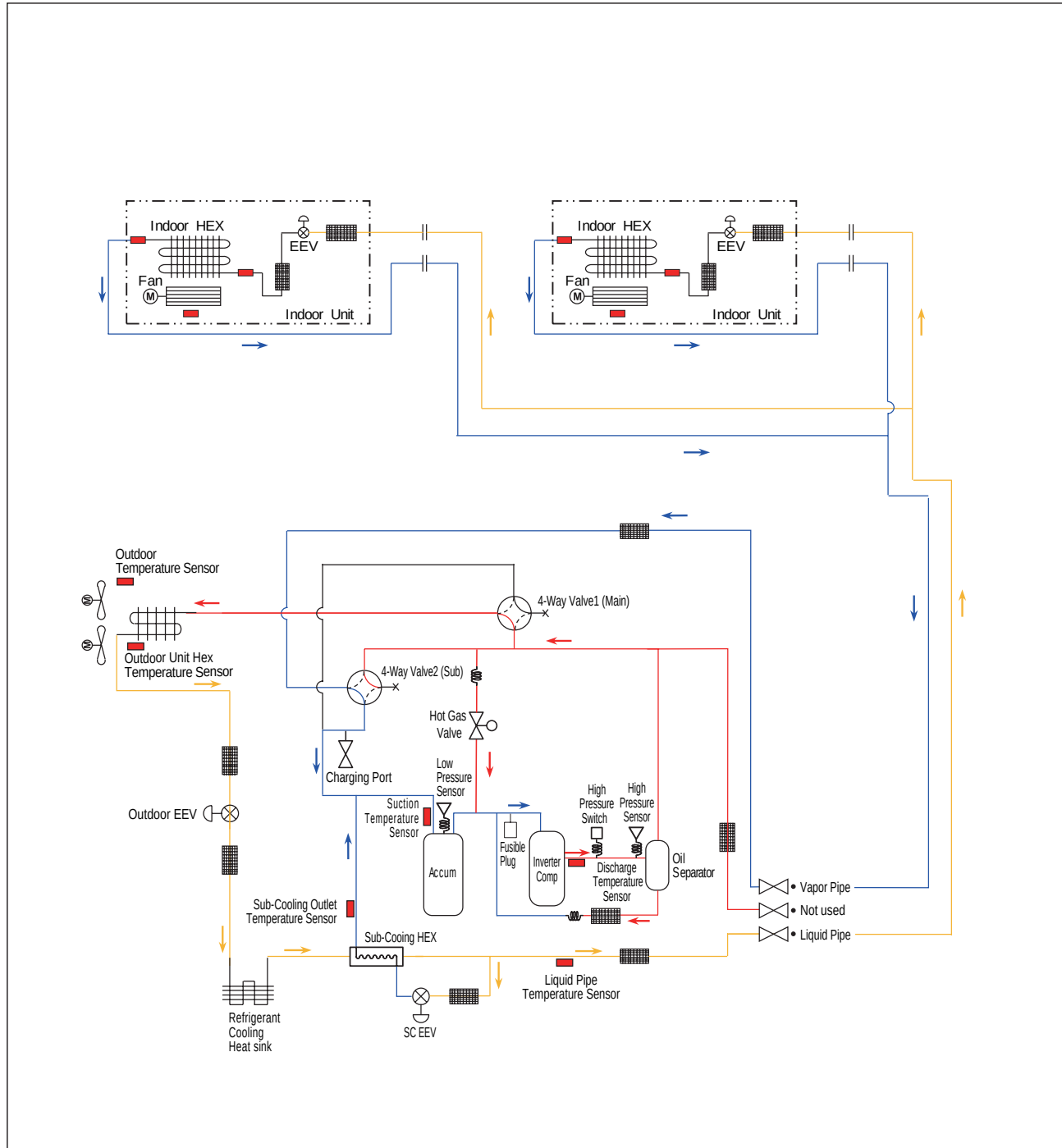


|         |                 |                    |                |              |
|---------|-----------------|--------------------|----------------|--------------|
| Remarks | Pressure Sensor | Temperature Sensor | Solenoid Valve | SVC Valve    |
|         | Pressure Switch | EEV                | Strainer       | Fusible Plug |



Figure 25: ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Heat Pump - Oil and Defrost Operation Refrigerant Flow Diagram.

## Heat Pump – Oil Return and Defrost Operation



|         |                 |                    |                |              |
|---------|-----------------|--------------------|----------------|--------------|
| Remarks | Pressure Sensor | Temperature Sensor | Solenoid Valve | SVC Valve    |
|         | Pressure Switch | EEV                | Strainer       | Fusible Plug |

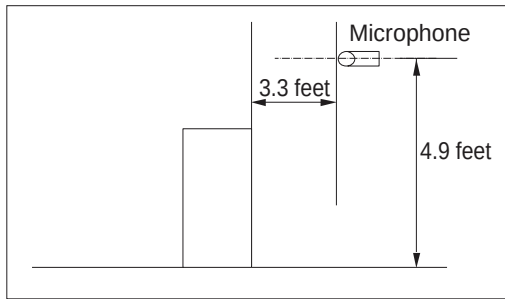


# ACOUSTIC DATA

## Sound Pressure Levels



Figure 26: Combination Outdoor Unit Sound Pressure Level Measurement Location.



- Measurement taken 4.9' above finished floor, and at a distance of 3.3' from face of fan discharge.
- Measurements taken with no attenuation and units operating at full load normal operating condition.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of a particular area in which the equipment is installed.
- Sound levels are measured in dB(A)±3.
- Tested in anechoic chamber per ISO Standard 3745.
- Off-Peak Operation: Logic takes advantage of lower outdoor ambient temperatures and limits the outdoor unit fan speed during nighttime operation to lower the unit sound level.

Table 11: LGRED Combination Outdoor Unit Sound Pressure Levels (dB[A]).

| Model Nos.  | Cooling | Heating |
|-------------|---------|---------|
| ZRUM036GSS0 | 50      | 52      |
| ZRUM048GSS0 | 53      | 54      |
| ZRUM060GSS0 | 57      | 59      |

Figure 27: ZRUM036GSS0 and ZRUM048GSS0 Combination Outdoor Unit Cooling and Heating Sound Pressure Level Diagram.

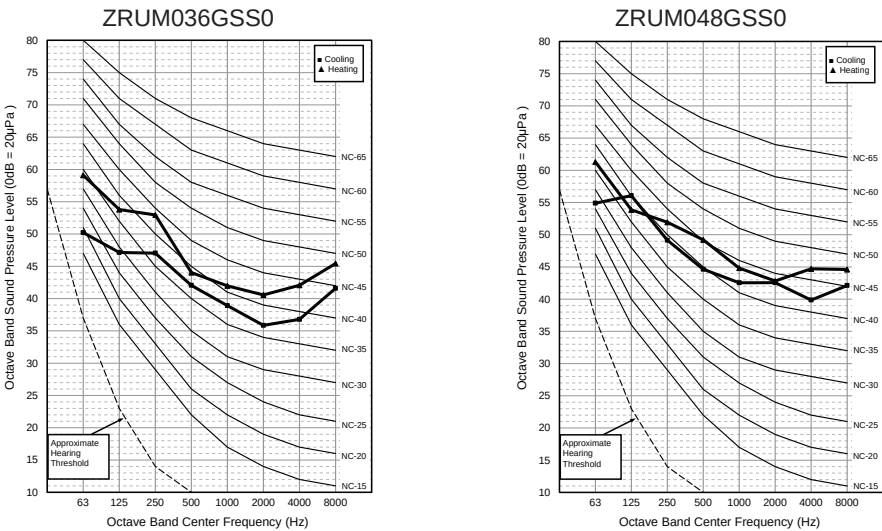


Figure 28: ZRUM060GSS0 Combination Outdoor Unit Cooling and Heating Sound Pressure Level Diagrams.

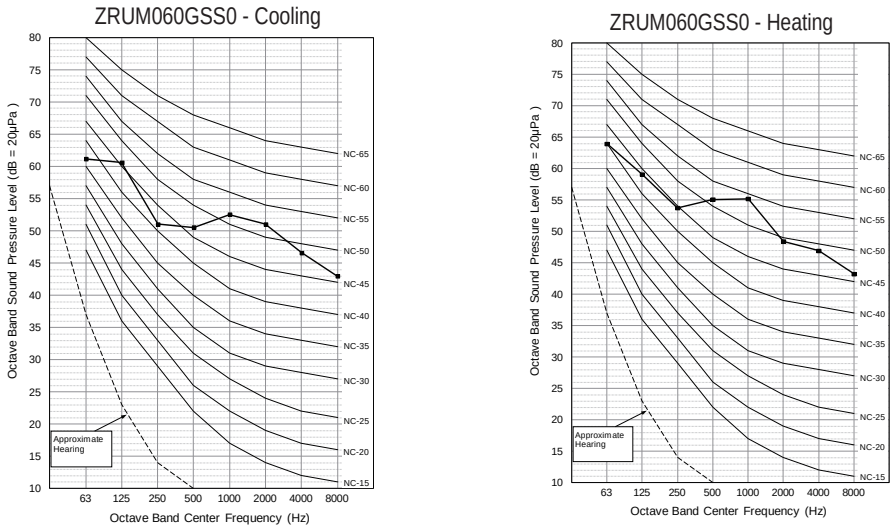


Table 12: Combination Outdoor Unit Sound Power Levels (dB[A]).

| Model Nos.  | Sound Power Levels (dB[A]) |
|-------------|----------------------------|
| ZRUM036GSS0 | 66                         |
| ZRUM048GSS0 | 67                         |
| ZRUM060GSS0 | 69                         |

- Data is valid under diffuse field conditions.
- Data is valid under nominal operating conditions.
- Sound power level is measured using rated conditions, and tested in a reverberation room per ISO 3741 standards.
- Sound level will vary depending on a range of factors such as construction (acoustic absorption coefficient) of a particular area in which the equipment is installed.
- Reference acoustic intensity: 0dB = 10E-6μW/m<sup>2</sup>

Figure 29: ZRUM036GSS0 and ZRUM048GSS0 Combination Outdoor Unit Sound Power Level Diagrams.

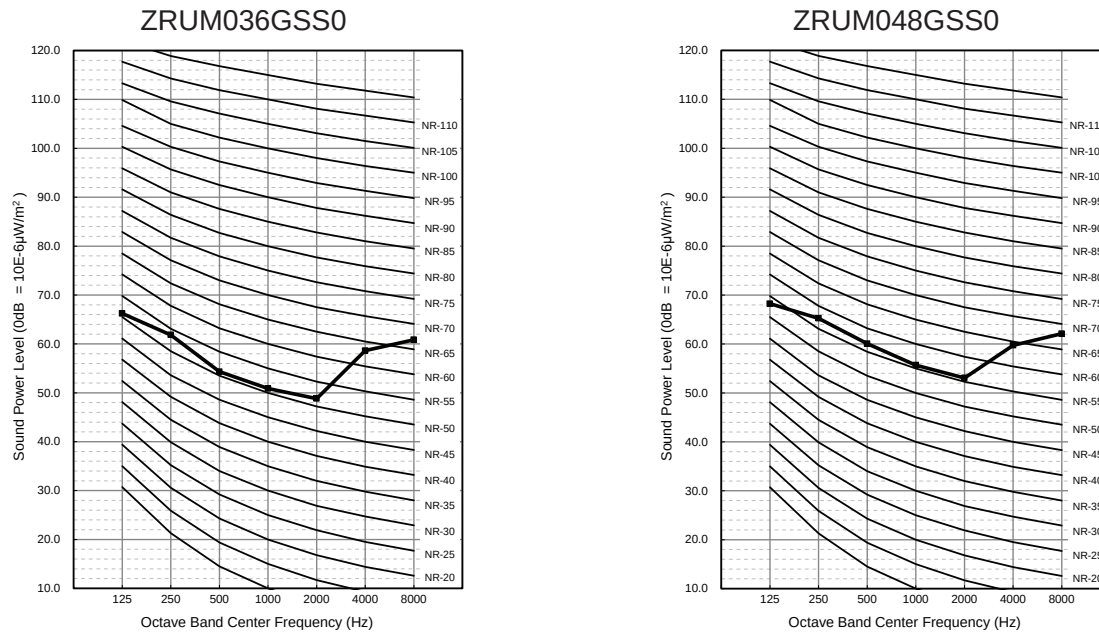
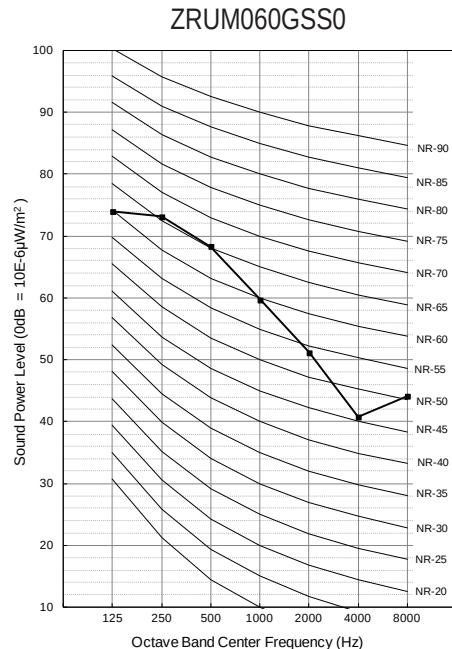


Figure 30: ZRUM060GSS0 Combination Outdoor Unit Sound Power Level Diagram.



## Y-branches for Heat Recovery Operation

(Unit: Inch [mm])

| Models     | Pipe                     |  |
|------------|--------------------------|--|
| ARBLB01621 | Low-Pressure Vapor Pipe  |  |
|            | Liquid Pipe              |  |
|            | High-Pressure Vapor Pipe |  |
|            |                          |  |
| ARBLB03321 | Low-Pressure Vapor Pipe  |  |
|            | Liquid Pipe              |  |
|            | High-Pressure Vapor Pipe |  |
|            |                          |  |
| ARBLB07121 | Low-Pressure Vapor Pipe  |  |
|            | Liquid Pipe              |  |
|            | High-Pressure Vapor Pipe |  |
|            |                          |  |
| ARBLB14521 | Low-Pressure Vapor Pipe  |  |
|            | Liquid Pipe              |  |
|            | High-Pressure Vapor Pipe |  |
|            |                          |  |

## Y-branches for Heat Pump Operation

(Unit: Inch [mm])

| Models     | Pipe               |                    |
|------------|--------------------|--------------------|
| ARBLN01621 | Vapor Pipe         | Liquid Pipe        |
|            | <p>AJR54072929</p> | <p>AJR54072927</p> |
| ARBLN03321 | Vapor Pipe         | Liquid Pipe        |
|            | <p>AJR54072930</p> | <p>AJR54072928</p> |
| ARBLN07121 | Vapor Pipe         | Liquid Pipe        |
|            | <p>AJR54072933</p> | <p>AJR54072931</p> |
| ARBLN14521 | Vapor Pipe         | Liquid Pipe        |
|            | <p>AJR54072908</p> | <p>AJR54072932</p> |

## Headers

Unit: Inch

| Models                | Vapor pipe | Liquid pipe |
|-----------------------|------------|-------------|
| 4 branch<br>ARBL054   |            |             |
| 7 branch<br>ARBL057   |            |             |
| 4 branch<br>ARBL104   |            |             |
| 7 branch<br>ARBL107   |            |             |
| 10 branch<br>ARBL1010 |            |             |

## Combining Heat Recovery Ports for Large Indoor Units

It is necessary to combine two ports on a system designed for heat recovery operation when installing a single indoor unit with a capacity exceeding 54,000 Btu/h. Two neighboring heat recovery ports are combined using a reverse Y-branch that is then connected to the one large indoor unit.  
(Unit: Inch [mm])

| Models     | Pipe        |             |
|------------|-------------|-------------|
|            | Vapor Pipe  | Liquid Pipe |
| ARBLN01621 |             |             |
|            | AJR54072929 | AJR54072927 |
| ARBLN03321 | Vapor Pipe  | Liquid Pipe |
|            |             |             |
|            | AJR54072930 | AJR54072928 |

## Low Ambient Wind Baffle Kit

(ZLABGP04A)

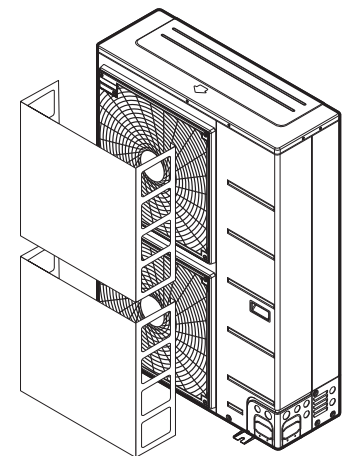
Optional low ambient baffle kits allow for Multi V S outdoor unit operation down to -9.9°F in cooling mode. When used with heat recovery operation, low ambient cooling to -9.9°F is possible only when all indoor units are operating in cooling mode. The low ambient wind baffle kit does not impact synchronous operating range.

Includes:

- 20 Gauge Paint Grip Wind Baffle in Soft Dove Grey
- Four (4) Zinc-Plated Pan-Head Phillips Screws, #8 x 1/2"

Use two (2) ZLABGP04A kits with the 3-ton ZRUM036GSS0, 4-ton ZRUM048GSS0, and 5-ton ZRUM060GSS0.

Contact an LG Sales Representative for more information.





## LG Monitoring View (LGMV) Diagnostic Software and Cable

LG Monitoring View (LGMV) is a maintenance and troubleshooting tool for Multi V<sup>TM</sup> air conditioning systems. LGMV formats are available for computer or mobile phone use.

The main screen for LGMV allows the user to view the following real time data:

- Actual inverter compressor speed
- Target inverter compressor speed
- Actual outdoor fan speed
- Target outdoor unit fan speed
- Actual superheat
- Target superheat
- Actual subcooler circuit superheat
- Target subcooler circuit superheat
- Main EEV position
- Subcooling EEV position
- Inverter compressor current transducer value
- Outdoor air temperature
- Actual high pressure/saturation temperature
- Actual low pressure/saturation temperature
- Suction temperature
- Inverter compressor discharge temperature
- Constant speed compressor discharge temperature
- Front outdoor coil pipe temperature
- Back outdoor coil pipe temperature
- Liquid line pipe temperature
- Subcooler inlet temperature
- Subcooler outlet temperature
- Average indoor unit (IDU) pipe temperature
- Inverter compressor operation indicator light
- Four-way reversing valve operation indicator light
- Pressure graph showing actual low pressure and actual high pressure levels
- Error code display
- Operating mode indicator
- Target high pressure
- Target low pressure
- PCB (printed circuit board) version
- Software version
- Installer name
- Model no. of outdoor units
- Site name
- Total number of connected indoor units
- Communication indicator lights
- Indoor unit capacity
- Indoor unit operating mode
- Indoor unit fan speed
- Indoor unit EEV position
- Indoor unit room temperature
- Indoor unit inlet pipe temperature
- Indoor unit outlet pipe temperature
- Indoor unit error code

Additional screens can be accessed by tabs on the main screen

### 1. Cycleview: Graphic of internal components including

- Compressors showing actual speeds
- EEVs
- Indoor Units
- Liquid injection valves
- Temperature and pressure sensors
- Four-way reversing valve
- Outdoor fans showing status and speeds

### 2. Graph:

Full screen graph of actual high and low pressures and high and low pressure limits. A sliding bar enables user to go back in time and view data.

### 3. Control IDU: Enables user to turn on all IDUs default setpoints of 86°F in heat mode or 64°F in cool mode.

### 4. Setting: Converts metric values to imperial values.

### 5. Making Data: Recording of real time data to a separate file created to be stored on the user's computer.

### 6. Loading Data: Recorded data from a saved ".CSV" file can be loaded to create an LGMV session.

### 7. Electrical Data: Screen is changed to show the following:

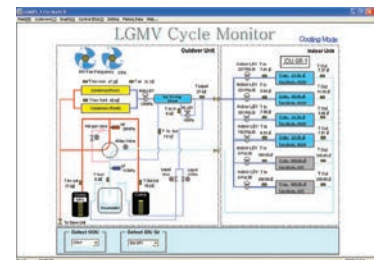
- Inverter compressor
- Amps / Volts / Power Hz
- Inverter control board fan Hz
- Constant compressor
- Current transducer value
- Phase

In lieu of connecting to the outdoor unit, user has the option to connect to the indoor unit with a connector kit. When connected through the indoor unit, user will not be able to record data.

This software can be used to both pre-set-up new systems and troubleshoot existing systems. LGMV data can be recorded to a ".CSV" file and emailed to an LG representative to assist with diagnostic evaluations.

**LGMV is available in different formats. Contact your LG Sales Representative for system requirements and for more information.**

Figure 31: Sample Cycleview (Computer View Example).



## ThinQ

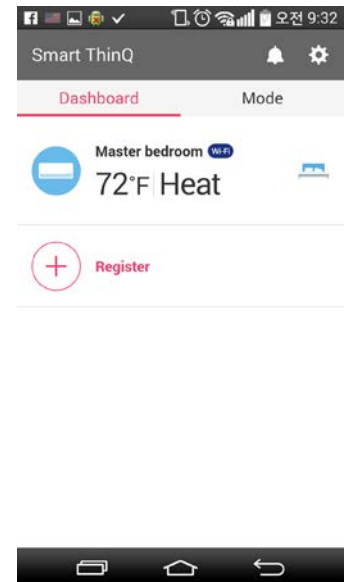
LG ThinQ is a built-in Wi-Fi module, along with a free smart phone app that provides monitoring and remote control capabilities for use with certain LG indoor units. The app has the following features and benefits:

- Sign in to the app using LG credentials, or using Google® or Facebook® login credentials. Users only have to log in to the app once; the app remembers login details for subsequent logins.
- View current temperature settings of the air conditioning unit and change temperature, fan speed, and air flow direction from anywhere in the house or at a remote location (through the use of wireless connection). Multiple users can control the household air conditioning unit remotely.
- Monitor filter usage of the unit.
- Set up weekly schedules to start and stop air conditioner activity.
- Set up the unit to run in different Modes, depending on the user's schedule. Set up specific temperatures for when the user is home, away on vacation, or sleeping.
- Troubleshoot problems, and view tips on general maintenance of the system using the Smart Diagnosis function.

*\*Google is a registered trademark of Google Inc.; Facebook is a registered trademark of Facebook.*

**Contact your LG Sales Representative or visit [www.lghvac.com](http://www.lghvac.com) for system requirements, how to download the app, a user's manual, or other information.**

Figure 32: Example of an LG Smart ThinQ Screen (appearance may differ depending on version of software).





# HEAT RECOVERY UNIT PRODUCT DATA

**Mechanical Specifications on page 53**

**General Data on page 54**

**Electrical Data on page 56**

**Dimensions on page 57**

**Wiring Diagrams on page 59**

**Refrigerant Flow Diagrams on page 63**

**Fan Curve Values on page 65**

**Acoustic Data on page 66**

**Accessories on page 67**

## Multi V Heat Recovery Units

### General

Multi V heat recovery units are for use with R32 Multi V i, Multi V Water and Multi V S heat recovery outdoor units to permit simultaneous heating and cooling operation. Heat recovery units have two (2), three (3), four (4), six (6), or eight (8) ports for connections to indoor units. Each port is capable of connecting from one (1) indoor unit up to eight (8) indoor units up to a maximum nominal capacity of ≤60 MBh. When multiple indoor units are connected to one port, all indoor units on that port must operate in the same mode (cooling or heating). Individual indoor units ≥60 MBh nominal capacity must use two (2) neighboring heat recovery unit ports twinned together using a reverse Y-branch kit. Connect largest indoor unit to first port of the heat recovery unit. Each heat recovery unit can support a maximum capacity (sum of ports) of up to 230 MBh.

Heat recovery ports can operate in heating or cooling mode independently, regardless of the mode of any other port on the unit or in the system except where heat recovery unit ports are twinned.

### Casing and Construction

Heat recovery units are completely factory assembled, internally piped, wired, and are designed for indoor installation. Casing is constructed of galvanized steel, and houses piping, valves and controls to divert refrigerant controlling each port to operate in either heating or cooling mode. Heat recovery units contain one double spiral subcooling heat exchanger per port and are internally insulated. All heat recovery units include refrigerant leak sensors and knockouts for enclosure ventilation applications.

### Refrigerant Valves

Each heat recovery port is circuited with two two-position motorized valves to control R32 refrigerant flow path to allow indoor units to operate in heating or cooling mode. Six and eight-port heat recovery units use EEVs for refrigerant flow control. R32 heat recovery units include built-in shutoff valves.

### Refrigerant Piping

Units can be piped in series and / or parallel to optimize cost between material and labor. Up to 16 heat recovery units can be piped in series, parallel, or a combination of series and parallel to optimize cost between material and labor. Any series string of heat recovery ports/units can connect up to 230 MBh of indoor unit nominal capacity (series string is defined as heat recovery units piped in series).

Heat recovery unit piping limitations also depend on the allowable piping parameters of the outdoor unit installed.

- Indoor units up to 131 equivalent feet of piping length from the heat recovery unit to which it is connected.
- Indoor units up to 295 equivalent feet of piping length from the first branch.
- Difference between highest and lowest elevation indoor units piped to separate parallel heat recovery units (HRUs) up to 131 feet in elevation.
- Difference between highest and lowest heat recovery units piped in parallel up to 98 feet in elevation.
- Difference between highest and lowest elevation heat recovery units piped in series up to 16 feet in elevation.
- Elevation difference of series connected heat recovery units cannot exceed 16 feet.

All refrigerant lines from the outdoor unit to the heat recovery units, and from the heat recovery units to the indoor units must be field insulated separately.

### Electrical

Heat recovery units require 208-230V, 1-phase, 60 Hz electrical power, and are capable of operation within ±10% of nominal voltage.

### Controls

Heat recovery units include factory-installed control boards with integral microprocessors. Heat recovery unit control boards communicate with the main control board in the outdoor unit and interface with the VRF equipment controls system. The control circuit between the indoor units, heat recovery units and the outdoor unit is RS-485 daisy chain communication over two-conductor, twisted, stranded, shielded, 18 AWG cable.

Figure 33: Four-Port Heat Recovery Unit.





Figure 34: Two-Port Heat Recovery Unit.



Figure 35: Three-Port Heat Recovery Unit.



Figure 36: Four-Port Heat Recovery Unit.

## NOTICE

Heat recovery units can only be used with LG systems piped for heat recovery operation.

Table 13: Two-, Three-, and Four-Port Heat Recovery Unit Specifications.

| Model                                             |                  |                              | PRHR024C                 | PRHR034C | PRHR044C |
|---------------------------------------------------|------------------|------------------------------|--------------------------|----------|----------|
| Number of Ports                                   |                  |                              | 2                        | 3        | 4        |
| Max. Connectable No. of Indoor Units              |                  |                              | 16                       | 24       | 32       |
| Max. Connectable No. of Indoor Units on each port |                  |                              | 8                        | 8        | 8        |
| Max. Port Capacity (each port)                    | Btu/h            |                              | 60,000                   | 60,000   | 60,000   |
| Max. Unit Capacity (sum of ports)                 | Btu/h            |                              | 120,000                  | 180,000  | 230,000  |
| Net Weight                                        | lbs.             |                              | 55.1                     | 61.5     | 68.1     |
| Shipping Weight                                   | lbs.             |                              | 71.7                     | 79.4     | 86.0     |
| Dimensions (W x H x D)                            | Inches           |                              | 19-1/4 x 9-1/2 x 31-3/32 |          |          |
| Refrigerant Type                                  |                  |                              | R32                      |          |          |
| Refrigerant Control                               |                  |                              | Motorized Valve          |          |          |
| Casing                                            |                  |                              | Galvanized Steel Plate   |          |          |
| Connecting Pipes                                  | To Indoor Units  | Liquid Pipe (inches)         | Ø3/8 – Ø1/4              |          |          |
|                                                   |                  | Vapor Pipe (inches)          | Ø5/8 – Ø1/2              |          |          |
|                                                   | To Outdoor Units | Liquid (inches)              | Ø3/8                     | Ø1/2     | Ø5/8     |
|                                                   |                  | Low Pressure Vapor (inches)  | Ø7/8                     | Ø1-1/8   | Ø1-1/8   |
|                                                   |                  | High Pressure Vapor (inches) | Ø3/4                     | Ø7/8     | Ø7/8     |

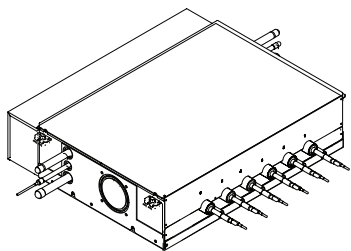


Figure 37: Six-Port Heat Recovery Unit.

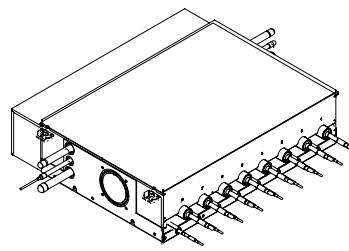


Figure 38: Eight-Port Heat Recovery Unit.

## NOTICE

Heat recovery units can only be used with LG systems piped for heat recovery operation.

Table 14: Six- and Eight-Port Heat Recovery Unit Specifications.

| Model                                             |                  |                              | PRHR065C                    | PRHR085C |
|---------------------------------------------------|------------------|------------------------------|-----------------------------|----------|
| Number of Ports                                   |                  |                              | 6                           | 8        |
| Max. Connectable No. of Indoor Units              |                  |                              | 48                          | 64       |
| Max. Connectable No. of Indoor Units on each port |                  |                              | 8                           | 8        |
| Max. Port Capacity (each port)                    | Btu/h            |                              | 60,000                      | 60,000   |
| Max. Unit Capacity (sum of ports)                 | Btu/h            |                              | 230,000                     | 230,000  |
| Net Weight                                        | lbs.             |                              | 112.2                       | 125.4    |
| Shipping Weight                                   | lbs.             |                              | -                           | -        |
| Dimensions (W x H x D)                            | Inches           |                              | 35-7/16 x 9-7/32 x 30-14/32 |          |
| Refrigerant Type                                  |                  |                              | R32                         |          |
| Refrigerant Control                               |                  |                              | EEV                         |          |
| Casing                                            |                  |                              | Galvanized Steel Plate      |          |
| Connecting Pipes                                  | To Indoor Units  | Liquid Pipe (inches)         | Ø3/8 – Ø1/4                 |          |
|                                                   |                  | Vapor Pipe (inches)          | Ø5/8 – Ø1/2                 |          |
|                                                   | To Outdoor Units | Liquid (inches)              | Ø1/2                        | Ø5/8     |
|                                                   |                  | Low Pressure Vapor (inches)  | Ø7/8                        | Ø1-1/8   |
|                                                   |                  | High Pressure Vapor (inches) | Ø3/4                        | Ø7/8     |

Table 15: Heat Recovery Unit Electrical Data.

| Unit Model No. | Voltage Range | Rated Amps | MCA   | MFA | Power Supply |         |       | Power Input (W) |         |
|----------------|---------------|------------|-------|-----|--------------|---------|-------|-----------------|---------|
|                |               |            |       |     | Hz           | Volts   | Phase | Cooling         | Heating |
| PRHR024C       | 187-253       | 0.38       | 0.875 | 15  | 60           | 208-230 | 1     | 49.2            | 46.6    |
| PRHR034C       |               |            |       |     |              |         |       |                 |         |
| PRHR044C       |               |            |       |     |              |         |       |                 |         |
| PRHR065C       |               | 0.43       | 0.94  | 15  |              |         |       | 98.7            | 94      |
| PRHR085C       |               |            |       |     |              |         |       |                 |         |

MCA : Minimum Circuit Ampacity.

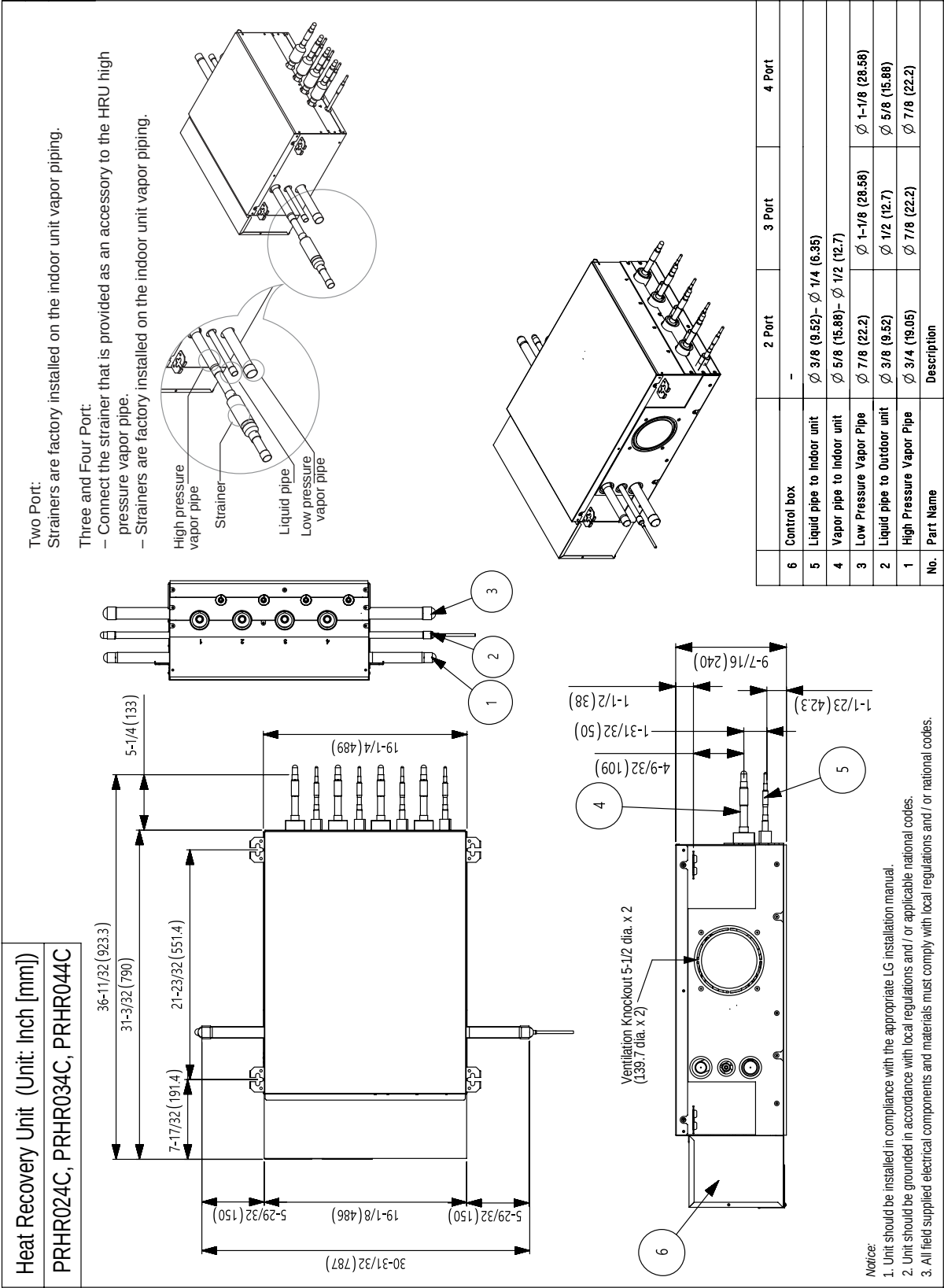
MFA : Maximum Fuse Amps.

Units are suitable for use on an electrical system where voltage supplied to unit terminals is within the listed range limits.

Select wire size based on the larger MCA value.

Instead of a fuse, use the circuit breaker.

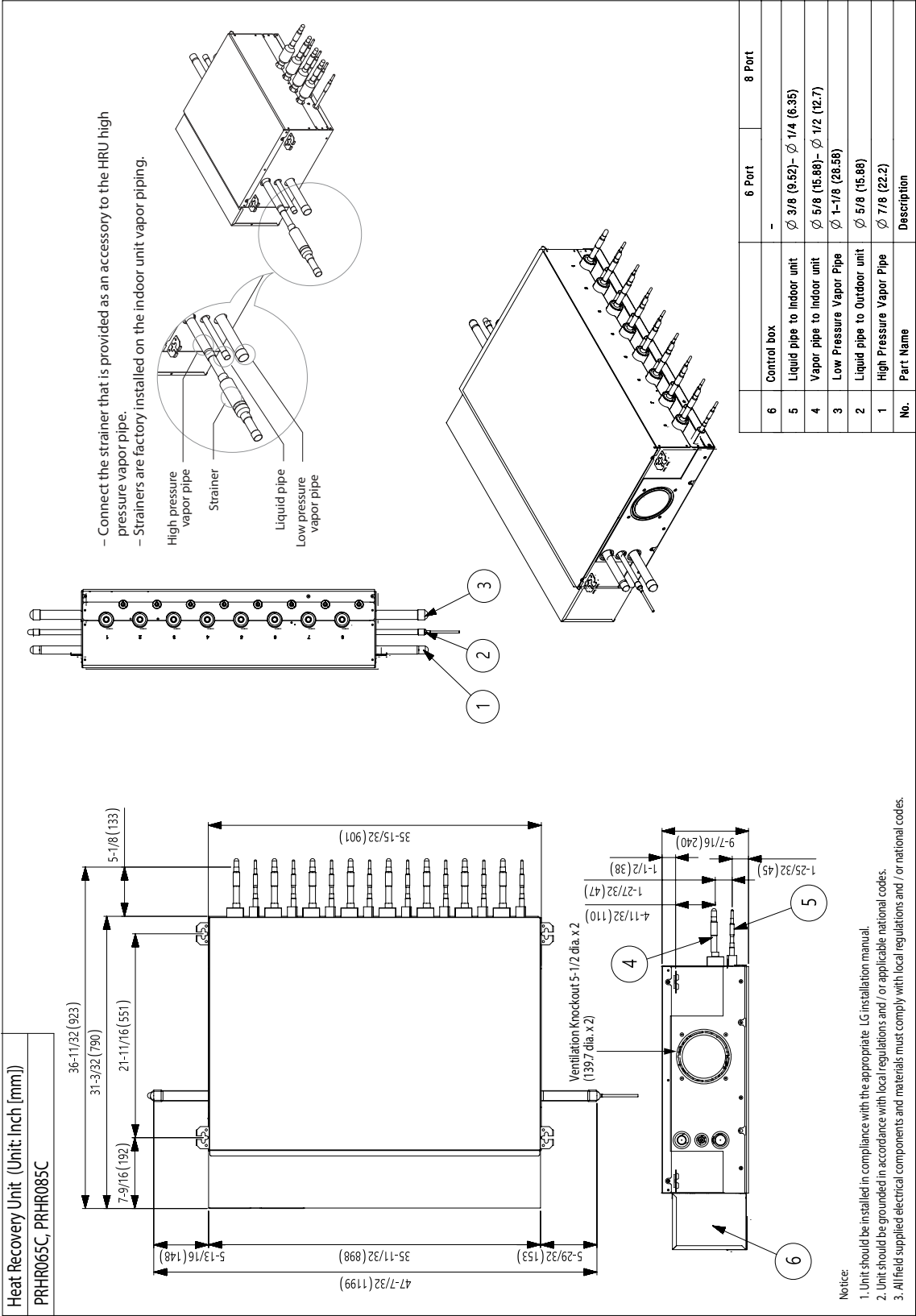
Figure 39: PRHR024C, PRHR034C and PRHR044C Dimensions.



DIMENSIONS



Figure 40: PRHR065C and PRHR085C Dimensions.



## Heat Recovery Unit Product Data





Table 16: PRHR024C, PRHR034C, and PRHR044C Wiring Diagram Legend

| Terminal                        | Description                                           |
|---------------------------------|-------------------------------------------------------|
| <i>Main PCB</i>                 |                                                       |
| CN_24V-EXT(RD)                  | 24V In (From Transformer)                             |
| CN_DAMPER(YL)                   | 24V Out (For Relay)                                   |
| CN_ODU_COMM(WH)/CN_IDU_COMM(WH) | Communication PCB (RS-485)                            |
| CN_TEMP(BK)                     | Thermistor (SC / In / Out / Liquid Pipe)              |
| CN_R1_MP_EEV(WH)                | EEV 01 (Bypass for Room 1)                            |
| CN_R2_MP_EEV(BL)                | EEV 02 (Bypass for Room 2)                            |
| CN_R3_MP_EEV(YL)                | EEV 03 (Bypass for Room 3)                            |
| CN_R4_MP_EEV(VI/RD)             | EEV 04 (Bypass for Room 4)                            |
| CN_SC_EEV(RD)                   | Sub Cooling EEV                                       |
| CN_R3_HL_EEV(WH)                | EEV 03 Low / High (For Room 3)                        |
| CN_R3_SHUT_HP(WH/BK)            | Shut Off Valve High (for Room 3)                      |
| CN_R3_SHUT_LP(GN/BK)            | Shut Off Valve Low (for Room 3)                       |
| CN_R4_HL_EEV(RD)                | EEV 04 Low / High (For Room 4)                        |
| CN_R4_SHUT_HP(RD)               | Shut Off Valve High (for Room 4)                      |
| CN_R4_SHUT_LP(BK)               | Shut Off Valve Low (for Room 4)                       |
| CN_R1_HL_EEV(BK)                | EEV 01 Low / High (For Room 1)                        |
| CN_R1_SHUT_HP(BL)               | Shut Off Valve High (for Room 1)                      |
| CN_R1_SHUT_LP(GY)               | Shut Off Valve Low (for Room 1)                       |
| CN_R2_HL_EEV(WH)                | EEV 02 Low / High (For Room 2)                        |
| CN_R2_SHUT_HP(GN/GR)            | Shut Off Valve High (for Room 2)                      |
| CN_R2_SHUT_LP(BR)               | Shut Off Valve Low (for Room 2)                       |
| CN_HR_COMM(YL)                  | Connection Sub PCB                                    |
| CN_LEAKAGE(VI)                  | Leak Detector                                         |
| CN_SVC                          | Display PCB                                           |
| CN_SOL_VALVE(BL)                | Liquid Bypass Valve                                   |
| CN_CHASSIS_GND                  | PCB Functional Ground                                 |
| CN_INPUT(BL)                    | Main Power                                            |
| CN_CC(WH)                       | Dry Contact                                           |
| CN_DC_INPUT(WH)                 | Auxiliary Power PCB                                   |
| <i>DIP Switch Settings</i>      |                                                       |
| SW01E                           | Setting, EEV Number (Manual Addressing)               |
|                                 | Setting, Valve Zone Number (Auto Addressing)          |
| SW02E(1)                        | Selecting Auto Address (↓) or Manual Address (↑)      |
| SW02E(2~4)                      | Setting, Total Number of Indoor Units Connected       |
| SW02E(5)                        | Setting, Sub PCB                                      |
| SW02E(6)                        | Setting, EEPROM Reset                                 |
| SW02E(7~8)                      | Setting, Mode (Zoning, etc.)                          |
| SW01A                           | Reset                                                 |
| SW01D                           | Setting, EEV Group                                    |
| SW01C                           | Setting, HR Unit Number                               |
|                                 | Setting, Indoor Units Zone Number (Manual Addressing) |
| SW02B                           | Setting, the Address of indoor_10 (Manual Addressing) |
| SW01B                           | Setting, the Address of indoor_1 (Manual Addressing)  |

Figure 42: PRHR065C and PRHR085C Wiring Diagram.

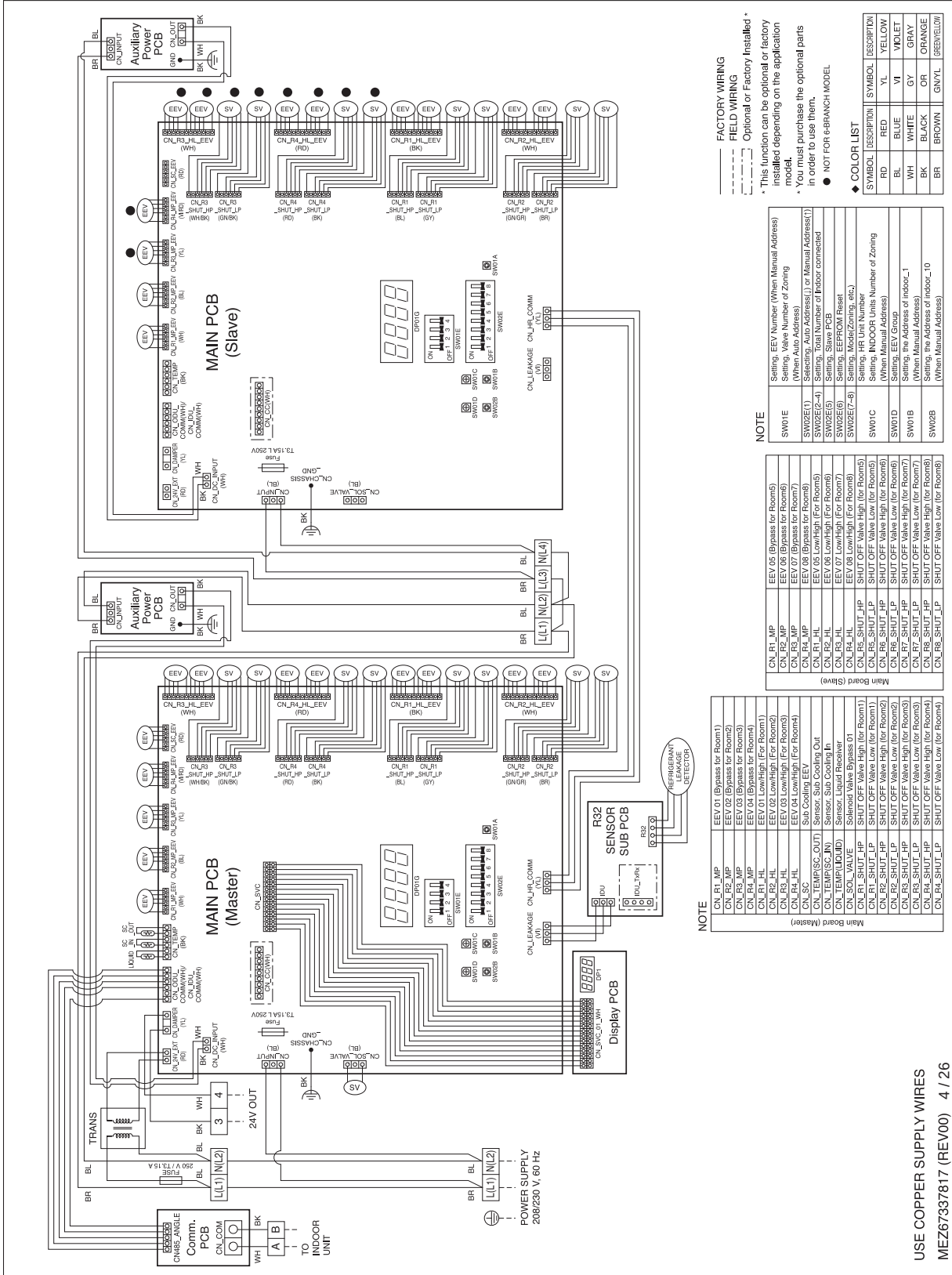
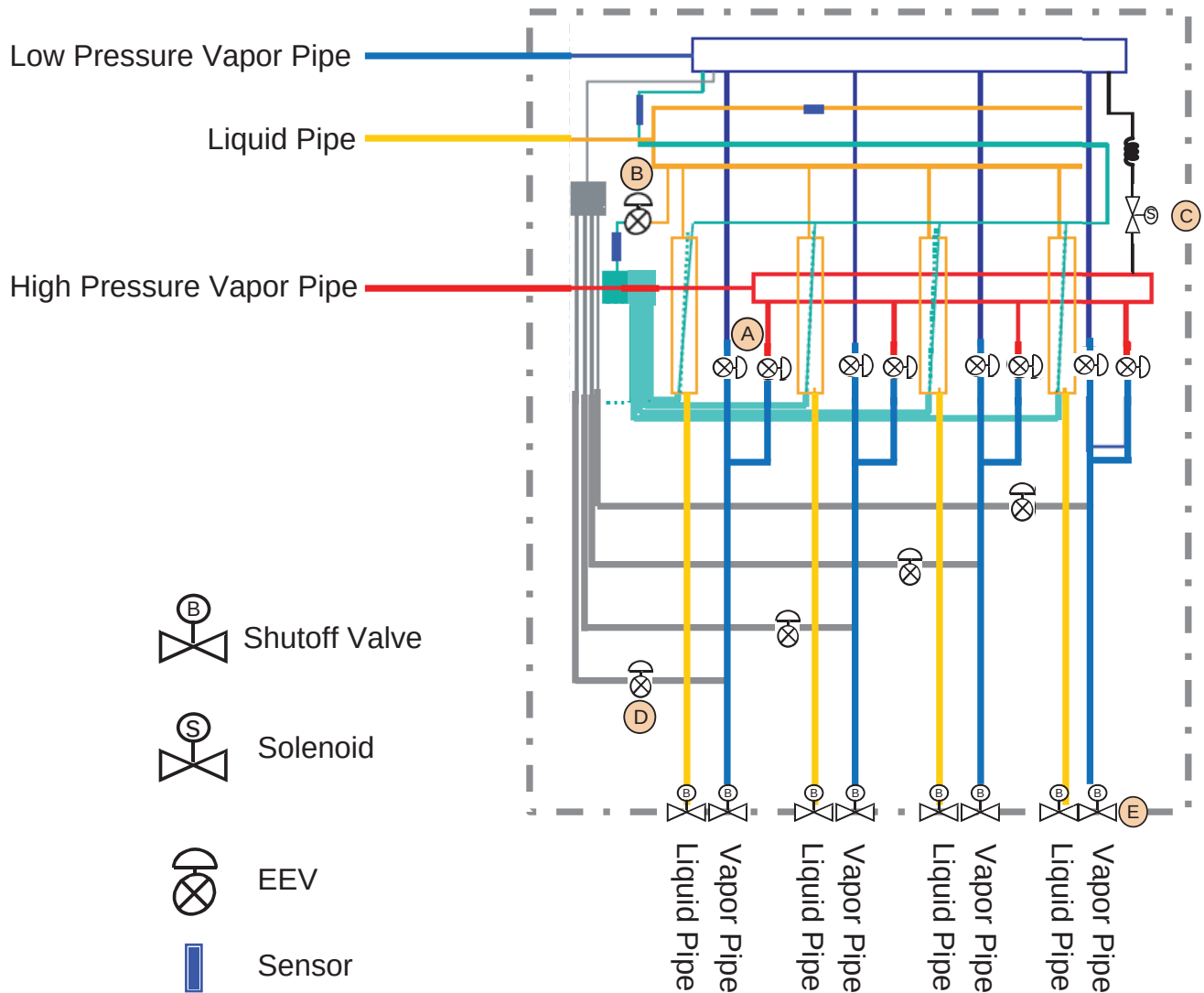


Table 17: PRHR065C and PRHR085C Wiring Diagram Legend

| Terminal                        | Description                                           |
|---------------------------------|-------------------------------------------------------|
| <i>Main PCB</i>                 |                                                       |
| CN_24V-EXT(RD)                  | 24V In (From Transformer)                             |
| CN_DAMPER(YL)                   | 24V Out (For Relay)                                   |
| CN_ODU_COMM(WH)/CN_IDU_COMM(WH) | Communication PCB (RS-485)                            |
| CN_TEMP(BK)                     | Thermistor (SC / In / Out / Liquid Pipe)              |
| CN_R1_MP_EEV(WH)                | EEV 01 (Bypass for Room 1)                            |
| CN_R2_MP_EEV(BL)                | EEV 02 (Bypass for Room 2)                            |
| CN_R3_MP_EEV(YL)                | EEV 03 (Bypass for Room 3)                            |
| CN_R4_MP_EEV(VI/RD)             | EEV 04 (Bypass for Room 4)                            |
| CN_SC_EEV(RD)                   | Sub Cooling EEV                                       |
| CN_R3_HL_EEV(WH)                | EEV 03 Low / High (For Room 3)                        |
| CN_R3_SHUT_HP(WH/BK)            | Shut Off Valve High (for Room 3)                      |
| CN_R3_SHUT_LP(GN/BK)            | Shut Off Valve Low (for Room 3)                       |
| CN_R4_HL_EEV(RD)                | EEV 04 Low / High (For Room 4)                        |
| CN_R4_SHUT_HP(RD)               | Shut Off Valve High (for Room 4)                      |
| CN_R4_SHUT_LP(BK)               | Shut Off Valve Low (for Room 4)                       |
| CN_R1_HL_EEV(BK)                | EEV 01 Low / High (For Room 1)                        |
| CN_R1_SHUT_HP(BL)               | Shut Off Valve High (for Room 1)                      |
| CN_R1_SHUT_LP(GY)               | Shut Off Valve Low (for Room 1)                       |
| CN_R2_HL_EEV(WH)                | EEV 02 Low / High (For Room 2)                        |
| CN_R2_SHUT_HP(GN/GR)            | Shut Off Valve High (for Room 2)                      |
| CN_R2_SHUT_LP(BR)               | Shut Off Valve Low (for Room 2)                       |
| CN_HR_COMM(YL)                  | Connection Sub PCB                                    |
| CN_LEAKAGE(VI)                  | Leak Detector                                         |
| CN_SVC                          | Display PCB                                           |
| CN_SOL_VALVE(BL)                | Liquid Bypass Valve                                   |
| CN_CHASSIS_GND                  | PCB Functional Ground                                 |
| CN_INPUT(BL)                    | Main Power                                            |
| CN_CC(WH)                       | Dry Contact                                           |
| CN_DC_INPUT(WH)                 | Auxiliary Power PCB                                   |
| <i>DIP Switch Settings</i>      |                                                       |
| SW01E                           | Setting, EEV Number (Manual Addressing)               |
|                                 | Setting, Valve Zone Number (Auto Addressing)          |
| SW02E(1)                        | Selecting Auto Address (↓) or Manual Address (↑)      |
| SW02E(2~4)                      | Setting, Total Number of Indoor Units Connected       |
| SW02E(5)                        | Setting, Sub PCB                                      |
| SW02E(6)                        | Setting, EEPROM Reset                                 |
| SW02E(7~8)                      | Setting, Mode (Zoning, etc.)                          |
| SW01A                           | Reset                                                 |
| SW01D                           | Setting, EEV Group                                    |
| SW01C                           | Setting, HR Unit Number                               |
|                                 | Setting, Indoor Units Zone Number (Manual Addressing) |
| SW02B                           | Setting, the Address of indoor_10 (Manual Addressing) |
| SW01B                           | Setting, the Address of indoor_1 (Manual Addressing)  |

Figure 43: PRHR024C, PRHR034C, and PRHR044C Refrigerant Flow Diagram.



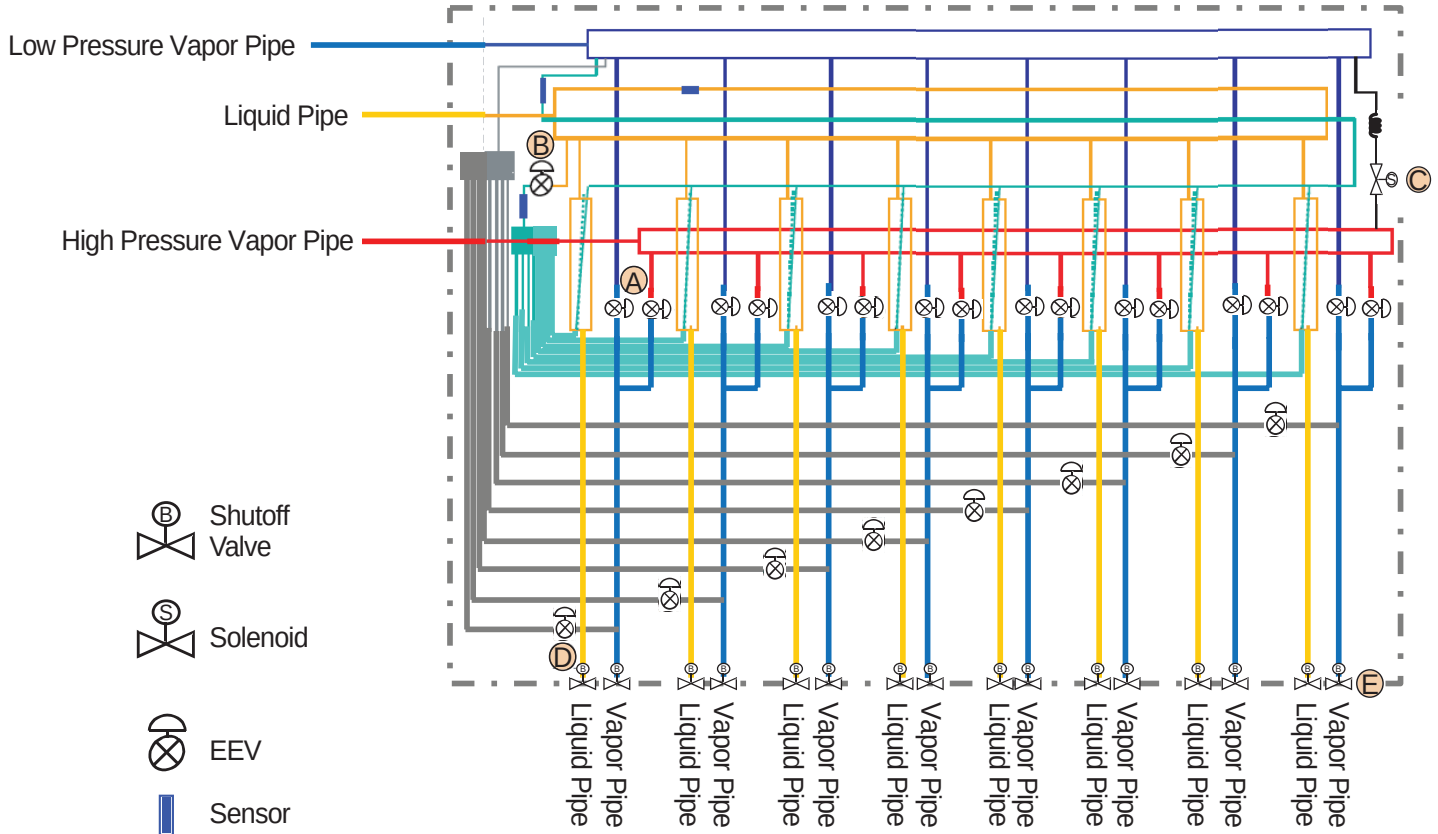
- Ⓐ: Switches operation between cooling and heating using the two valves.
- Ⓑ: Decreases sound following subcooling operation between the inlet of one indoor unit and outlet of another indoor unit during simultaneous operation.
- Ⓒ: Prevents liquid from entering high pressure vapor valve and heat recovery unit cooling mode.
- Ⓓ: Controls pressure between the high and low pressure vapor piping when operation mode switches.
- Ⓔ: Blocks refrigerant flow if leak is detected.

**NOTICE**

Refrigerant diagram above represents the PRHR044C model. Appearances will differ depending on model.

# REFRIGERANT FLOW DIAGRAMS

Figure 44: PRHR065C and PRHR085C Refrigerant Flow Diagram.



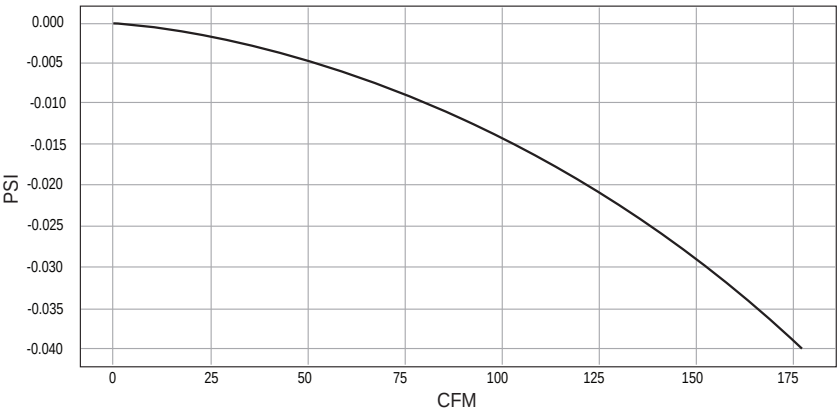
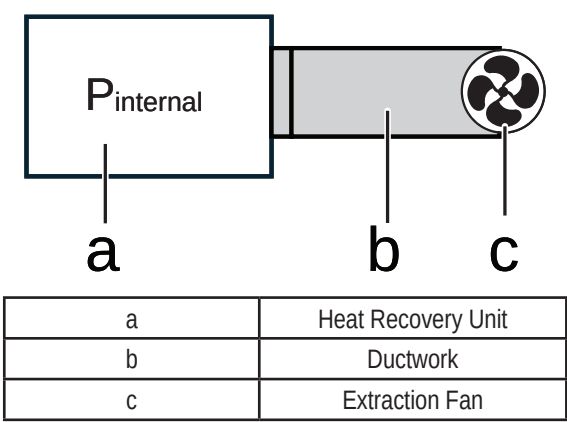
- (A): Switches operation between cooling and heating using the two valves.
- (B): Decreases sound following subcooling operation between the inlet of one indoor unit and outlet of another indoor unit during simultaneous operation.
- (C): Prevents liquid from entering high pressure vapor valve and heat recovery unit cooling mode.
- (D): Controls pressure between the high and low pressure vapor piping when operation mode switches.
- (E): Blocks refrigerant flow if leak is detected.

## NOTICE

Refrigerant diagram above represents the PRHR085C model. Appearances will differ depending on model.

Enclosure Ventilation (UL 60335-2-40: 2022 Edition 4)

- The ventilation airflow must be set higher than 11.11 CFM (18.87m³/h), and the internal negative pressure must be set higher than 0.08 in. w.g. (20 Pa).
- The internal pressure of the Heat Recovery Unit must not drop more than 1.4 in. w.g. (350 Pa) below the surrounding ambient pressure.

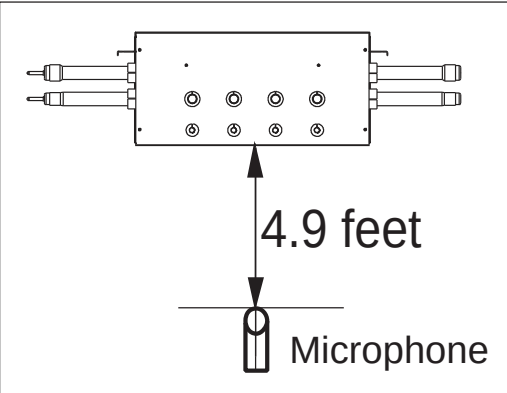


# ACOUSTIC DATA

## Sound Pressure Levels



Figure 46: Sound Pressure Measurement Location.



- Measurements are taken 4.9 ft. away from the center of the unit.
- Sound level will vary depending on a range of factors including the construction (acoustic absorption coefficient) of a particular room in which the unit was installed.
- Sound pressure levels are measured in dB(A) with a tolerance of  $\pm 3$ .
- Sound pressure levels are tested in an anechoic chamber under ISO Standard 3745.

### Operating Conditions:

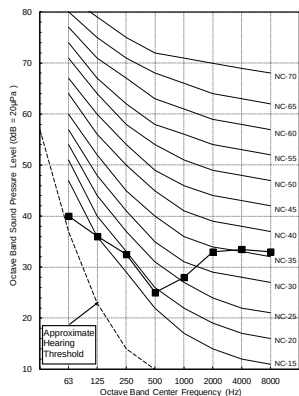
- Power source: 220V 60Hz
- Reference acoustic pressure: 0dB = 20 $\mu$ Pa.
- Cooling: Indoor Temperature 80.6°F D.B., 66.2°F W.B., Outdoor Temperature 95°F D.B., 75.2°F W.B.
- Heating: Indoor Temperature 68°F D.B., 59°F W.B., Outdoor Temperature 44.6°F D.B., 42.8°F W.B.

Table 18: PRHR\*\*4C / 5C Sound Pressure Levels.

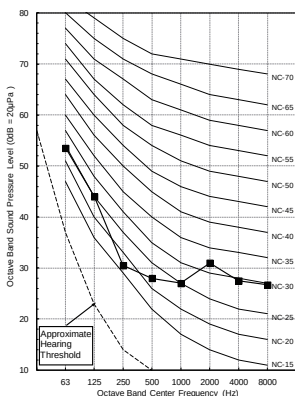
| Operation Mode                     | Sound Pressure Levels dB(A) |
|------------------------------------|-----------------------------|
| Cooling                            | 31                          |
| Heating                            | 31                          |
| Simultaneous                       | 38                          |
| Changeover From Cooling to Heating | 33                          |
| Changeover From Heating to Cooling | 38                          |

Figure 45: PRHR\*\*4C / 5C Sound Pressure Level Diagrams.

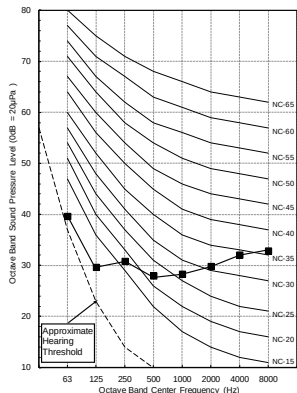
### Cooling



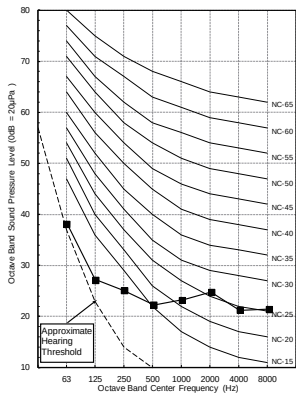
### Heating



### Changeover from Cooling to Heating



### Changeover from Heating to Cooling



## Combining Heat Recovery Ports for Large Indoor Units

It is necessary to combine two ports on a system designed for heat recovery operation when installing a single indoor unit with a capacity exceeding 54,000 Btu/h. Two neighboring heat recovery ports are combined using a reverse Y-branch that is then connected to the one large indoor unit.

(Unit: Inch [mm])

| Models     | Pipe       |             |
|------------|------------|-------------|
| ARBLN01621 | Vapor Pipe | Liquid Pipe |
|            |            |             |
| ARBLN03321 | Vapor Pipe | Liquid Pipe |
|            |            |             |



# ACCESSORIES



## Reducers

It may be necessary to install a reducer if the indoor unit piping or outdoor unit piping is too large or too small for the heat recovery unit connections.

Unit: Inches (mm)

| Model                      |                                              | Liquid Piping                                                                               | Vapor Piping                                                                                  |                                                                                                  |
|----------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|                            |                                              |                                                                                             | High Pressure                                                                                 | Low Pressure                                                                                     |
| Heat Recovery Unit Reducer | PRHR024C                                     | <p>O.D. 3/8 (9.52)    Ø1/4 (6.35)</p>                                                       | <p>O.D. 3/4 (19.05)    Ø5/8 (15.88)    Ø1/2 (12.7)</p> <p>O.D. 1/2 (12.7)    Ø3/8 (9.52)</p>  | <p>O.D. 7/8 (22.2)    Ø3/4 (19.05)    Ø5/8 (15.88)</p> <p>O.D. 5/8 (15.88)    Ø1/2 (12.7)</p>    |
|                            | PRHR034C<br>PRHR044C<br>PRHR065C<br>PRHR085C | <p>O.D. 5/8 (15.88)    Ø1/2 (12.7)    Ø3/8 (9.52)</p> <p>O.D. 1/2 (12.7)    Ø3/8 (9.52)</p> | <p>O.D. 7/8 (22.2)    Ø3/4 (19.05)    Ø5/8 (15.88)</p> <p>O.D. 5/8 (15.88)    Ø1/2 (12.7)</p> | <p>O.D. 1-1/8 (28.58)    Ø7/8 (22.2)    Ø3/4 (19.05)</p> <p>O.D. 3/4 (19.05)    Ø5/8 (15.88)</p> |

## Strainers

Strainers are provided as an accessory to three (3), four (4), six (6), and eight (8) port heat recovery units, and are to be installed on the high pressure vapor pipe to the indoor unit.

| Models   |                                                             | High Pressure Vapor Pipe |
|----------|-------------------------------------------------------------|--------------------------|
| Strainer | For Three-, Four-, Six-, and Eight-Port Heat Recovery Units |                          |



# SHUTOFF VALVE UNIT PRODUCT DATA

**General Data on page 70**

**Electrical Data on page 71**

**Dimensions on page 72**

**Wiring Diagrams on page 74**

**Refrigerant Flow Diagrams on page 78**

**Fan Curve Values on page 80**

**Accessories on page 81**



Figure 47: One-Port Shutoff Valve Unit.



Figure 48: Two-Port Shutoff Valve Unit.



Figure 49: Three-Port Shutoff Valve Unit.



Figure 50: Four-Port Shutoff Valve Unit.

Table 19: Shutoff Valve Unit Specifications.

| Model                                             |                  |                      | PRHPZ010A                     | PRHPZ020A                    | PRHPZ030A    | PRHPZ040A    |
|---------------------------------------------------|------------------|----------------------|-------------------------------|------------------------------|--------------|--------------|
| Number of Ports                                   |                  |                      | 1                             | 2                            | 3            | 4            |
| Max. Connectable No. of Indoor Units              |                  |                      | 8                             | 16                           | 24           | 32           |
| Max. Connectable No. of Indoor Units on each port |                  |                      | 8                             | 8                            | 8            | 8            |
| Max. Port Capacity (each port)                    | Btu/h            |                      | 60,000                        | 60,000                       | 60,000       | 60,000       |
| Max. Unit Capacity (sum of ports)                 | Btu/h            |                      | 60,000                        | 120,000                      | 180,000      | 230,000      |
| Net Weight                                        | lbs.             |                      | 14.9                          | 42.1                         | 45.4         | 48.1         |
| Shipping Weight                                   | lbs.             |                      | 19.4                          | 56.0                         | 59.7         | 62.4         |
| Net Dimensions (W x H x D)                        | Inches           |                      | 13 x 8-25/32 x 11-27/64       | 37-1/2 x 10-5/8 x 24-5/8     |              |              |
| Shipping Dimensions (W x H x D)                   | Inches           |                      | 26-17/32 x 11-15/16 x 14-1/32 | 42-13/32 x 13-45/64 x 29-7/8 |              |              |
| Refrigerant Type                                  |                  |                      | R32                           | R32                          | R32          | R32          |
| Refrigerant Control                               |                  |                      | Motorized Valve               |                              |              |              |
| Casing                                            |                  |                      | Galvanized Steel Plate        |                              |              |              |
| Connecting Pipes                                  | To Indoor Units  | Liquid Pipe (inches) | Ø3/8 – Ø1/4 Braze             |                              |              |              |
|                                                   |                  | Vapor Pipe (inches)  | Ø5/8 – Ø1/2 Braze             |                              |              |              |
|                                                   | To Outdoor Units | Liquid Pipe (inches) | N / A                         | Ø3/8 Braze                   | Ø1/2 Braze   | Ø5/8 Braze   |
|                                                   |                  | Vapor Pipe (inches)  | N / A                         | Ø7/8 Braze                   | Ø1-1/8 Braze | Ø1-1/8 Braze |

## NOTICE

The two-, three-, and 4-port shutoff valve units include refrigerant leak sensors and knockouts for enclosure ventilation applications. The single port units do not.

Table 20: Shutoff Valve Unit Electrical Data.

| Unit Model No. | Voltage Range | Rated Amps | MCA   | MFA | Power Supply |         |       | Power Input (W) |         |
|----------------|---------------|------------|-------|-----|--------------|---------|-------|-----------------|---------|
|                |               |            |       |     | Hz           | Volts   | Phase | Cooling         | Heating |
| PRHPZ010A      | 187-253       | 0.10       | 0.5   | 15  | 60           | 208-230 | 1     | 30              | 30      |
| PRHPZ020A      |               | 0.28       | 0.875 | 15  |              |         |       | 49.2            | 46.6    |
| PRHPZ030A      |               | 0.28       | 0.875 | 15  |              |         |       | 49.2            | 46.6    |
| PRHPZ040A      |               | 0.28       | 0.875 | 15  |              |         |       | 49.2            | 46.6    |

MCA : Minimum Circuit Ampacity.

MFA : Maximum Fuse Amps.

Units are suitable for use on an electrical system where voltage supplied to unit terminals is within the listed range limits.

Select wire size based on the larger MCA value.

Instead of a fuse, use the circuit breaker.

Figure 51: PRHPZ010A Dimensions.

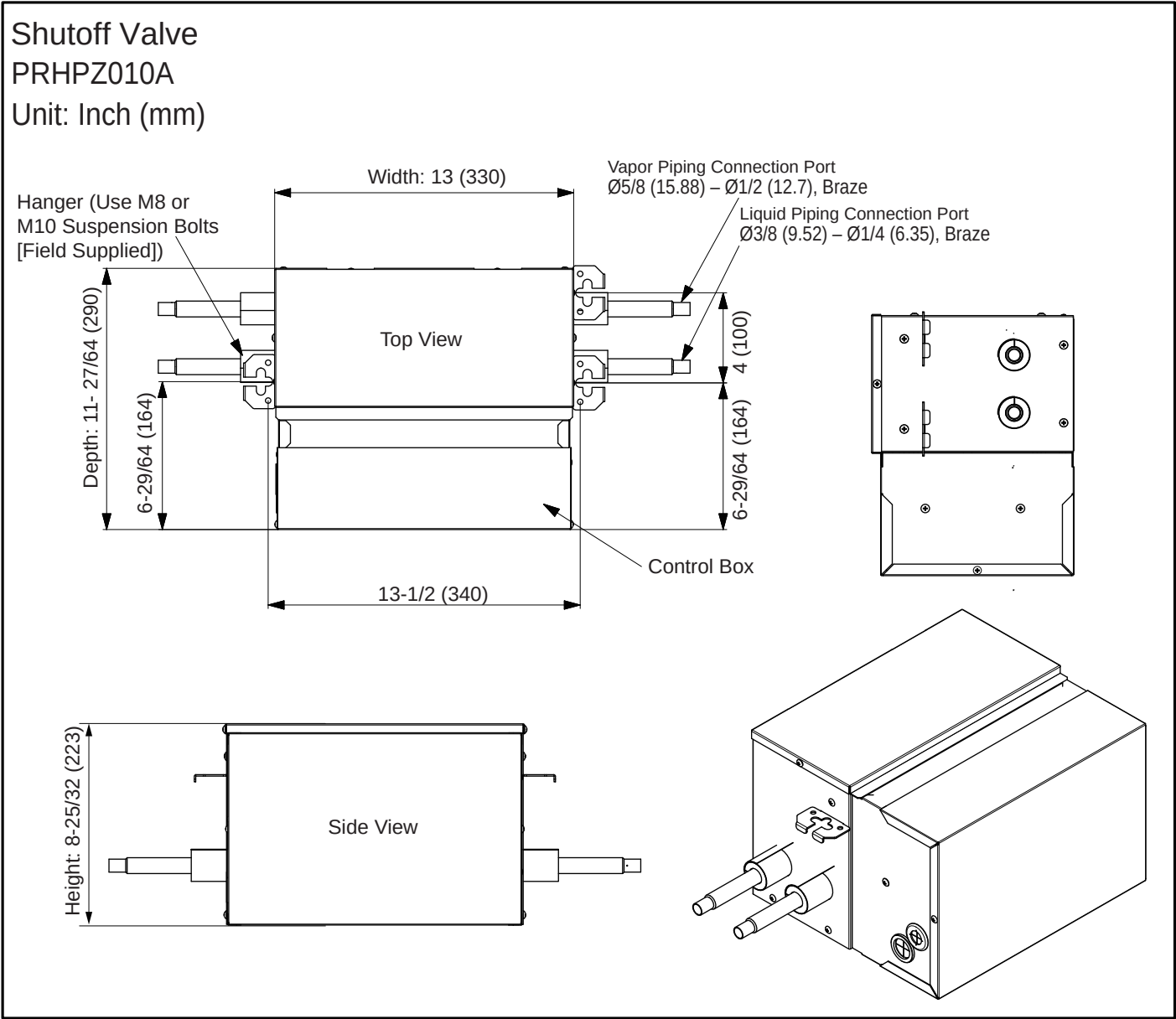
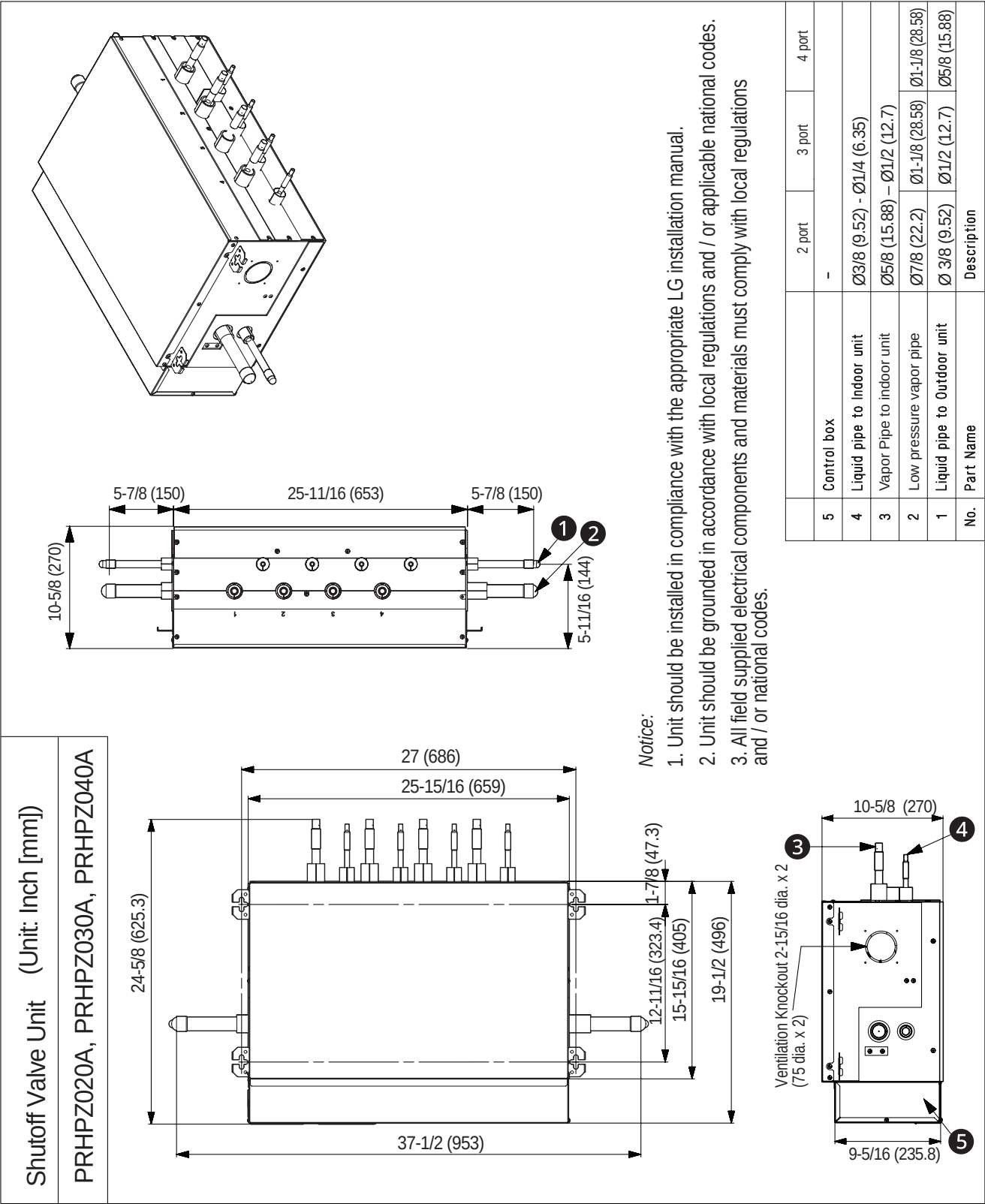


Figure 52: PRHPZ020A, PRHPZ030A, and PRHPZ040A Dimensions.



WIRING DIAGRAMS



Figure 53: PRHPZ010A Wiring Diagram.

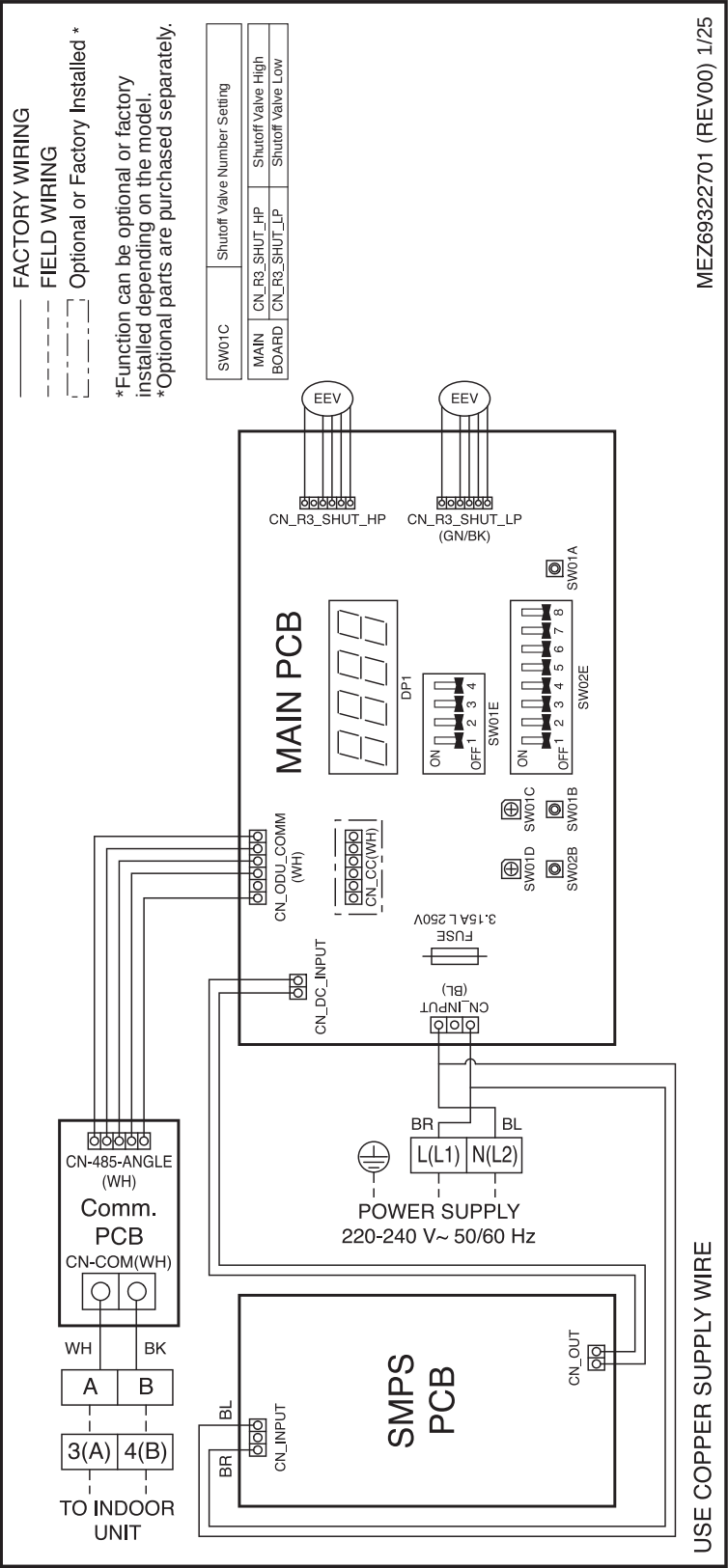


Table 21: PRHPZ010A Wiring Diagram Legend

| Terminal                   | Description                                           |
|----------------------------|-------------------------------------------------------|
| <i>Main PCB</i>            |                                                       |
| CN_INPUT (BL)              | Main Power                                            |
| CN_DC_INPUT                | Auxiliary Power PCB                                   |
| CN_ODU_COMM (WH)           | Communication PCB (RS-485)                            |
| CN_CC (WH)                 | Dry Contact                                           |
| CN_R3_SHUT_HP(WH/BK)       | Shutoff Valve High                                    |
| CN_R3_SHUT_LP (GN/BK)      | Shutoff Valve Low                                     |
| <i>DIP Switch Settings</i> |                                                       |
| SW01E                      | Setting, Shutoff Valve Number (Manual Addressing)     |
| SW02E(1)                   | Selecting Manual Address (↑)                          |
| SW02E(2~4)                 | Setting, Total Number of Indoor Units Connected       |
| SW02E(5)                   | Setting, Sub PCB                                      |
| SW02E(6)                   | Setting, EEPROM Reset                                 |
| SW02E(7~8)                 | Setting, Mode (Zoning, etc.)                          |
| SW01A                      | Reset                                                 |
| SW01D                      | Setting, Shutoff Valve Group                          |
| SW01C                      | Setting, Shutoff Valve Unit Number                    |
| SW02B                      | Setting, the Address of indoor_10 (Manual Addressing) |
| SW01B                      | Setting, the Address of indoor_1 (Manual Addressing)  |



WIRING DIAGRAMS



Figure 54: PRHPZ020A, PRHPZ030A, and PRHPZ040A Wiring Diagram.

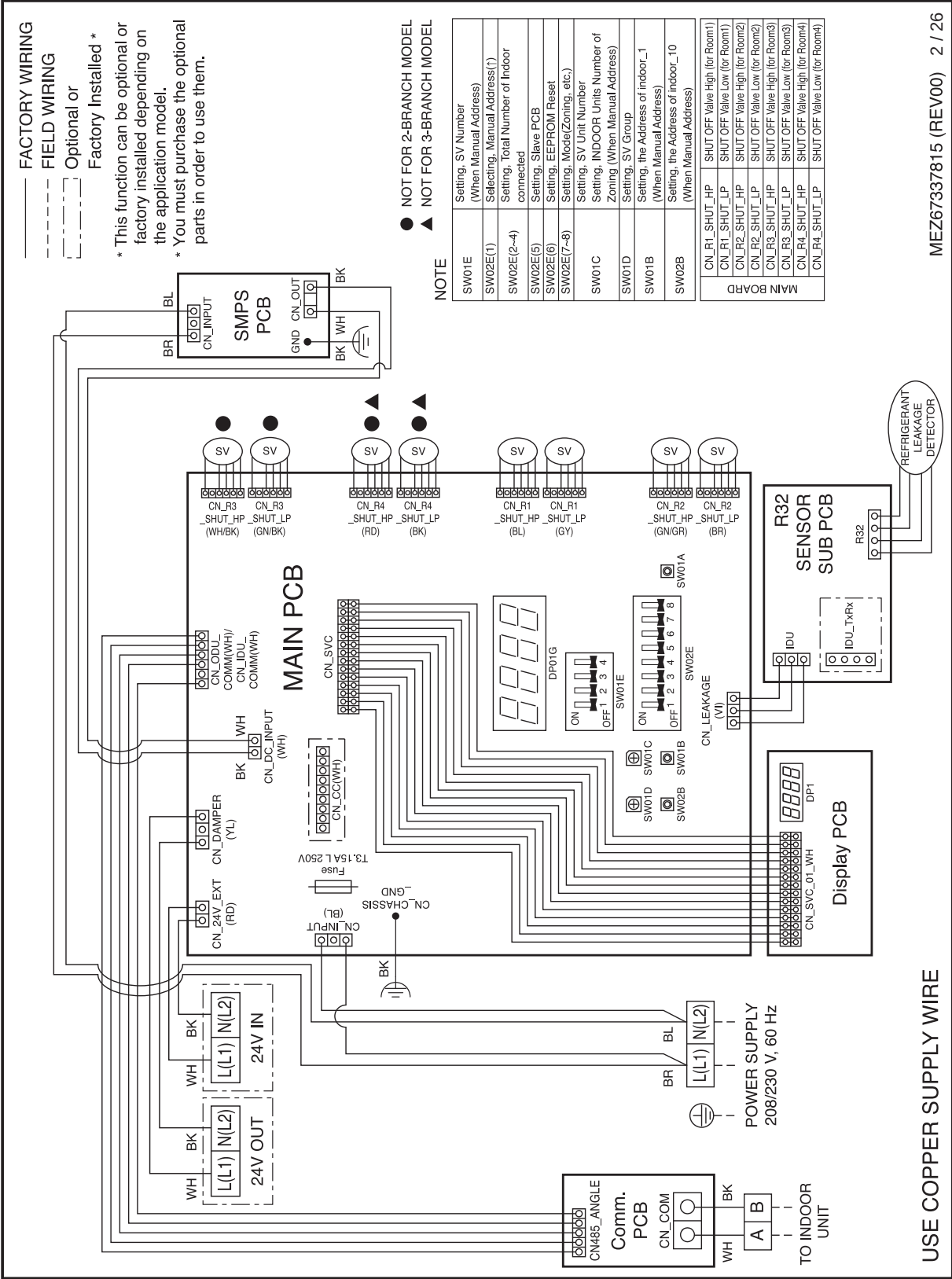


Table 22: PRHPZ020A, PRHPZ030A, and PRHPZ040A Wiring Diagram Legend.

| Terminal                          | Description                                           |
|-----------------------------------|-------------------------------------------------------|
| <i>Main PCB</i>                   |                                                       |
| CN_24V_EXT(RD)                    | 24V In (Field Supply)                                 |
| CN_DAMPER(YL)                     | 24V Out (For Relay)                                   |
| CN_DC_INPUT(WH)                   | Auxiliary Power PCB                                   |
| CN_ODU_COMM(WH) / CN_IDU_COMM(WH) | Communication PCB (RS-485)                            |
| CN_R3_SHUT_HP(WH/BK)              | Shutoff Valve High (for Room 3)                       |
| CN_R3_SHUT_LP(GN/BK)              | Shutoff Valve Low (for Room 3)                        |
| CN_R4_SHUT_HP(RD)                 | Shutoff Valve High (for Room 4)                       |
| CN_R4_SHUT_LP(BK)                 | Shutoff Valve Low (for Room 4)                        |
| CN_R1_SHUT_HP(BL)                 | Shutoff Valve High (for Room 1)                       |
| CN_R1_SHUT_LP(GY)                 | Shutoff Valve Low (for Room 1)                        |
| CN_R2_SHUT_HP(GN/GR)              | Shutoff Valve High (for Room 2)                       |
| CN_R2_SHUT_LP(BR)                 | Shutoff Valve Low (for Room 2)                        |
| CN_LEAKAGE(VI)                    | Leak Detector                                         |
| CN_SVC                            | Display PCB                                           |
| CN_CC(WH)                         | Dry Contact                                           |
| CN_CHASSIS_GND                    | PCB Functional Ground                                 |
| CN_INPUT(BL)                      | Main Power                                            |
| <i>DIP Switch Settings</i>        |                                                       |
| SW01E                             | Setting, Shutoff Valve Number (Manual Addressing)     |
| SW02E(1)                          | Selecting Manual Address (↑)                          |
| SW02E(2~4)                        | Setting, Total Number of Indoor Units Connected       |
| SW02E(5)                          | Setting, Sub PCB                                      |
| SW02E(6)                          | Setting, EEPROM Reset                                 |
| SW02E(7~8)                        | Setting, Mode (Zoning, etc.)                          |
| SW01A                             | Reset                                                 |
| SW01D                             | Setting, Shutoff Valve Group                          |
| SW01C                             | Setting, Shutoff Valve Unit Number                    |
|                                   | Setting, Indoor Units Zone Number (Manual Addressing) |
| SW02B                             | Setting, Address of Indoor_10 (Manual Addressing)     |
| SW01B                             | Setting, Address of Indoor_1 (Manual Addressing)      |

Figure 55: PRHPZ010A Refrigerant Flow Diagram.

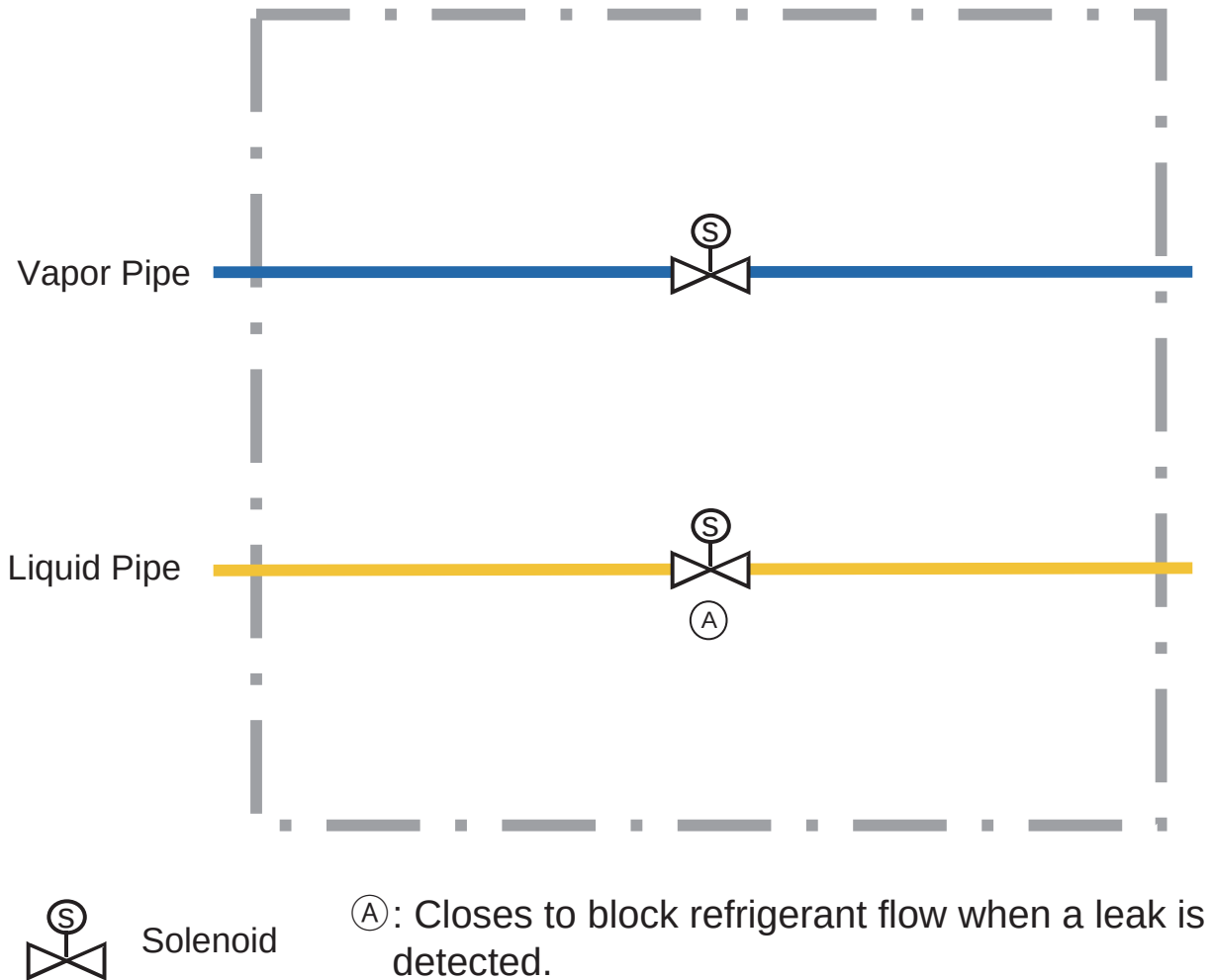
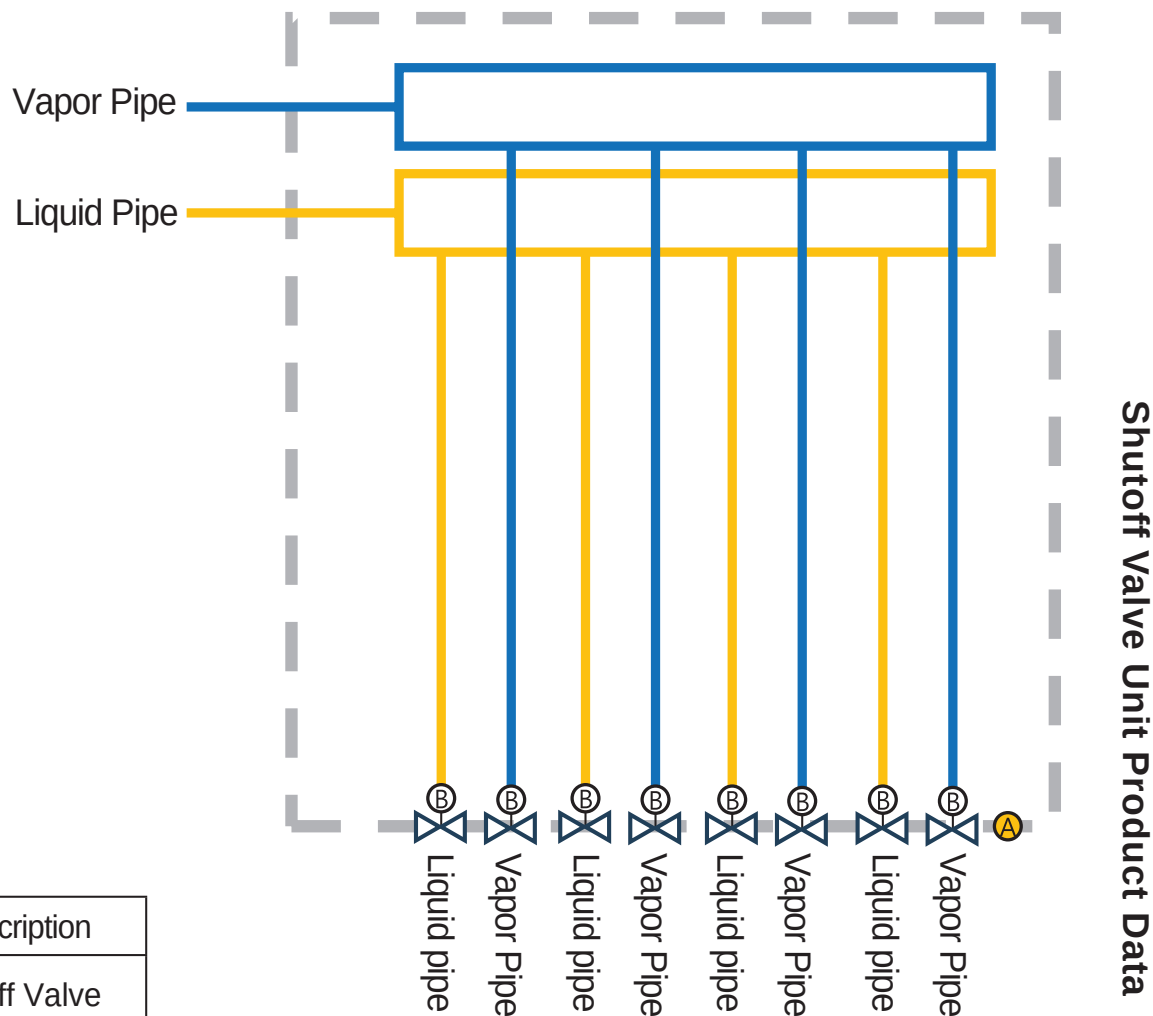


Figure 56: PRHPZ020A, PRHPZ030A, and PRHPZ040A Refrigerant Flow Diagram.



| Symbol                                                                              | Description        |
|-------------------------------------------------------------------------------------|--------------------|
|  | Shutoff Valve Unit |

① :Closes to block refrigerant flow when a leak is detected.

## NOTICE

Refrigerant diagram above represents the PRHPZ040A model. Appearances will differ depending on model.

Enclosure Ventilation (UL 60335-2-40: 2022 Edition 4)

- The ventilation airflow must be set higher than 11.11 CFM (18.87m³/h), and the internal negative pressure must be set higher than 0.08 in. w.g. (20 Pa).
- The internal pressure of the Shutoff Valve Unit must not drop more than 1.4 in. w.g (350 Pa) below the surrounding ambient pressure.

CFM / PSI Performance Curve

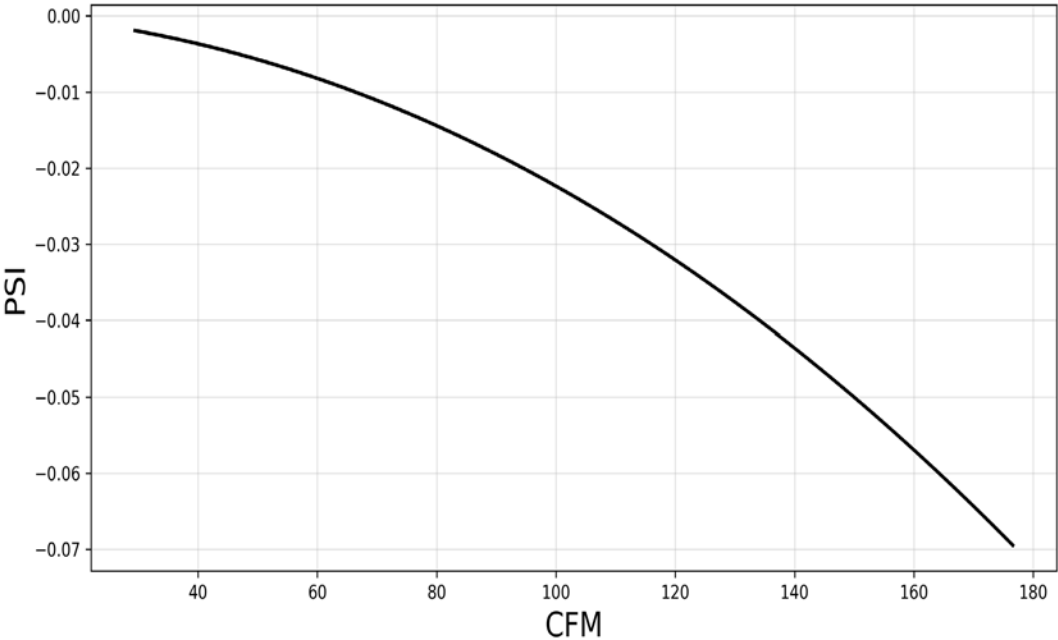


Table 23: Ventilation Accessories Overview (Sold Separately).

| Accessory                                                                  | Model Number |
|----------------------------------------------------------------------------|--------------|
| Ventilation Flange only for 2-3-4 ports                                    | PTVK430      |
| Simple Dry Contact (1 contact, 24 VAC external power) only for 2-3-4-ports | PDRYCB100    |

## Combining Shutoff Valve Unit Ports for Large Indoor Units

It is necessary to combine two ports when installing a single indoor unit with a capacity exceeding 54,000 Btu/h. Two neighboring shutoff valve ports are combined using a reverse Y-branch that is then connected to the one large indoor unit.

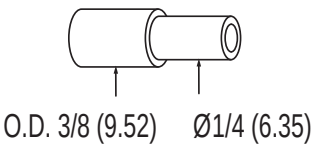
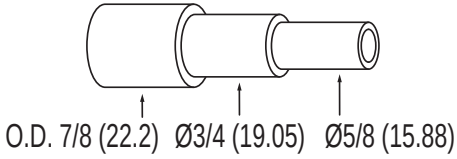
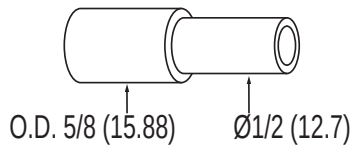
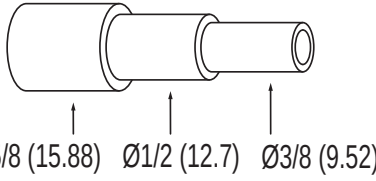
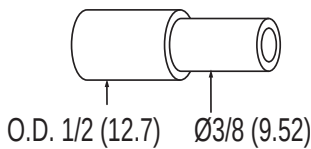
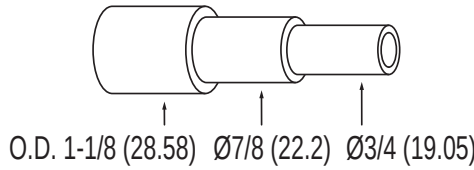
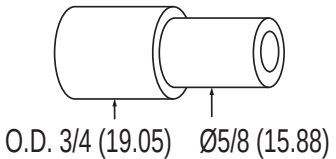
(Unit: Inch [mm])

| Models     | Pipe        |             |
|------------|-------------|-------------|
|            | Vapor Pipe  | Liquid Pipe |
| ARBLN01621 |             |             |
|            | AJR54072929 | AJR54072927 |
| ARBLN03321 |             |             |
|            | AJR54072930 | AJR54072928 |

Reducers

It may be necessary to install a reducer if the indoor unit piping or outdoor unit piping is too large or too small for the shutoff valve unit connections.

Unit: Inches (mm)

| Model                      |                        | Liquid Piping                                                                                                                                                                                                                                                 | Vapor Piping                                                                                                                                                                                                                                                           |
|----------------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Shutoff Valve Unit Reducer | PRHPZ010A<br>PRHPZ020A | <br>O.D. 3/8 (9.52)    Ø1/4 (6.35)                                                                                                                                           | <br>O.D. 7/8 (22.2)    Ø3/4 (19.05)    Ø5/8 (15.88)<br><br>O.D. 5/8 (15.88)    Ø1/2 (12.7)       |
|                            | PRHPZ030A<br>PRHPZ040A | <br>O.D. 5/8 (15.88)    Ø1/2 (12.7)    Ø3/8 (9.52)<br><br>O.D. 1/2 (12.7)    Ø3/8 (9.52) | <br>O.D. 1-1/8 (28.58)    Ø7/8 (22.2)    Ø3/4 (19.05)<br><br>O.D. 3/4 (19.05)    Ø5/8 (15.88) |

# PERFORMANCE DATA

**Cooling Capacity on page 84**

**Maximum Cooling Capacity on page 104**

**Heating Capacity on page 108**

**Maximum Heating Capacity on page 120**

**Correction Factors on page 122**



# COOLING CAPACITY

ZRUN024GSS0



Table 24: ZRUN024GSS0 Cooling Capacities.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 130             | -9.9                      | 21.8                         | 0.52 | 25.9  | 0.63 | 30.1  | 0.75 | 31.2  | 0.81 | 31.7  | 0.87 | 32.8  | 1.00 | 33.6  | 1.03 |
|                 | -5                        | 21.8                         | 0.55 | 25.9  | 0.66 | 30.1  | 0.79 | 31.2  | 0.85 | 31.7  | 0.92 | 32.8  | 1.05 | 33.6  | 1.09 |
|                 | 0                         | 21.8                         | 0.57 | 25.9  | 0.69 | 30.1  | 0.82 | 31.2  | 0.89 | 31.7  | 0.95 | 32.8  | 1.09 | 33.6  | 1.13 |
|                 | 5                         | 21.8                         | 0.59 | 25.9  | 0.72 | 30.1  | 0.85 | 31.2  | 0.92 | 31.7  | 0.99 | 32.8  | 1.13 | 33.6  | 1.17 |
|                 | 10                        | 21.8                         | 0.61 | 25.9  | 0.74 | 30.1  | 0.87 | 31.2  | 0.94 | 31.7  | 1.02 | 32.8  | 1.17 | 33.6  | 1.21 |
|                 | 14                        | 21.8                         | 0.63 | 25.9  | 0.76 | 30.1  | 0.91 | 31.2  | 0.98 | 31.7  | 1.05 | 32.8  | 1.21 | 33.6  | 1.25 |
|                 | 20                        | 21.8                         | 0.64 | 25.9  | 0.78 | 30.1  | 0.92 | 31.2  | 0.99 | 31.7  | 1.07 | 32.8  | 1.23 | 33.6  | 1.27 |
|                 | 25                        | 21.8                         | 0.65 | 25.9  | 0.79 | 30.1  | 0.93 | 31.2  | 1.01 | 31.7  | 1.08 | 32.8  | 1.24 | 33.6  | 1.28 |
|                 | 30                        | 21.8                         | 0.66 | 25.9  | 0.80 | 30.1  | 0.94 | 31.2  | 1.02 | 31.7  | 1.09 | 32.8  | 1.25 | 33.6  | 1.30 |
|                 | 35                        | 21.8                         | 0.67 | 25.9  | 0.81 | 30.1  | 0.95 | 31.2  | 1.03 | 31.7  | 1.11 | 32.8  | 1.27 | 33.6  | 1.31 |
|                 | 40                        | 21.8                         | 0.67 | 25.9  | 0.82 | 30.1  | 0.96 | 31.2  | 1.04 | 31.7  | 1.12 | 32.8  | 1.28 | 33.6  | 1.33 |
|                 | 45                        | 21.8                         | 0.68 | 25.9  | 0.82 | 30.1  | 0.97 | 31.2  | 1.05 | 31.7  | 1.13 | 32.8  | 1.30 | 33.6  | 1.34 |
|                 | 50                        | 21.8                         | 0.69 | 25.9  | 0.83 | 30.1  | 0.98 | 31.2  | 1.06 | 31.7  | 1.14 | 32.8  | 1.31 | 33.6  | 1.36 |
|                 | 55                        | 21.8                         | 0.70 | 25.9  | 0.85 | 30.1  | 1.00 | 30.8  | 1.09 | 31.2  | 1.17 | 32.3  | 1.33 | 33.1  | 1.37 |
|                 | 60                        | 21.8                         | 0.72 | 25.9  | 0.88 | 29.7  | 1.04 | 30.1  | 1.13 | 30.5  | 1.21 | 31.6  | 1.37 | 32.3  | 1.38 |
|                 | 65                        | 21.8                         | 0.74 | 25.9  | 0.90 | 29.2  | 1.06 | 29.7  | 1.15 | 30.0  | 1.23 | 31.1  | 1.42 | 31.9  | 1.43 |
|                 | 70                        | 21.8                         | 0.71 | 25.9  | 0.86 | 28.7  | 1.06 | 29.0  | 1.17 | 29.5  | 1.28 | 30.5  | 1.42 | 31.3  | 1.44 |
|                 | 75                        | 21.8                         | 0.73 | 25.9  | 0.92 | 28.3  | 1.13 | 28.6  | 1.25 | 29.0  | 1.37 | 30.1  | 1.49 | 30.9  | 1.50 |
|                 | 80                        | 21.8                         | 0.83 | 25.9  | 1.05 | 27.5  | 1.30 | 27.8  | 1.43 | 28.3  | 1.57 | 29.3  | 1.62 | 30.1  | 1.63 |
|                 | 85                        | 21.8                         | 0.88 | 25.9  | 1.12 | 27.0  | 1.39 | 27.5  | 1.53 | 27.8  | 1.67 | 28.9  | 1.68 | 29.7  | 1.70 |
|                 | 90                        | 21.8                         | 1.00 | 25.5  | 1.27 | 26.3  | 1.57 | 26.6  | 1.74 | 27.0  | 1.80 | 28.1  | 1.81 | 28.9  | 1.83 |
|                 | 95                        | 22.1                         | 1.06 | 25.3  | 1.35 | 26.1  | 1.68 | 26.5  | 1.86 | 26.9  | 1.86 | 27.9  | 1.88 | 28.7  | 1.90 |
|                 | 100                       | 22.1                         | 1.14 | 24.9  | 1.46 | 25.6  | 1.82 | 26.1  | 1.95 | 26.4  | 1.97 | 27.6  | 1.98 | 28.4  | 2.00 |
|                 | 105                       | 22.1                         | 1.29 | 24.2  | 1.65 | 25.0  | 2.05 | 25.4  | 2.10 | 25.7  | 2.11 | 26.6  | 2.13 | 27.0  | 2.15 |
|                 | 110                       | 22.1                         | 1.45 | 23.2  | 1.86 | 24.2  | 2.24 | 24.2  | 2.25 | 24.6  | 2.26 | 25.1  | 2.28 | 25.2  | 2.30 |
|                 | 115                       | 21.9                         | 1.67 | 22.3  | 2.14 | 22.3  | 2.36 | 22.3  | 2.36 | 22.3  | 2.36 | 22.7  | 2.37 | 22.8  | 2.37 |
|                 | 118                       | 19.1                         | 1.42 | 19.4  | 1.82 | 19.5  | 1.99 | 19.5  | 2.00 | 19.5  | 2.00 | 19.7  | 2.01 | 19.7  | 2.01 |
|                 | 122                       | 15.2                         | 1.08 | 15.6  | 1.38 | 15.5  | 1.51 | 15.5  | 1.52 | 15.6  | 1.52 | 15.8  | 1.52 | 15.8  | 1.53 |
| 120             | -9.9                      | 19.9                         | 0.49 | 23.7  | 0.59 | 27.5  | 0.70 | 29.5  | 0.76 | 30.8  | 0.82 | 32.2  | 0.94 | 32.9  | 0.97 |
|                 | -5                        | 19.9                         | 0.52 | 23.7  | 0.63 | 27.5  | 0.74 | 29.5  | 0.80 | 30.8  | 0.86 | 32.2  | 0.99 | 32.9  | 1.02 |
|                 | 0                         | 19.9                         | 0.54 | 23.7  | 0.65 | 27.5  | 0.77 | 29.5  | 0.83 | 30.8  | 0.90 | 32.2  | 1.03 | 32.9  | 1.06 |
|                 | 5                         | 19.9                         | 0.56 | 23.7  | 0.67 | 27.5  | 0.80 | 29.5  | 0.86 | 30.8  | 0.93 | 32.2  | 1.06 | 32.9  | 1.10 |
|                 | 10                        | 19.9                         | 0.57 | 23.7  | 0.69 | 27.5  | 0.82 | 29.5  | 0.89 | 30.8  | 0.95 | 32.2  | 1.09 | 32.9  | 1.13 |
|                 | 14                        | 19.9                         | 0.59 | 23.7  | 0.72 | 27.5  | 0.85 | 29.5  | 0.92 | 30.8  | 0.99 | 32.2  | 1.13 | 32.9  | 1.17 |
|                 | 20                        | 19.9                         | 0.60 | 23.7  | 0.73 | 27.5  | 0.86 | 29.5  | 0.93 | 30.8  | 1.00 | 32.2  | 1.15 | 32.9  | 1.19 |
|                 | 25                        | 19.9                         | 0.61 | 23.7  | 0.74 | 27.5  | 0.87 | 29.5  | 0.94 | 30.8  | 1.02 | 32.2  | 1.16 | 32.9  | 1.20 |
|                 | 30                        | 19.9                         | 0.62 | 23.7  | 0.75 | 27.5  | 0.88 | 29.5  | 0.96 | 30.8  | 1.03 | 32.2  | 1.18 | 32.9  | 1.22 |
|                 | 35                        | 19.9                         | 0.63 | 23.7  | 0.76 | 27.5  | 0.89 | 29.5  | 0.97 | 30.8  | 1.04 | 32.2  | 1.19 | 32.9  | 1.23 |
|                 | 40                        | 19.9                         | 0.63 | 23.7  | 0.77 | 27.5  | 0.91 | 29.5  | 0.98 | 30.8  | 1.05 | 32.2  | 1.21 | 32.9  | 1.25 |
|                 | 45                        | 19.9                         | 0.64 | 23.7  | 0.77 | 27.5  | 0.92 | 29.5  | 0.99 | 30.8  | 1.06 | 32.2  | 1.22 | 32.9  | 1.26 |
|                 | 50                        | 19.9                         | 0.65 | 23.7  | 0.78 | 27.5  | 0.93 | 29.5  | 1.00 | 30.8  | 1.08 | 32.2  | 1.23 | 32.9  | 1.28 |
|                 | 55                        | 19.9                         | 0.66 | 23.7  | 0.80 | 27.5  | 0.94 | 29.5  | 1.02 | 30.5  | 1.10 | 31.8  | 1.26 | 32.6  | 1.29 |
|                 | 60                        | 19.9                         | 0.68 | 23.7  | 0.83 | 27.5  | 0.98 | 29.3  | 1.06 | 29.6  | 1.14 | 31.0  | 1.29 | 31.7  | 1.32 |
|                 | 65                        | 19.9                         | 0.69 | 23.7  | 0.84 | 27.5  | 1.00 | 28.9  | 1.08 | 29.3  | 1.16 | 30.6  | 1.34 | 31.3  | 1.35 |
|                 | 70                        | 19.9                         | 0.68 | 23.7  | 0.83 | 27.5  | 1.02 | 28.3  | 1.12 | 28.6  | 1.23 | 30.0  | 1.36 | 30.7  | 1.38 |
|                 | 75                        | 19.9                         | 0.70 | 23.7  | 0.88 | 27.5  | 1.09 | 27.9  | 1.20 | 28.3  | 1.32 | 29.5  | 1.43 | 30.3  | 1.44 |
|                 | 80                        | 19.9                         | 0.79 | 23.7  | 1.00 | 26.8  | 1.25 | 27.1  | 1.37 | 27.4  | 1.51 | 28.8  | 1.55 | 29.4  | 1.57 |
|                 | 85                        | 19.9                         | 0.84 | 23.7  | 1.07 | 26.3  | 1.33 | 26.7  | 1.47 | 27.1  | 1.60 | 28.3  | 1.62 | 29.1  | 1.63 |
|                 | 90                        | 19.9                         | 0.96 | 23.7  | 1.22 | 25.6  | 1.51 | 25.9  | 1.67 | 26.2  | 1.73 | 27.5  | 1.74 | 28.2  | 1.76 |
|                 | 95                        | 20.1                         | 1.01 | 24.0  | 1.30 | 25.4  | 1.61 | 25.7  | 1.78 | 26.2  | 1.79 | 27.4  | 1.81 | 28.2  | 1.82 |
|                 | 100                       | 20.1                         | 1.10 | 24.0  | 1.40 | 24.9  | 1.75 | 25.4  | 1.88 | 25.7  | 1.89 | 27.0  | 1.90 | 27.7  | 1.92 |
|                 | 105                       | 20.1                         | 1.24 | 23.6  | 1.59 | 24.3  | 1.97 | 24.7  | 2.02 | 25.0  | 2.03 | 26.2  | 2.05 | 26.7  | 2.07 |
|                 | 110                       | 20.1                         | 1.39 | 23.0  | 1.79 | 23.7  | 2.15 | 23.8  | 2.16 | 24.1  | 2.17 | 24.9  | 2.19 | 25.0  | 2.21 |
|                 | 115                       | 19.5                         | 1.61 | 22.1  | 2.06 | 22.1  | 2.27 | 22.1  | 2.27 | 22.1  | 2.27 | 22.7  | 2.27 | 22.8  | 2.28 |
|                 | 118                       | 17.4                         | 1.42 | 19.2  | 1.74 | 19.3  | 1.91 | 19.3  | 1.92 | 19.3  | 1.92 | 19.7  | 1.93 | 19.7  | 1.93 |
|                 | 122                       | 13.9                         | 1.08 | 15.4  | 1.32 | 15.4  | 1.45 | 15.4  | 1.46 | 15.4  | 1.46 | 15.9  | 1.46 | 15.8  | 1.47 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 25: ZRUN024GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 110             | -9.9                      | 18.4                         | 0.45 | 22.0  | 0.54 | 25.5  | 0.64 | 27.3  | 0.70 | 29.1  | 0.75 | 32.0  | 0.85 | 32.7  | 0.88 |
|                 | -5                        | 18.4                         | 0.47 | 22.0  | 0.57 | 25.5  | 0.68 | 27.3  | 0.74 | 29.1  | 0.79 | 32.0  | 0.90 | 32.7  | 0.93 |
|                 | 0                         | 18.4                         | 0.49 | 22.0  | 0.60 | 25.5  | 0.71 | 27.3  | 0.77 | 29.1  | 0.82 | 32.0  | 0.94 | 32.7  | 0.97 |
|                 | 5                         | 18.4                         | 0.51 | 22.0  | 0.62 | 25.5  | 0.73 | 27.3  | 0.79 | 29.1  | 0.85 | 32.0  | 0.97 | 32.7  | 1.01 |
|                 | 10                        | 18.4                         | 0.53 | 22.0  | 0.64 | 25.5  | 0.75 | 27.3  | 0.82 | 29.1  | 0.87 | 32.0  | 1.00 | 32.7  | 1.04 |
|                 | 14                        | 18.4                         | 0.55 | 22.0  | 0.66 | 25.5  | 0.78 | 27.3  | 0.85 | 29.1  | 0.91 | 32.0  | 1.03 | 32.7  | 1.07 |
|                 | 20                        | 18.4                         | 0.55 | 22.0  | 0.67 | 25.5  | 0.79 | 27.3  | 0.86 | 29.1  | 0.92 | 32.0  | 1.05 | 32.7  | 1.09 |
|                 | 25                        | 18.4                         | 0.56 | 22.0  | 0.68 | 25.5  | 0.80 | 27.3  | 0.87 | 29.1  | 0.93 | 32.0  | 1.07 | 32.7  | 1.10 |
|                 | 30                        | 18.4                         | 0.57 | 22.0  | 0.69 | 25.5  | 0.81 | 27.3  | 0.88 | 29.1  | 0.94 | 32.0  | 1.08 | 32.7  | 1.12 |
|                 | 35                        | 18.4                         | 0.58 | 22.0  | 0.70 | 25.5  | 0.82 | 27.3  | 0.89 | 29.1  | 0.96 | 32.0  | 1.10 | 32.7  | 1.14 |
|                 | 40                        | 18.4                         | 0.58 | 22.0  | 0.71 | 25.5  | 0.83 | 27.3  | 0.90 | 29.1  | 0.97 | 32.0  | 1.11 | 32.7  | 1.15 |
|                 | 45                        | 18.4                         | 0.59 | 22.0  | 0.72 | 25.5  | 0.85 | 27.3  | 0.92 | 29.1  | 0.99 | 32.0  | 1.13 | 32.7  | 1.17 |
|                 | 50                        | 18.4                         | 0.60 | 22.0  | 0.73 | 25.5  | 0.86 | 27.3  | 0.93 | 29.1  | 1.00 | 32.0  | 1.15 | 32.7  | 1.19 |
|                 | 55                        | 18.4                         | 0.61 | 22.0  | 0.74 | 25.5  | 0.88 | 27.3  | 0.95 | 29.1  | 1.02 | 31.6  | 1.17 | 32.2  | 1.20 |
|                 | 60                        | 18.4                         | 0.63 | 22.0  | 0.77 | 25.5  | 0.92 | 27.3  | 0.99 | 29.1  | 1.06 | 30.8  | 1.21 | 31.4  | 1.22 |
|                 | 65                        | 18.4                         | 0.65 | 22.0  | 0.79 | 25.5  | 0.93 | 27.3  | 1.01 | 29.1  | 1.08 | 30.3  | 1.25 | 31.0  | 1.26 |
|                 | 70                        | 18.4                         | 0.65 | 22.0  | 0.79 | 25.5  | 0.98 | 27.3  | 1.07 | 28.5  | 1.18 | 29.7  | 1.31 | 30.4  | 1.32 |
|                 | 75                        | 18.4                         | 0.67 | 22.0  | 0.85 | 25.5  | 1.04 | 27.3  | 1.15 | 28.1  | 1.26 | 29.3  | 1.37 | 30.0  | 1.38 |
|                 | 80                        | 18.2                         | 0.76 | 21.7  | 0.96 | 25.2  | 1.19 | 26.7  | 1.32 | 27.0  | 1.45 | 28.2  | 1.49 | 28.9  | 1.50 |
|                 | 85                        | 18.2                         | 0.81 | 21.7  | 1.03 | 25.2  | 1.28 | 26.2  | 1.41 | 26.6  | 1.54 | 27.8  | 1.55 | 28.4  | 1.56 |
|                 | 90                        | 18.2                         | 0.92 | 21.7  | 1.17 | 25.1  | 1.45 | 25.5  | 1.60 | 25.8  | 1.66 | 27.0  | 1.67 | 27.7  | 1.69 |
|                 | 95                        | 18.2                         | 0.97 | 21.7  | 1.24 | 24.7  | 1.55 | 25.0  | 1.71 | 25.4  | 1.72 | 26.5  | 1.73 | 27.2  | 1.75 |
|                 | 100                       | 18.2                         | 1.05 | 21.7  | 1.34 | 24.4  | 1.68 | 24.7  | 1.80 | 25.0  | 1.81 | 26.2  | 1.83 | 26.9  | 1.84 |
|                 | 105                       | 18.2                         | 1.19 | 21.7  | 1.52 | 23.6  | 1.89 | 23.9  | 1.94 | 24.3  | 1.95 | 25.4  | 1.96 | 26.1  | 1.98 |
|                 | 110                       | 18.2                         | 1.33 | 21.7  | 1.71 | 22.9  | 2.06 | 22.9  | 2.07 | 23.3  | 2.08 | 24.0  | 2.10 | 24.1  | 2.12 |
|                 | 115                       | 18.2                         | 1.54 | 21.7  | 1.97 | 21.9  | 2.17 | 21.9  | 2.17 | 22.0  | 2.17 | 22.4  | 2.18 | 22.5  | 2.18 |
|                 | 118                       | 17.6                         | 1.40 | 18.9  | 1.67 | 19.1  | 1.83 | 19.1  | 1.85 | 19.2  | 1.85 | 19.5  | 1.85 | 19.5  | 1.85 |
|                 | 122                       | 14.1                         | 1.07 | 15.2  | 1.27 | 15.2  | 1.39 | 15.2  | 1.40 | 15.3  | 1.40 | 15.7  | 1.40 | 15.7  | 1.41 |
| 100             | -9.9                      | 16.2                         | 0.40 | 19.3  | 0.48 | 22.4  | 0.57 | 24.0  | 0.62 | 26.4  | 0.67 | 29.6  | 0.77 | 31.2  | 0.80 |
|                 | -5                        | 16.2                         | 0.42 | 19.3  | 0.50 | 22.4  | 0.60 | 24.0  | 0.65 | 26.4  | 0.70 | 29.6  | 0.81 | 31.2  | 0.85 |
|                 | 0                         | 16.2                         | 0.43 | 19.3  | 0.52 | 22.4  | 0.62 | 24.0  | 0.68 | 26.4  | 0.73 | 29.6  | 0.85 | 31.2  | 0.88 |
|                 | 5                         | 16.2                         | 0.45 | 19.3  | 0.54 | 22.4  | 0.64 | 24.0  | 0.70 | 26.4  | 0.76 | 29.6  | 0.88 | 31.2  | 0.91 |
|                 | 10                        | 16.2                         | 0.46 | 19.3  | 0.56 | 22.4  | 0.66 | 24.0  | 0.72 | 26.4  | 0.78 | 29.6  | 0.90 | 31.2  | 0.94 |
|                 | 14                        | 16.2                         | 0.48 | 19.3  | 0.58 | 22.4  | 0.69 | 24.0  | 0.75 | 26.4  | 0.81 | 29.6  | 0.93 | 31.2  | 0.97 |
|                 | 20                        | 16.2                         | 0.50 | 19.3  | 0.60 | 22.4  | 0.71 | 24.0  | 0.77 | 26.4  | 0.84 | 29.6  | 0.96 | 31.2  | 1.00 |
|                 | 25                        | 16.2                         | 0.51 | 19.3  | 0.61 | 22.4  | 0.73 | 24.0  | 0.79 | 26.4  | 0.86 | 29.6  | 0.98 | 31.2  | 1.02 |
|                 | 30                        | 16.2                         | 0.52 | 19.3  | 0.63 | 22.4  | 0.74 | 24.0  | 0.81 | 26.4  | 0.88 | 29.6  | 1.01 | 31.2  | 1.05 |
|                 | 35                        | 16.2                         | 0.53 | 19.3  | 0.64 | 22.4  | 0.76 | 24.0  | 0.82 | 26.4  | 0.89 | 29.6  | 1.02 | 31.2  | 1.06 |
|                 | 40                        | 16.2                         | 0.54 | 19.3  | 0.65 | 22.4  | 0.77 | 24.0  | 0.83 | 26.4  | 0.91 | 29.6  | 1.04 | 31.2  | 1.08 |
|                 | 45                        | 16.2                         | 0.55 | 19.3  | 0.66 | 22.4  | 0.78 | 24.0  | 0.85 | 26.4  | 0.93 | 29.6  | 1.06 | 31.2  | 1.10 |
|                 | 50                        | 16.2                         | 0.56 | 19.3  | 0.68 | 22.4  | 0.80 | 24.0  | 0.87 | 26.4  | 0.94 | 29.6  | 1.08 | 31.2  | 1.13 |
|                 | 55                        | 16.2                         | 0.57 | 19.3  | 0.69 | 22.4  | 0.82 | 24.0  | 0.88 | 26.4  | 0.96 | 29.6  | 1.10 | 30.9  | 1.14 |
|                 | 60                        | 16.2                         | 0.59 | 19.3  | 0.71 | 22.4  | 0.85 | 24.0  | 0.92 | 26.4  | 1.00 | 29.5  | 1.14 | 30.0  | 1.16 |
|                 | 65                        | 16.2                         | 0.60 | 19.3  | 0.73 | 22.4  | 0.87 | 24.0  | 0.94 | 26.4  | 1.02 | 29.0  | 1.17 | 29.7  | 1.20 |
|                 | 70                        | 16.2                         | 0.62 | 19.3  | 0.75 | 22.4  | 0.92 | 24.0  | 1.02 | 26.4  | 1.13 | 28.5  | 1.26 | 29.0  | 1.28 |
|                 | 75                        | 16.2                         | 0.63 | 19.3  | 0.80 | 22.4  | 0.99 | 24.0  | 1.09 | 26.4  | 1.21 | 28.0  | 1.32 | 28.7  | 1.33 |
|                 | 80                        | 16.2                         | 0.72 | 19.3  | 0.91 | 22.4  | 1.13 | 24.0  | 1.25 | 26.4  | 1.39 | 27.3  | 1.43 | 27.8  | 1.45 |
|                 | 85                        | 16.2                         | 0.77 | 19.3  | 0.97 | 22.4  | 1.21 | 24.0  | 1.33 | 26.3  | 1.48 | 26.8  | 1.49 | 27.5  | 1.51 |
|                 | 90                        | 16.2                         | 0.87 | 19.3  | 1.11 | 22.4  | 1.37 | 24.0  | 1.52 | 25.4  | 1.59 | 26.0  | 1.61 | 26.6  | 1.63 |
|                 | 95                        | 16.2                         | 0.92 | 19.3  | 1.18 | 22.4  | 1.47 | 24.0  | 1.62 | 25.1  | 1.65 | 25.6  | 1.67 | 26.3  | 1.69 |
|                 | 100                       | 16.2                         | 0.99 | 19.3  | 1.27 | 22.4  | 1.58 | 23.6  | 1.70 | 24.6  | 1.74 | 25.3  | 1.75 | 25.8  | 1.78 |
|                 | 105                       | 16.2                         | 1.12 | 19.3  | 1.43 | 22.3  | 1.78 | 22.9  | 1.82 | 23.9  | 1.86 | 24.5  | 1.88 | 25.1  | 1.90 |
|                 | 110                       | 16.2                         | 1.25 | 19.3  | 1.61 | 22.0  | 1.93 | 22.5  | 1.94 | 23.0  | 1.98 | 23.3  | 2.00 | 23.8  | 2.03 |
|                 | 115                       | 16.2                         | 1.44 | 19.3  | 1.84 | 21.0  | 2.03 | 21.6  | 2.03 | 22.1  | 2.06 | 22.3  | 2.06 | 22.4  | 2.07 |
|                 | 118                       | 16.2                         | 1.45 | 16.9  | 1.72 | 18.2  | 1.70 | 18.8  | 1.72 | 19.3  | 1.74 | 19.5  | 1.75 | 19.4  | 1.76 |
|                 | 122                       | 13.8                         | 1.31 | 13.6  | 1.31 | 14.5  | 1.30 | 15.0  | 1.30 | 15.4  | 1.32 | 15.6  | 1.32 | 15.6  | 1.34 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

# COOLING CAPACITY

ZRUN024GSS0



Table 26: ZRUN024GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 90              | -9.9                      | 14.6                         | 0.35 | 17.4  | 0.42 | 20.3  | 0.50 | 21.6  | 0.54 | 23.0  | 0.57 | 25.8  | 0.66 | 28.6  | 0.73 |
|                 | -5                        | 14.6                         | 0.37 | 17.4  | 0.45 | 20.3  | 0.53 | 21.6  | 0.57 | 23.0  | 0.61 | 25.8  | 0.70 | 28.6  | 0.77 |
|                 | 0                         | 14.6                         | 0.39 | 17.4  | 0.46 | 20.3  | 0.55 | 21.6  | 0.59 | 23.0  | 0.63 | 25.8  | 0.73 | 28.6  | 0.80 |
|                 | 5                         | 14.6                         | 0.40 | 17.4  | 0.48 | 20.3  | 0.57 | 21.6  | 0.61 | 23.0  | 0.65 | 25.8  | 0.75 | 28.6  | 0.83 |
|                 | 10                        | 14.6                         | 0.41 | 17.4  | 0.50 | 20.3  | 0.59 | 21.6  | 0.63 | 23.0  | 0.67 | 25.8  | 0.77 | 28.6  | 0.85 |
|                 | 14                        | 14.6                         | 0.43 | 17.4  | 0.51 | 20.3  | 0.61 | 21.6  | 0.65 | 23.0  | 0.70 | 25.8  | 0.80 | 28.6  | 0.88 |
|                 | 20                        | 14.6                         | 0.44 | 17.4  | 0.53 | 20.3  | 0.63 | 21.6  | 0.68 | 23.0  | 0.73 | 25.8  | 0.83 | 28.6  | 0.91 |
|                 | 25                        | 14.6                         | 0.46 | 17.4  | 0.55 | 20.3  | 0.65 | 21.6  | 0.70 | 23.0  | 0.75 | 25.8  | 0.86 | 28.6  | 0.94 |
|                 | 30                        | 14.6                         | 0.47 | 17.4  | 0.57 | 20.3  | 0.67 | 21.6  | 0.72 | 23.0  | 0.77 | 25.8  | 0.88 | 28.6  | 0.97 |
|                 | 35                        | 14.6                         | 0.48 | 17.4  | 0.58 | 20.3  | 0.69 | 21.6  | 0.74 | 23.0  | 0.80 | 25.8  | 0.91 | 28.6  | 1.00 |
|                 | 40                        | 14.6                         | 0.50 | 17.4  | 0.60 | 20.3  | 0.71 | 21.6  | 0.76 | 23.0  | 0.82 | 25.8  | 0.93 | 28.6  | 1.03 |
|                 | 45                        | 14.6                         | 0.51 | 17.4  | 0.61 | 20.3  | 0.72 | 21.6  | 0.78 | 23.0  | 0.84 | 25.8  | 0.95 | 28.6  | 1.05 |
|                 | 50                        | 14.6                         | 0.52 | 17.4  | 0.63 | 20.3  | 0.74 | 21.6  | 0.80 | 23.0  | 0.86 | 25.8  | 0.98 | 28.6  | 1.08 |
|                 | 55                        | 14.6                         | 0.53 | 17.4  | 0.64 | 20.3  | 0.75 | 21.6  | 0.81 | 23.0  | 0.88 | 25.8  | 1.00 | 28.6  | 1.09 |
|                 | 60                        | 14.6                         | 0.55 | 17.4  | 0.66 | 20.3  | 0.78 | 21.6  | 0.85 | 23.0  | 0.91 | 25.8  | 1.03 | 28.4  | 1.10 |
|                 | 65                        | 14.6                         | 0.56 | 17.4  | 0.68 | 20.3  | 0.80 | 21.6  | 0.86 | 23.0  | 0.93 | 25.8  | 1.05 | 28.2  | 1.16 |
|                 | 70                        | 14.6                         | 0.57 | 17.4  | 0.70 | 20.3  | 0.83 | 21.6  | 0.91 | 23.0  | 0.99 | 25.8  | 1.17 | 27.6  | 1.24 |
|                 | 75                        | 14.6                         | 0.58 | 17.4  | 0.73 | 20.3  | 0.89 | 21.6  | 0.98 | 23.0  | 1.07 | 25.8  | 1.23 | 27.2  | 1.30 |
|                 | 80                        | 14.6                         | 0.65 | 17.4  | 0.82 | 20.3  | 1.01 | 21.6  | 1.11 | 23.0  | 1.22 | 25.8  | 1.35 | 26.5  | 1.41 |
|                 | 85                        | 14.6                         | 0.70 | 17.4  | 0.88 | 20.3  | 1.08 | 21.6  | 1.19 | 23.0  | 1.30 | 25.5  | 1.43 | 26.0  | 1.47 |
|                 | 90                        | 14.6                         | 0.79 | 17.4  | 0.99 | 20.3  | 1.23 | 21.6  | 1.35 | 23.0  | 1.48 | 24.8  | 1.56 | 25.3  | 1.58 |
|                 | 95                        | 14.6                         | 0.84 | 17.4  | 1.06 | 20.3  | 1.31 | 21.6  | 1.44 | 23.0  | 1.58 | 24.3  | 1.62 | 24.9  | 1.64 |
|                 | 100                       | 14.6                         | 0.86 | 17.4  | 1.10 | 20.3  | 1.36 | 21.6  | 1.50 | 23.0  | 1.62 | 24.0  | 1.69 | 24.4  | 1.71 |
|                 | 105                       | 14.6                         | 1.00 | 17.4  | 1.28 | 20.3  | 1.54 | 21.6  | 1.64 | 22.8  | 1.74 | 23.3  | 1.81 | 23.6  | 1.83 |
|                 | 110                       | 14.6                         | 1.15 | 17.4  | 1.47 | 20.3  | 1.69 | 21.6  | 1.77 | 21.9  | 1.88 | 22.1  | 1.95 | 22.3  | 1.97 |
|                 | 115                       | 14.6                         | 1.25 | 17.4  | 1.60 | 19.0  | 1.78 | 20.5  | 1.85 | 20.8  | 1.94 | 21.0  | 1.98 | 21.1  | 2.01 |
|                 | 118                       | 14.6                         | 1.32 | 16.9  | 1.72 | 16.5  | 1.50 | 17.9  | 1.57 | 18.1  | 1.65 | 18.3  | 1.68 | 18.2  | 1.70 |
|                 | 122                       | 13.8                         | 1.31 | 13.6  | 1.31 | 13.2  | 1.14 | 14.3  | 1.19 | 14.5  | 1.25 | 14.7  | 1.28 | 14.7  | 1.30 |
| 80              | -9.9                      | 13.0                         | 0.31 | 15.4  | 0.37 | 18.0  | 0.43 | 19.2  | 0.46 | 20.5  | 0.50 | 22.9  | 0.57 | 25.4  | 0.64 |
|                 | -5                        | 13.0                         | 0.32 | 15.4  | 0.39 | 18.0  | 0.45 | 19.2  | 0.49 | 20.5  | 0.53 | 22.9  | 0.60 | 25.4  | 0.67 |
|                 | 0                         | 13.0                         | 0.34 | 15.4  | 0.40 | 18.0  | 0.47 | 19.2  | 0.51 | 20.5  | 0.55 | 22.9  | 0.63 | 25.4  | 0.70 |
|                 | 5                         | 13.0                         | 0.35 | 15.4  | 0.42 | 18.0  | 0.49 | 19.2  | 0.53 | 20.5  | 0.57 | 22.9  | 0.65 | 25.4  | 0.73 |
|                 | 10                        | 13.0                         | 0.36 | 15.4  | 0.43 | 18.0  | 0.50 | 19.2  | 0.54 | 20.5  | 0.59 | 22.9  | 0.67 | 25.4  | 0.75 |
|                 | 14                        | 13.0                         | 0.37 | 15.4  | 0.45 | 18.0  | 0.52 | 19.2  | 0.56 | 20.5  | 0.61 | 22.9  | 0.69 | 25.4  | 0.77 |
|                 | 20                        | 13.0                         | 0.39 | 15.4  | 0.46 | 18.0  | 0.54 | 19.2  | 0.59 | 20.5  | 0.63 | 22.9  | 0.72 | 25.4  | 0.80 |
|                 | 25                        | 13.0                         | 0.40 | 15.4  | 0.48 | 18.0  | 0.56 | 19.2  | 0.60 | 20.5  | 0.65 | 22.9  | 0.74 | 25.4  | 0.83 |
|                 | 30                        | 13.0                         | 0.41 | 15.4  | 0.49 | 18.0  | 0.57 | 19.2  | 0.62 | 20.5  | 0.66 | 22.9  | 0.76 | 25.4  | 0.85 |
|                 | 35                        | 13.0                         | 0.42 | 15.4  | 0.50 | 18.0  | 0.59 | 19.2  | 0.64 | 20.5  | 0.68 | 22.9  | 0.78 | 25.4  | 0.88 |
|                 | 40                        | 13.0                         | 0.43 | 15.4  | 0.52 | 18.0  | 0.61 | 19.2  | 0.65 | 20.5  | 0.70 | 22.9  | 0.80 | 25.4  | 0.90 |
|                 | 45                        | 13.0                         | 0.44 | 15.4  | 0.52 | 18.0  | 0.62 | 19.2  | 0.66 | 20.5  | 0.71 | 22.9  | 0.81 | 25.4  | 0.91 |
|                 | 50                        | 13.0                         | 0.44 | 15.4  | 0.53 | 18.0  | 0.62 | 19.2  | 0.67 | 20.5  | 0.72 | 22.9  | 0.83 | 25.4  | 0.92 |
|                 | 55                        | 13.0                         | 0.45 | 15.4  | 0.54 | 18.0  | 0.63 | 19.2  | 0.68 | 20.5  | 0.73 | 22.9  | 0.84 | 25.4  | 0.94 |
|                 | 60                        | 13.0                         | 0.47 | 15.4  | 0.56 | 18.0  | 0.66 | 19.2  | 0.71 | 20.5  | 0.76 | 22.9  | 0.87 | 25.4  | 0.98 |
|                 | 65                        | 13.0                         | 0.47 | 15.4  | 0.57 | 18.0  | 0.67 | 19.2  | 0.72 | 20.5  | 0.78 | 22.9  | 0.89 | 25.4  | 1.00 |
|                 | 70                        | 13.0                         | 0.49 | 15.4  | 0.59 | 18.0  | 0.69 | 19.2  | 0.74 | 20.5  | 0.81 | 22.9  | 0.96 | 25.4  | 1.11 |
|                 | 75                        | 13.0                         | 0.50 | 15.4  | 0.60 | 18.0  | 0.72 | 19.2  | 0.79 | 20.5  | 0.86 | 22.9  | 1.02 | 25.4  | 1.17 |
|                 | 80                        | 13.0                         | 0.54 | 15.4  | 0.68 | 18.0  | 0.83 | 19.2  | 0.90 | 20.5  | 0.99 | 22.9  | 1.17 | 25.4  | 1.30 |
|                 | 85                        | 13.0                         | 0.58 | 15.4  | 0.72 | 18.0  | 0.88 | 19.2  | 0.96 | 20.5  | 1.06 | 22.9  | 1.25 | 25.4  | 1.34 |
|                 | 90                        | 13.0                         | 0.65 | 15.4  | 0.82 | 18.0  | 0.99 | 19.2  | 1.09 | 20.5  | 1.20 | 22.9  | 1.37 | 25.0  | 1.42 |
|                 | 95                        | 13.0                         | 0.69 | 15.4  | 0.86 | 18.0  | 1.06 | 19.2  | 1.16 | 20.5  | 1.28 | 22.9  | 1.42 | 24.4  | 1.46 |
|                 | 100                       | 13.0                         | 0.74 | 15.4  | 0.93 | 18.0  | 1.15 | 19.2  | 1.24 | 20.5  | 1.33 | 22.9  | 1.48 | 23.9  | 1.50 |
|                 | 105                       | 13.0                         | 0.85 | 15.4  | 1.07 | 18.0  | 1.27 | 19.2  | 1.33 | 20.5  | 1.42 | 22.7  | 1.53 | 23.2  | 1.58 |
|                 | 110                       | 13.0                         | 0.96 | 15.4  | 1.22 | 18.0  | 1.35 | 19.2  | 1.43 | 20.5  | 1.53 | 21.9  | 1.59 | 22.0  | 1.66 |
|                 | 115                       | 13.0                         | 1.03 | 15.4  | 1.30 | 18.0  | 1.40 | 19.2  | 1.50 | 19.2  | 1.57 | 19.3  | 1.63 | 19.3  | 1.73 |
|                 | 118                       | 13.0                         | 1.09 | 15.4  | 1.38 | 16.5  | 1.50 | 16.8  | 1.42 | 16.7  | 1.33 | 16.8  | 1.38 | 16.7  | 1.46 |
|                 | 122                       | 13.0                         | 1.18 | 13.6  | 1.30 | 13.2  | 1.14 | 13.5  | 1.08 | 13.4  | 1.01 | 13.5  | 1.05 | 13.4  | 1.11 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 27: ZRUN024GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 70              | -9.9                      | 11.4                         | 0.27 | 13.5  | 0.32 | 15.8  | 0.38 | 16.8  | 0.40 | 17.9  | 0.43 | 20.0  | 0.49 | 22.3  | 0.55 |
|                 | -5                        | 11.4                         | 0.28 | 13.5  | 0.34 | 15.8  | 0.40 | 16.8  | 0.43 | 17.9  | 0.45 | 20.0  | 0.52 | 22.3  | 0.58 |
|                 | 0                         | 11.4                         | 0.30 | 13.5  | 0.35 | 15.8  | 0.41 | 16.8  | 0.44 | 17.9  | 0.47 | 20.0  | 0.54 | 22.3  | 0.61 |
|                 | 5                         | 11.4                         | 0.31 | 13.5  | 0.37 | 15.8  | 0.43 | 16.8  | 0.46 | 17.9  | 0.49 | 20.0  | 0.56 | 22.3  | 0.63 |
|                 | 10                        | 11.4                         | 0.32 | 13.5  | 0.38 | 15.8  | 0.44 | 16.8  | 0.47 | 17.9  | 0.50 | 20.0  | 0.58 | 22.3  | 0.65 |
|                 | 14                        | 11.4                         | 0.33 | 13.5  | 0.39 | 15.8  | 0.46 | 16.8  | 0.49 | 17.9  | 0.52 | 20.0  | 0.60 | 22.3  | 0.67 |
|                 | 20                        | 11.4                         | 0.34 | 13.5  | 0.40 | 15.8  | 0.47 | 16.8  | 0.51 | 17.9  | 0.54 | 20.0  | 0.62 | 22.3  | 0.69 |
|                 | 25                        | 11.4                         | 0.35 | 13.5  | 0.41 | 15.8  | 0.48 | 16.8  | 0.52 | 17.9  | 0.56 | 20.0  | 0.63 | 22.3  | 0.71 |
|                 | 30                        | 11.4                         | 0.36 | 13.5  | 0.42 | 15.8  | 0.50 | 16.8  | 0.53 | 17.9  | 0.57 | 20.0  | 0.65 | 22.3  | 0.73 |
|                 | 35                        | 11.4                         | 0.37 | 13.5  | 0.44 | 15.8  | 0.51 | 16.8  | 0.55 | 17.9  | 0.59 | 20.0  | 0.67 | 22.3  | 0.75 |
|                 | 40                        | 11.4                         | 0.38 | 13.5  | 0.45 | 15.8  | 0.52 | 16.8  | 0.56 | 17.9  | 0.60 | 20.0  | 0.68 | 22.3  | 0.77 |
|                 | 45                        | 11.4                         | 0.38 | 13.5  | 0.45 | 15.8  | 0.53 | 16.8  | 0.57 | 17.9  | 0.61 | 20.0  | 0.69 | 22.3  | 0.78 |
|                 | 50                        | 11.4                         | 0.39 | 13.5  | 0.46 | 15.8  | 0.54 | 16.8  | 0.58 | 17.9  | 0.62 | 20.0  | 0.71 | 22.3  | 0.79 |
|                 | 55                        | 11.4                         | 0.40 | 13.5  | 0.47 | 15.8  | 0.55 | 16.8  | 0.59 | 17.9  | 0.63 | 20.0  | 0.72 | 22.3  | 0.81 |
|                 | 60                        | 11.4                         | 0.41 | 13.5  | 0.49 | 15.8  | 0.57 | 16.8  | 0.61 | 17.9  | 0.65 | 20.0  | 0.75 | 22.3  | 0.84 |
|                 | 65                        | 11.4                         | 0.41 | 13.5  | 0.50 | 15.8  | 0.58 | 16.8  | 0.62 | 17.9  | 0.67 | 20.0  | 0.76 | 22.3  | 0.86 |
|                 | 70                        | 11.4                         | 0.43 | 13.5  | 0.51 | 15.8  | 0.60 | 16.8  | 0.64 | 17.9  | 0.69 | 20.0  | 0.79 | 22.3  | 0.91 |
|                 | 75                        | 11.4                         | 0.43 | 13.5  | 0.52 | 15.8  | 0.61 | 16.8  | 0.66 | 17.9  | 0.72 | 20.0  | 0.84 | 22.3  | 0.96 |
|                 | 80                        | 11.4                         | 0.47 | 13.5  | 0.57 | 15.8  | 0.69 | 16.8  | 0.75 | 17.9  | 0.82 | 20.0  | 0.93 | 22.3  | 1.07 |
|                 | 85                        | 11.4                         | 0.50 | 13.5  | 0.61 | 15.8  | 0.74 | 16.8  | 0.80 | 17.9  | 0.88 | 20.0  | 0.99 | 22.3  | 1.11 |
|                 | 90                        | 11.4                         | 0.56 | 13.5  | 0.69 | 15.8  | 0.83 | 16.8  | 0.91 | 17.9  | 0.99 | 20.0  | 1.11 | 22.3  | 1.21 |
|                 | 95                        | 11.4                         | 0.59 | 13.5  | 0.73 | 15.8  | 0.89 | 16.8  | 0.97 | 17.9  | 1.06 | 20.0  | 1.16 | 22.3  | 1.24 |
|                 | 100                       | 11.4                         | 0.63 | 13.5  | 0.79 | 15.8  | 0.96 | 16.8  | 1.05 | 17.9  | 1.09 | 20.0  | 1.22 | 22.3  | 1.28 |
|                 | 105                       | 11.4                         | 0.72 | 13.5  | 0.90 | 15.8  | 1.05 | 16.8  | 1.12 | 17.9  | 1.18 | 20.0  | 1.28 | 22.3  | 1.35 |
|                 | 110                       | 11.4                         | 0.81 | 13.5  | 1.02 | 15.8  | 1.12 | 16.8  | 1.18 | 17.9  | 1.28 | 20.0  | 1.33 | 21.6  | 1.46 |
|                 | 115                       | 11.4                         | 0.87 | 13.5  | 1.08 | 15.8  | 1.15 | 16.8  | 1.25 | 17.9  | 1.32 | 20.0  | 1.38 | 20.4  | 1.55 |
|                 | 118                       | 11.4                         | 0.92 | 13.5  | 1.15 | 15.8  | 1.23 | 16.8  | 1.33 | 16.3  | 1.32 | 16.8  | 1.17 | 16.7  | 1.32 |
|                 | 122                       | 11.4                         | 1.00 | 13.5  | 1.25 | 14.1  | 1.17 | 13.4  | 1.09 | 13.0  | 1.00 | 13.5  | 0.88 | 13.4  | 1.00 |
| 60              | -9.9                      | 9.8                          | 0.23 | 11.6  | 0.27 | 13.5  | 0.32 | 14.4  | 0.34 | 15.3  | 0.37 | 17.3  | 0.42 | 19.1  | 0.46 |
|                 | -5                        | 9.8                          | 0.25 | 11.6  | 0.29 | 13.5  | 0.34 | 14.4  | 0.36 | 15.3  | 0.39 | 17.3  | 0.44 | 19.1  | 0.49 |
|                 | 0                         | 9.8                          | 0.26 | 11.6  | 0.30 | 13.5  | 0.35 | 14.4  | 0.37 | 15.3  | 0.40 | 17.3  | 0.46 | 19.1  | 0.51 |
|                 | 5                         | 9.8                          | 0.27 | 11.6  | 0.31 | 13.5  | 0.36 | 14.4  | 0.39 | 15.3  | 0.42 | 17.3  | 0.47 | 19.1  | 0.53 |
|                 | 10                        | 9.8                          | 0.27 | 11.6  | 0.32 | 13.5  | 0.37 | 14.4  | 0.40 | 15.3  | 0.43 | 17.3  | 0.49 | 19.1  | 0.54 |
|                 | 14                        | 9.8                          | 0.28 | 11.6  | 0.33 | 13.5  | 0.39 | 14.4  | 0.41 | 15.3  | 0.45 | 17.3  | 0.50 | 19.1  | 0.56 |
|                 | 20                        | 9.8                          | 0.29 | 11.6  | 0.34 | 13.5  | 0.40 | 14.4  | 0.43 | 15.3  | 0.46 | 17.3  | 0.52 | 19.1  | 0.58 |
|                 | 25                        | 9.8                          | 0.30 | 11.6  | 0.35 | 13.5  | 0.41 | 14.4  | 0.44 | 15.3  | 0.47 | 17.3  | 0.53 | 19.1  | 0.60 |
|                 | 30                        | 9.8                          | 0.31 | 11.6  | 0.36 | 13.5  | 0.42 | 14.4  | 0.45 | 15.3  | 0.48 | 17.3  | 0.55 | 19.1  | 0.62 |
|                 | 35                        | 9.8                          | 0.31 | 11.6  | 0.37 | 13.5  | 0.43 | 14.4  | 0.46 | 15.3  | 0.50 | 17.3  | 0.56 | 19.1  | 0.63 |
|                 | 40                        | 9.8                          | 0.32 | 11.6  | 0.38 | 13.5  | 0.44 | 14.4  | 0.48 | 15.3  | 0.51 | 17.3  | 0.58 | 19.1  | 0.65 |
|                 | 45                        | 9.8                          | 0.33 | 11.6  | 0.38 | 13.5  | 0.45 | 14.4  | 0.48 | 15.3  | 0.51 | 17.3  | 0.58 | 19.1  | 0.65 |
|                 | 50                        | 9.8                          | 0.33 | 11.6  | 0.39 | 13.5  | 0.45 | 14.4  | 0.48 | 15.3  | 0.52 | 17.3  | 0.59 | 19.1  | 0.66 |
|                 | 55                        | 9.8                          | 0.33 | 11.6  | 0.39 | 13.5  | 0.46 | 14.4  | 0.49 | 15.3  | 0.53 | 17.3  | 0.60 | 19.1  | 0.67 |
|                 | 60                        | 9.8                          | 0.34 | 11.6  | 0.41 | 13.5  | 0.47 | 14.4  | 0.51 | 15.3  | 0.55 | 17.3  | 0.62 | 19.1  | 0.70 |
|                 | 65                        | 9.8                          | 0.35 | 11.6  | 0.41 | 13.5  | 0.48 | 14.4  | 0.52 | 15.3  | 0.56 | 17.3  | 0.63 | 19.1  | 0.71 |
|                 | 70                        | 9.8                          | 0.36 | 11.6  | 0.43 | 13.5  | 0.50 | 14.4  | 0.53 | 15.3  | 0.57 | 17.3  | 0.65 | 19.1  | 0.74 |
|                 | 75                        | 9.8                          | 0.36 | 11.6  | 0.43 | 13.5  | 0.51 | 14.4  | 0.54 | 15.3  | 0.59 | 17.3  | 0.69 | 19.1  | 0.79 |
|                 | 80                        | 9.8                          | 0.39 | 11.6  | 0.47 | 13.5  | 0.57 | 14.4  | 0.62 | 15.3  | 0.67 | 17.3  | 0.77 | 19.1  | 0.89 |
|                 | 85                        | 9.8                          | 0.41 | 11.6  | 0.50 | 13.5  | 0.60 | 14.4  | 0.66 | 15.3  | 0.72 | 17.3  | 0.81 | 19.1  | 0.92 |
|                 | 90                        | 9.8                          | 0.46 | 11.6  | 0.57 | 13.5  | 0.68 | 14.4  | 0.74 | 15.3  | 0.81 | 17.3  | 0.91 | 19.1  | 1.00 |
|                 | 95                        | 9.8                          | 0.49 | 11.6  | 0.60 | 13.5  | 0.72 | 14.4  | 0.79 | 15.3  | 0.85 | 17.3  | 0.95 | 19.1  | 1.05 |
|                 | 100                       | 9.8                          | 0.52 | 11.6  | 0.65 | 13.5  | 0.78 | 14.4  | 0.86 | 15.3  | 0.89 | 17.3  | 1.01 | 19.1  | 1.10 |
|                 | 105                       | 9.8                          | 0.60 | 11.6  | 0.74 | 13.5  | 0.86 | 14.4  | 0.91 | 15.3  | 0.97 | 17.3  | 1.07 | 19.1  | 1.20 |
|                 | 110                       | 9.8                          | 0.67 | 11.6  | 0.83 | 13.5  | 0.93 | 14.4  | 0.97 | 15.3  | 1.05 | 17.3  | 1.14 | 19.1  | 1.31 |
|                 | 115                       | 9.8                          | 0.72 | 11.6  | 0.89 | 13.5  | 0.97 | 14.4  | 1.02 | 15.3  | 1.09 | 17.3  | 1.21 | 19.1  | 1.40 |
|                 | 118                       | 9.8                          | 0.76 | 11.6  | 0.94 | 13.5  | 1.03 | 14.4  | 1.09 | 15.3  | 1.16 | 16.8  | 1.17 | 16.7  | 1.32 |
|                 | 122                       | 9.8                          | 0.82 | 11.6  | 1.02 | 13.5  | 1.11 | 13.4  | 1.10 | 13.0  | 1.02 | 13.5  | 0.88 | 13.4  | 1.00 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

# COOLING CAPACITY

ZRUN024GSS0



Table 28: ZRUN024GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 50              | -9.9                      | 8.1                          | 0.20 | 9.6   | 0.24 | 11.3  | 0.27 | 12.0  | 0.29 | 12.8  | 0.31 | 14.4  | 0.34 | 15.9  | 0.38 |
|                 | -5                        | 8.1                          | 0.21 | 9.6   | 0.25 | 11.3  | 0.28 | 12.0  | 0.30 | 12.8  | 0.32 | 14.4  | 0.36 | 15.9  | 0.40 |
|                 | 0                         | 8.1                          | 0.22 | 9.6   | 0.26 | 11.3  | 0.29 | 12.0  | 0.31 | 12.8  | 0.34 | 14.4  | 0.37 | 15.9  | 0.42 |
|                 | 5                         | 8.1                          | 0.23 | 9.6   | 0.27 | 11.3  | 0.30 | 12.0  | 0.32 | 12.8  | 0.35 | 14.4  | 0.39 | 15.9  | 0.43 |
|                 | 10                        | 8.1                          | 0.24 | 9.6   | 0.28 | 11.3  | 0.31 | 12.0  | 0.33 | 12.8  | 0.36 | 14.4  | 0.40 | 15.9  | 0.44 |
|                 | 14                        | 8.1                          | 0.24 | 9.6   | 0.29 | 11.3  | 0.32 | 12.0  | 0.35 | 12.8  | 0.37 | 14.4  | 0.41 | 15.9  | 0.46 |
|                 | 20                        | 8.1                          | 0.25 | 9.6   | 0.30 | 11.3  | 0.33 | 12.0  | 0.36 | 12.8  | 0.39 | 14.4  | 0.43 | 15.9  | 0.48 |
|                 | 25                        | 8.1                          | 0.26 | 9.6   | 0.30 | 11.3  | 0.35 | 12.0  | 0.37 | 12.8  | 0.40 | 14.4  | 0.44 | 15.9  | 0.49 |
|                 | 30                        | 8.1                          | 0.27 | 9.6   | 0.31 | 11.3  | 0.36 | 12.0  | 0.38 | 12.8  | 0.41 | 14.4  | 0.45 | 15.9  | 0.51 |
|                 | 35                        | 8.1                          | 0.28 | 9.6   | 0.32 | 11.3  | 0.37 | 12.0  | 0.39 | 12.8  | 0.42 | 14.4  | 0.47 | 15.9  | 0.52 |
|                 | 40                        | 8.1                          | 0.28 | 9.6   | 0.33 | 11.3  | 0.38 | 12.0  | 0.40 | 12.8  | 0.43 | 14.4  | 0.48 | 15.9  | 0.53 |
|                 | 45                        | 8.1                          | 0.29 | 9.6   | 0.33 | 11.3  | 0.38 | 12.0  | 0.41 | 12.8  | 0.43 | 14.4  | 0.48 | 15.9  | 0.54 |
|                 | 50                        | 8.1                          | 0.29 | 9.6   | 0.34 | 11.3  | 0.39 | 12.0  | 0.41 | 12.8  | 0.44 | 14.4  | 0.49 | 15.9  | 0.55 |
|                 | 55                        | 8.1                          | 0.30 | 9.6   | 0.34 | 11.3  | 0.39 | 12.0  | 0.42 | 12.8  | 0.45 | 14.4  | 0.50 | 15.9  | 0.56 |
|                 | 60                        | 8.1                          | 0.30 | 9.6   | 0.35 | 11.3  | 0.41 | 12.0  | 0.43 | 12.8  | 0.46 | 14.4  | 0.52 | 15.9  | 0.58 |
|                 | 65                        | 8.1                          | 0.31 | 9.6   | 0.36 | 11.3  | 0.41 | 12.0  | 0.44 | 12.8  | 0.47 | 14.4  | 0.53 | 15.9  | 0.59 |
|                 | 70                        | 8.1                          | 0.32 | 9.6   | 0.36 | 11.3  | 0.42 | 12.0  | 0.45 | 12.8  | 0.48 | 14.4  | 0.54 | 15.9  | 0.61 |
|                 | 75                        | 8.1                          | 0.32 | 9.6   | 0.37 | 11.3  | 0.43 | 12.0  | 0.46 | 12.8  | 0.49 | 14.4  | 0.55 | 15.9  | 0.62 |
|                 | 80                        | 8.1                          | 0.33 | 9.6   | 0.39 | 11.3  | 0.46 | 12.0  | 0.50 | 12.8  | 0.53 | 14.4  | 0.62 | 15.9  | 0.70 |
|                 | 85                        | 8.1                          | 0.35 | 9.6   | 0.41 | 11.3  | 0.49 | 12.0  | 0.53 | 12.8  | 0.57 | 14.4  | 0.66 | 15.9  | 0.75 |
|                 | 90                        | 8.1                          | 0.39 | 9.6   | 0.46 | 11.3  | 0.55 | 12.0  | 0.59 | 12.8  | 0.64 | 14.4  | 0.74 | 15.9  | 0.85 |
|                 | 95                        | 8.1                          | 0.41 | 9.6   | 0.49 | 11.3  | 0.58 | 12.0  | 0.63 | 12.8  | 0.68 | 14.4  | 0.79 | 15.9  | 0.90 |
|                 | 100                       | 8.1                          | 0.43 | 9.6   | 0.52 | 11.3  | 0.62 | 12.0  | 0.67 | 12.8  | 0.72 | 14.4  | 0.83 | 15.9  | 0.96 |
|                 | 105                       | 8.1                          | 0.47 | 9.6   | 0.57 | 11.3  | 0.68 | 12.0  | 0.74 | 12.8  | 0.80 | 14.4  | 0.93 | 15.9  | 1.06 |
|                 | 110                       | 8.1                          | 0.52 | 9.6   | 0.63 | 11.3  | 0.75 | 12.0  | 0.82 | 12.8  | 0.89 | 14.4  | 1.03 | 15.9  | 1.19 |
|                 | 115                       | 8.1                          | 0.56 | 9.6   | 0.68 | 11.3  | 0.81 | 12.0  | 0.88 | 12.8  | 0.96 | 14.4  | 1.11 | 15.9  | 1.28 |
|                 | 118                       | 8.1                          | 0.60 | 9.6   | 0.74 | 11.3  | 0.88 | 12.0  | 0.96 | 12.8  | 1.04 | 14.4  | 1.17 | 15.9  | 1.32 |
|                 | 122                       | 8.1                          | 0.67 | 9.6   | 0.82 | 11.3  | 0.97 | 12.0  | 1.06 | 12.8  | 1.02 | 13.5  | 0.88 | 13.4  | 1.00 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).



Table 29: ZRUM036GSS0 Cooling Capacities.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 130             | -9.9                      | 32.7                         | 0.74 | 38.9  | 0.90 | 45.2  | 1.07 | 46.9  | 1.15 | 47.5  | 1.25 | 49.2  | 1.43 | 50.4  | 1.48 |
|                 | -5                        | 32.7                         | 0.78 | 38.9  | 0.95 | 45.2  | 1.13 | 46.9  | 1.22 | 47.5  | 1.31 | 49.2  | 1.51 | 50.4  | 1.56 |
|                 | 0                         | 32.7                         | 0.82 | 38.9  | 0.99 | 45.2  | 1.17 | 46.9  | 1.27 | 47.5  | 1.37 | 49.2  | 1.57 | 50.4  | 1.62 |
|                 | 5                         | 32.7                         | 0.85 | 38.9  | 1.03 | 45.2  | 1.22 | 46.9  | 1.31 | 47.5  | 1.42 | 49.2  | 1.62 | 50.4  | 1.68 |
|                 | 10                        | 32.7                         | 0.87 | 38.9  | 1.06 | 45.2  | 1.25 | 46.9  | 1.35 | 47.5  | 1.46 | 49.2  | 1.67 | 50.4  | 1.73 |
|                 | 14                        | 32.7                         | 0.90 | 38.9  | 1.09 | 45.2  | 1.30 | 46.9  | 1.40 | 47.5  | 1.51 | 49.2  | 1.73 | 50.4  | 1.79 |
|                 | 20                        | 32.7                         | 0.92 | 38.9  | 1.11 | 45.2  | 1.32 | 46.9  | 1.42 | 47.5  | 1.53 | 49.2  | 1.76 | 50.4  | 1.82 |
|                 | 25                        | 32.7                         | 0.93 | 38.9  | 1.13 | 45.2  | 1.33 | 46.9  | 1.44 | 47.5  | 1.55 | 49.2  | 1.78 | 50.4  | 1.84 |
|                 | 30                        | 32.7                         | 0.94 | 38.9  | 1.14 | 45.2  | 1.35 | 46.9  | 1.46 | 47.5  | 1.57 | 49.2  | 1.80 | 50.4  | 1.86 |
|                 | 35                        | 32.7                         | 0.95 | 38.9  | 1.15 | 45.2  | 1.36 | 46.9  | 1.47 | 47.5  | 1.59 | 49.2  | 1.82 | 50.4  | 1.88 |
|                 | 40                        | 32.7                         | 0.96 | 38.9  | 1.17 | 45.2  | 1.38 | 46.9  | 1.49 | 47.5  | 1.60 | 49.2  | 1.84 | 50.4  | 1.90 |
|                 | 45                        | 32.7                         | 0.97 | 38.9  | 1.18 | 45.2  | 1.40 | 46.9  | 1.51 | 47.5  | 1.62 | 49.2  | 1.86 | 50.4  | 1.92 |
|                 | 50                        | 32.7                         | 0.98 | 38.9  | 1.19 | 45.2  | 1.41 | 46.9  | 1.52 | 47.5  | 1.64 | 49.2  | 1.88 | 50.4  | 1.94 |
|                 | 55                        | 32.7                         | 1.00 | 38.9  | 1.21 | 45.2  | 1.44 | 46.2  | 1.56 | 46.9  | 1.67 | 48.5  | 1.91 | 49.7  | 1.96 |
|                 | 60                        | 32.7                         | 1.03 | 38.9  | 1.26 | 44.5  | 1.50 | 45.2  | 1.62 | 45.7  | 1.74 | 47.3  | 1.97 | 48.5  | 1.98 |
|                 | 65                        | 32.7                         | 1.06 | 38.9  | 1.28 | 43.9  | 1.52 | 44.5  | 1.65 | 45.0  | 1.77 | 46.7  | 2.03 | 47.8  | 2.05 |
|                 | 70                        | 32.7                         | 1.02 | 38.9  | 1.23 | 43.0  | 1.52 | 43.5  | 1.67 | 44.2  | 1.83 | 45.8  | 2.04 | 47.0  | 2.06 |
|                 | 75                        | 32.7                         | 1.04 | 38.9  | 1.31 | 42.4  | 1.62 | 42.9  | 1.79 | 43.5  | 1.96 | 45.1  | 2.13 | 46.3  | 2.15 |
|                 | 80                        | 32.7                         | 1.18 | 38.9  | 1.50 | 41.2  | 1.86 | 41.7  | 2.05 | 42.4  | 2.25 | 44.0  | 2.31 | 45.1  | 2.34 |
|                 | 85                        | 32.7                         | 1.26 | 38.9  | 1.60 | 40.5  | 1.98 | 41.2  | 2.19 | 41.7  | 2.39 | 43.3  | 2.41 | 44.5  | 2.43 |
|                 | 90                        | 32.7                         | 1.43 | 38.2  | 1.82 | 39.4  | 2.25 | 39.9  | 2.49 | 40.5  | 2.58 | 42.1  | 2.60 | 43.3  | 2.62 |
|                 | 95                        | 33.1                         | 1.51 | 38.0  | 1.93 | 39.1  | 2.41 | 39.8  | 2.66 | 40.3  | 2.67 | 41.9  | 2.70 | 43.1  | 2.72 |
|                 | 100                       | 33.1                         | 1.64 | 37.3  | 2.09 | 38.5  | 2.61 | 39.1  | 2.80 | 39.6  | 2.82 | 41.4  | 2.84 | 42.6  | 2.87 |
|                 | 105                       | 33.1                         | 1.85 | 36.3  | 2.37 | 37.4  | 2.94 | 38.0  | 3.01 | 38.6  | 3.03 | 39.9  | 3.05 | 40.5  | 3.08 |
|                 | 110                       | 33.1                         | 2.07 | 34.8  | 2.67 | 36.2  | 3.21 | 36.3  | 3.23 | 36.9  | 3.24 | 37.7  | 3.27 | 37.8  | 3.30 |
|                 | 115                       | 32.9                         | 2.40 | 33.5  | 3.07 | 33.5  | 3.38 | 33.5  | 3.38 | 33.5  | 3.38 | 34.0  | 3.39 | 34.2  | 3.40 |
|                 | 118                       | 28.6                         | 2.03 | 29.1  | 2.60 | 29.2  | 2.84 | 29.2  | 2.87 | 29.2  | 2.87 | 29.6  | 2.88 | 29.5  | 2.88 |
|                 | 122                       | 22.9                         | 1.54 | 23.4  | 1.98 | 23.3  | 2.17 | 23.3  | 2.17 | 23.4  | 2.17 | 23.8  | 2.18 | 23.7  | 2.19 |
| 120             | -9.9                      | 29.8                         | 0.70 | 35.6  | 0.85 | 41.3  | 1.00 | 44.3  | 1.08 | 46.2  | 1.17 | 48.3  | 1.34 | 49.4  | 1.38 |
|                 | -5                        | 29.8                         | 0.74 | 35.6  | 0.90 | 41.3  | 1.06 | 44.3  | 1.14 | 46.2  | 1.23 | 48.3  | 1.41 | 49.4  | 1.46 |
|                 | 0                         | 29.8                         | 0.77 | 35.6  | 0.93 | 41.3  | 1.10 | 44.3  | 1.19 | 46.2  | 1.28 | 48.3  | 1.47 | 49.4  | 1.52 |
|                 | 5                         | 29.8                         | 0.80 | 35.6  | 0.97 | 41.3  | 1.14 | 44.3  | 1.23 | 46.2  | 1.33 | 48.3  | 1.52 | 49.4  | 1.58 |
|                 | 10                        | 29.8                         | 0.82 | 35.6  | 0.99 | 41.3  | 1.18 | 44.3  | 1.27 | 46.2  | 1.37 | 48.3  | 1.57 | 49.4  | 1.62 |
|                 | 14                        | 29.8                         | 0.85 | 35.6  | 1.03 | 41.3  | 1.22 | 44.3  | 1.31 | 46.2  | 1.42 | 48.3  | 1.62 | 49.4  | 1.68 |
|                 | 20                        | 29.8                         | 0.86 | 35.6  | 1.04 | 41.3  | 1.24 | 44.3  | 1.33 | 46.2  | 1.44 | 48.3  | 1.65 | 49.4  | 1.70 |
|                 | 25                        | 29.8                         | 0.87 | 35.6  | 1.06 | 41.3  | 1.25 | 44.3  | 1.35 | 46.2  | 1.45 | 48.3  | 1.67 | 49.4  | 1.72 |
|                 | 30                        | 29.8                         | 0.88 | 35.6  | 1.07 | 41.3  | 1.27 | 44.3  | 1.37 | 46.2  | 1.47 | 48.3  | 1.69 | 49.4  | 1.74 |
|                 | 35                        | 29.8                         | 0.90 | 35.6  | 1.08 | 41.3  | 1.28 | 44.3  | 1.39 | 46.2  | 1.49 | 48.3  | 1.71 | 49.4  | 1.77 |
|                 | 40                        | 29.8                         | 0.91 | 35.6  | 1.10 | 41.3  | 1.30 | 44.3  | 1.40 | 46.2  | 1.51 | 48.3  | 1.73 | 49.4  | 1.79 |
|                 | 45                        | 29.8                         | 0.92 | 35.6  | 1.11 | 41.3  | 1.31 | 44.3  | 1.42 | 46.2  | 1.52 | 48.3  | 1.75 | 49.4  | 1.81 |
|                 | 50                        | 29.8                         | 0.93 | 35.6  | 1.12 | 41.3  | 1.33 | 44.3  | 1.43 | 46.2  | 1.54 | 48.3  | 1.77 | 49.4  | 1.83 |
|                 | 55                        | 29.8                         | 0.94 | 35.6  | 1.14 | 41.3  | 1.35 | 44.3  | 1.46 | 45.8  | 1.57 | 47.7  | 1.80 | 48.9  | 1.84 |
|                 | 60                        | 29.8                         | 0.97 | 35.6  | 1.18 | 41.3  | 1.41 | 43.9  | 1.52 | 44.4  | 1.63 | 46.5  | 1.85 | 47.5  | 1.89 |
|                 | 65                        | 29.8                         | 0.99 | 35.6  | 1.21 | 41.3  | 1.43 | 43.3  | 1.55 | 43.9  | 1.66 | 45.8  | 1.92 | 47.0  | 1.93 |
|                 | 70                        | 29.8                         | 0.97 | 35.6  | 1.18 | 41.3  | 1.46 | 42.5  | 1.60 | 43.0  | 1.76 | 45.0  | 1.95 | 46.0  | 1.97 |
|                 | 75                        | 29.8                         | 1.00 | 35.6  | 1.26 | 41.3  | 1.56 | 41.8  | 1.72 | 42.5  | 1.89 | 44.3  | 2.05 | 45.5  | 2.06 |
|                 | 80                        | 29.8                         | 1.14 | 35.6  | 1.44 | 40.2  | 1.78 | 40.7  | 1.97 | 41.1  | 2.16 | 43.1  | 2.22 | 44.2  | 2.24 |
|                 | 85                        | 29.8                         | 1.21 | 35.6  | 1.54 | 39.5  | 1.91 | 40.0  | 2.10 | 40.7  | 2.30 | 42.5  | 2.31 | 43.6  | 2.33 |
|                 | 90                        | 29.8                         | 1.37 | 35.6  | 1.74 | 38.3  | 2.16 | 38.8  | 2.39 | 39.3  | 2.48 | 41.3  | 2.50 | 42.3  | 2.52 |
|                 | 95                        | 30.1                         | 1.45 | 35.9  | 1.86 | 38.1  | 2.31 | 38.6  | 2.55 | 39.3  | 2.56 | 41.1  | 2.59 | 42.2  | 2.61 |
|                 | 100                       | 30.1                         | 1.57 | 35.9  | 2.01 | 37.4  | 2.50 | 38.1  | 2.69 | 38.6  | 2.70 | 40.5  | 2.73 | 41.6  | 2.75 |
|                 | 105                       | 30.1                         | 1.77 | 35.4  | 2.27 | 36.4  | 2.83 | 37.0  | 2.89 | 37.5  | 2.91 | 39.4  | 2.93 | 40.0  | 2.96 |
|                 | 110                       | 30.1                         | 1.99 | 34.5  | 2.56 | 35.6  | 3.08 | 35.7  | 3.10 | 36.2  | 3.11 | 37.3  | 3.14 | 37.5  | 3.17 |
|                 | 115                       | 29.3                         | 2.30 | 33.2  | 2.95 | 33.2  | 3.25 | 33.2  | 3.25 | 33.2  | 3.25 | 34.0  | 3.25 | 34.2  | 3.26 |
|                 | 118                       | 26.1                         | 2.03 | 28.9  | 2.50 | 28.9  | 2.73 | 28.9  | 2.76 | 28.9  | 2.76 | 29.6  | 2.76 | 29.5  | 2.77 |
|                 | 122                       | 20.9                         | 1.54 | 23.1  | 1.90 | 23.0  | 2.08 | 23.1  | 2.08 | 23.1  | 2.09 | 23.8  | 2.09 | 23.7  | 2.10 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

# COOLING CAPACITY

ZRUM036GSS0



Table 30: ZRUM036GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 110             | -9.9                      | 27.6                         | 0.64 | 32.9  | 0.78 | 38.3  | 0.92 | 40.9  | 1.00 | 43.6  | 1.07 | 48.0  | 1.22 | 49.0  | 1.27 |
|                 | -5                        | 27.6                         | 0.68 | 32.9  | 0.82 | 38.3  | 0.97 | 40.9  | 1.05 | 43.6  | 1.13 | 48.0  | 1.29 | 49.0  | 1.34 |
|                 | 0                         | 27.6                         | 0.71 | 32.9  | 0.85 | 38.3  | 1.01 | 40.9  | 1.10 | 43.6  | 1.17 | 48.0  | 1.34 | 49.0  | 1.39 |
|                 | 5                         | 27.6                         | 0.73 | 32.9  | 0.88 | 38.3  | 1.05 | 40.9  | 1.14 | 43.6  | 1.22 | 48.0  | 1.39 | 49.0  | 1.44 |
|                 | 10                        | 27.6                         | 0.75 | 32.9  | 0.91 | 38.3  | 1.08 | 40.9  | 1.17 | 43.6  | 1.25 | 48.0  | 1.43 | 49.0  | 1.48 |
|                 | 14                        | 27.6                         | 0.78 | 32.9  | 0.94 | 38.3  | 1.12 | 40.9  | 1.21 | 43.6  | 1.30 | 48.0  | 1.48 | 49.0  | 1.54 |
|                 | 20                        | 27.6                         | 0.79 | 32.9  | 0.96 | 38.3  | 1.13 | 40.9  | 1.23 | 43.6  | 1.32 | 48.0  | 1.51 | 49.0  | 1.56 |
|                 | 25                        | 27.6                         | 0.80 | 32.9  | 0.97 | 38.3  | 1.15 | 40.9  | 1.24 | 43.6  | 1.33 | 48.0  | 1.53 | 49.0  | 1.58 |
|                 | 30                        | 27.6                         | 0.81 | 32.9  | 0.98 | 38.3  | 1.16 | 40.9  | 1.26 | 43.6  | 1.35 | 48.0  | 1.55 | 49.0  | 1.60 |
|                 | 35                        | 27.6                         | 0.82 | 32.9  | 1.00 | 38.3  | 1.18 | 40.9  | 1.27 | 43.6  | 1.37 | 48.0  | 1.57 | 49.0  | 1.63 |
|                 | 40                        | 27.6                         | 0.84 | 32.9  | 1.01 | 38.3  | 1.20 | 40.9  | 1.29 | 43.6  | 1.39 | 48.0  | 1.59 | 49.0  | 1.65 |
|                 | 45                        | 27.6                         | 0.85 | 32.9  | 1.03 | 38.3  | 1.22 | 40.9  | 1.31 | 43.6  | 1.41 | 48.0  | 1.62 | 49.0  | 1.67 |
|                 | 50                        | 27.6                         | 0.86 | 32.9  | 1.04 | 38.3  | 1.24 | 40.9  | 1.34 | 43.6  | 1.44 | 48.0  | 1.65 | 49.0  | 1.70 |
|                 | 55                        | 27.6                         | 0.88 | 32.9  | 1.06 | 38.3  | 1.26 | 40.9  | 1.36 | 43.6  | 1.46 | 47.3  | 1.67 | 48.3  | 1.72 |
|                 | 60                        | 27.6                         | 0.91 | 32.9  | 1.10 | 38.3  | 1.31 | 40.9  | 1.42 | 43.6  | 1.52 | 46.1  | 1.73 | 47.2  | 1.74 |
|                 | 65                        | 27.6                         | 0.93 | 32.9  | 1.13 | 38.3  | 1.34 | 40.9  | 1.45 | 43.6  | 1.55 | 45.5  | 1.78 | 46.5  | 1.80 |
|                 | 70                        | 27.6                         | 0.93 | 32.9  | 1.14 | 38.3  | 1.40 | 40.9  | 1.54 | 42.7  | 1.69 | 44.6  | 1.87 | 45.6  | 1.89 |
|                 | 75                        | 27.6                         | 0.96 | 32.9  | 1.21 | 38.3  | 1.50 | 40.9  | 1.65 | 42.1  | 1.81 | 43.9  | 1.96 | 45.0  | 1.98 |
|                 | 80                        | 27.3                         | 1.09 | 32.6  | 1.38 | 37.9  | 1.71 | 40.0  | 1.89 | 40.5  | 2.07 | 42.3  | 2.13 | 43.3  | 2.15 |
|                 | 85                        | 27.3                         | 1.16 | 32.6  | 1.47 | 37.9  | 1.83 | 39.3  | 2.01 | 39.8  | 2.20 | 41.6  | 2.22 | 42.7  | 2.24 |
|                 | 90                        | 27.3                         | 1.31 | 32.6  | 1.67 | 37.7  | 2.07 | 38.2  | 2.29 | 38.7  | 2.37 | 40.5  | 2.39 | 41.5  | 2.42 |
|                 | 95                        | 27.3                         | 1.39 | 32.6  | 1.78 | 37.0  | 2.22 | 37.5  | 2.45 | 38.0  | 2.46 | 39.8  | 2.48 | 40.8  | 2.50 |
|                 | 100                       | 27.3                         | 1.51 | 32.6  | 1.93 | 36.5  | 2.40 | 37.0  | 2.58 | 37.5  | 2.59 | 39.3  | 2.62 | 40.3  | 2.64 |
|                 | 105                       | 27.3                         | 1.70 | 32.6  | 2.18 | 35.4  | 2.71 | 35.9  | 2.77 | 36.4  | 2.79 | 38.1  | 2.81 | 39.1  | 2.84 |
|                 | 110                       | 27.3                         | 1.91 | 32.6  | 2.46 | 34.3  | 2.95 | 34.4  | 2.97 | 34.9  | 2.98 | 36.0  | 3.01 | 36.1  | 3.04 |
|                 | 115                       | 27.3                         | 2.21 | 32.6  | 2.82 | 32.9  | 3.11 | 32.9  | 3.11 | 33.0  | 3.11 | 33.7  | 3.12 | 33.8  | 3.13 |
|                 | 118                       | 26.4                         | 2.01 | 28.3  | 2.39 | 28.6  | 2.62 | 28.6  | 2.64 | 28.7  | 2.64 | 29.3  | 2.65 | 29.2  | 2.65 |
|                 | 122                       | 21.1                         | 1.53 | 22.7  | 1.82 | 22.8  | 1.99 | 22.9  | 2.00 | 23.0  | 2.00 | 23.5  | 2.01 | 23.5  | 2.01 |
| 100             | -9.9                      | 24.3                         | 0.57 | 28.9  | 0.68 | 33.6  | 0.81 | 36.0  | 0.88 | 39.6  | 0.96 | 44.4  | 1.10 | 46.8  | 1.15 |
|                 | -5                        | 24.3                         | 0.60 | 28.9  | 0.72 | 33.6  | 0.86 | 36.0  | 0.93 | 39.6  | 1.01 | 44.4  | 1.16 | 46.8  | 1.21 |
|                 | 0                         | 24.3                         | 0.62 | 28.9  | 0.75 | 33.6  | 0.89 | 36.0  | 0.97 | 39.6  | 1.05 | 44.4  | 1.21 | 46.8  | 1.26 |
|                 | 5                         | 24.3                         | 0.65 | 28.9  | 0.78 | 33.6  | 0.92 | 36.0  | 1.01 | 39.6  | 1.09 | 44.4  | 1.26 | 46.8  | 1.31 |
|                 | 10                        | 24.3                         | 0.66 | 28.9  | 0.80 | 33.6  | 0.95 | 36.0  | 1.03 | 39.6  | 1.12 | 44.4  | 1.29 | 46.8  | 1.34 |
|                 | 14                        | 24.3                         | 0.69 | 28.9  | 0.83 | 33.6  | 0.98 | 36.0  | 1.07 | 39.6  | 1.16 | 44.4  | 1.34 | 46.8  | 1.39 |
|                 | 20                        | 24.3                         | 0.71 | 28.9  | 0.86 | 33.6  | 1.01 | 36.0  | 1.10 | 39.6  | 1.20 | 44.4  | 1.38 | 46.8  | 1.43 |
|                 | 25                        | 24.3                         | 0.73 | 28.9  | 0.88 | 33.6  | 1.04 | 36.0  | 1.13 | 39.6  | 1.23 | 44.4  | 1.41 | 46.8  | 1.47 |
|                 | 30                        | 24.3                         | 0.75 | 28.9  | 0.90 | 33.6  | 1.07 | 36.0  | 1.15 | 39.6  | 1.26 | 44.4  | 1.44 | 46.8  | 1.50 |
|                 | 35                        | 24.3                         | 0.76 | 28.9  | 0.92 | 33.6  | 1.08 | 36.0  | 1.17 | 39.6  | 1.28 | 44.4  | 1.47 | 46.8  | 1.52 |
|                 | 40                        | 24.3                         | 0.77 | 28.9  | 0.93 | 33.6  | 1.10 | 36.0  | 1.19 | 39.6  | 1.30 | 44.4  | 1.49 | 46.8  | 1.55 |
|                 | 45                        | 24.3                         | 0.79 | 28.9  | 0.95 | 33.6  | 1.12 | 36.0  | 1.22 | 39.6  | 1.32 | 44.4  | 1.52 | 46.8  | 1.58 |
|                 | 50                        | 24.3                         | 0.80 | 28.9  | 0.97 | 33.6  | 1.15 | 36.0  | 1.24 | 39.6  | 1.35 | 44.4  | 1.55 | 46.8  | 1.61 |
|                 | 55                        | 24.3                         | 0.81 | 28.9  | 0.99 | 33.6  | 1.17 | 36.0  | 1.27 | 39.6  | 1.38 | 44.4  | 1.58 | 46.4  | 1.64 |
|                 | 60                        | 24.3                         | 0.84 | 28.9  | 1.02 | 33.6  | 1.22 | 36.0  | 1.31 | 39.6  | 1.43 | 44.2  | 1.63 | 45.0  | 1.67 |
|                 | 65                        | 24.3                         | 0.86 | 28.9  | 1.04 | 33.6  | 1.24 | 36.0  | 1.34 | 39.6  | 1.46 | 43.5  | 1.68 | 44.5  | 1.71 |
|                 | 70                        | 24.3                         | 0.89 | 28.9  | 1.08 | 33.6  | 1.32 | 36.0  | 1.46 | 39.6  | 1.62 | 42.7  | 1.80 | 43.5  | 1.83 |
|                 | 75                        | 24.3                         | 0.91 | 28.9  | 1.15 | 33.6  | 1.42 | 36.0  | 1.56 | 39.6  | 1.74 | 42.0  | 1.89 | 43.0  | 1.91 |
|                 | 80                        | 24.3                         | 1.03 | 28.9  | 1.31 | 33.6  | 1.62 | 36.0  | 1.79 | 39.6  | 2.00 | 40.9  | 2.05 | 41.7  | 2.08 |
|                 | 85                        | 24.3                         | 1.10 | 28.9  | 1.39 | 33.6  | 1.73 | 36.0  | 1.91 | 39.4  | 2.12 | 40.2  | 2.13 | 41.2  | 2.16 |
|                 | 90                        | 24.3                         | 1.24 | 28.9  | 1.59 | 33.6  | 1.97 | 36.0  | 2.17 | 38.1  | 2.28 | 39.1  | 2.30 | 39.9  | 2.33 |
|                 | 95                        | 24.3                         | 1.32 | 28.9  | 1.69 | 33.6  | 2.10 | 36.0  | 2.32 | 37.6  | 2.36 | 38.4  | 2.39 | 39.4  | 2.42 |
|                 | 100                       | 24.3                         | 1.42 | 28.9  | 1.82 | 33.6  | 2.27 | 35.4  | 2.44 | 36.9  | 2.49 | 37.9  | 2.51 | 38.8  | 2.54 |
|                 | 105                       | 24.3                         | 1.60 | 28.9  | 2.05 | 33.4  | 2.55 | 34.4  | 2.61 | 35.8  | 2.66 | 36.8  | 2.69 | 37.7  | 2.72 |
|                 | 110                       | 24.3                         | 1.79 | 28.9  | 2.30 | 33.0  | 2.77 | 33.8  | 2.78 | 34.5  | 2.84 | 35.0  | 2.86 | 35.6  | 2.90 |
|                 | 115                       | 24.3                         | 2.06 | 28.9  | 2.63 | 31.4  | 2.90 | 32.4  | 2.90 | 33.2  | 2.94 | 33.5  | 2.95 | 33.7  | 2.97 |
|                 | 118                       | 24.3                         | 2.07 | 25.4  | 2.47 | 27.4  | 2.44 | 28.2  | 2.46 | 28.9  | 2.50 | 29.2  | 2.50 | 29.1  | 2.52 |
|                 | 122                       | 20.8                         | 1.88 | 20.4  | 1.88 | 21.8  | 1.86 | 22.5  | 1.86 | 23.2  | 1.89 | 23.4  | 1.90 | 23.4  | 1.91 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 31: ZRUM036GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 90              | -9.9                      | 21.9                         | 0.51 | 26.0  | 0.61 | 30.4  | 0.72 | 32.5  | 0.77 | 34.6  | 0.82 | 38.7  | 0.95 | 42.9  | 1.04 |
|                 | -5                        | 21.9                         | 0.53 | 26.0  | 0.64 | 30.4  | 0.76 | 32.5  | 0.81 | 34.6  | 0.87 | 38.7  | 1.00 | 42.9  | 1.10 |
|                 | 0                         | 21.9                         | 0.56 | 26.0  | 0.67 | 30.4  | 0.79 | 32.5  | 0.85 | 34.6  | 0.90 | 38.7  | 1.04 | 42.9  | 1.14 |
|                 | 5                         | 21.9                         | 0.58 | 26.0  | 0.69 | 30.4  | 0.81 | 32.5  | 0.88 | 34.6  | 0.94 | 38.7  | 1.08 | 42.9  | 1.18 |
|                 | 10                        | 21.9                         | 0.59 | 26.0  | 0.71 | 30.4  | 0.84 | 32.5  | 0.90 | 34.6  | 0.96 | 38.7  | 1.11 | 42.9  | 1.22 |
|                 | 14                        | 21.9                         | 0.61 | 26.0  | 0.74 | 30.4  | 0.87 | 32.5  | 0.93 | 34.6  | 1.00 | 38.7  | 1.15 | 42.9  | 1.26 |
|                 | 20                        | 21.9                         | 0.64 | 26.0  | 0.76 | 30.4  | 0.90 | 32.5  | 0.97 | 34.6  | 1.04 | 38.7  | 1.19 | 42.9  | 1.31 |
|                 | 25                        | 21.9                         | 0.65 | 26.0  | 0.79 | 30.4  | 0.93 | 32.5  | 1.00 | 34.6  | 1.07 | 38.7  | 1.22 | 42.9  | 1.35 |
|                 | 30                        | 21.9                         | 0.67 | 26.0  | 0.81 | 30.4  | 0.96 | 32.5  | 1.03 | 34.6  | 1.11 | 38.7  | 1.26 | 42.9  | 1.39 |
|                 | 35                        | 21.9                         | 0.69 | 26.0  | 0.84 | 30.4  | 0.98 | 32.5  | 1.06 | 34.6  | 1.14 | 38.7  | 1.30 | 42.9  | 1.43 |
|                 | 40                        | 21.9                         | 0.71 | 26.0  | 0.86 | 30.4  | 1.01 | 32.5  | 1.09 | 34.6  | 1.18 | 38.7  | 1.34 | 42.9  | 1.48 |
|                 | 45                        | 21.9                         | 0.73 | 26.0  | 0.88 | 30.4  | 1.04 | 32.5  | 1.12 | 34.6  | 1.20 | 38.7  | 1.37 | 42.9  | 1.51 |
|                 | 50                        | 21.9                         | 0.75 | 26.0  | 0.90 | 30.4  | 1.06 | 32.5  | 1.14 | 34.6  | 1.23 | 38.7  | 1.40 | 42.9  | 1.54 |
|                 | 55                        | 21.9                         | 0.76 | 26.0  | 0.91 | 30.4  | 1.08 | 32.5  | 1.17 | 34.6  | 1.25 | 38.7  | 1.43 | 42.9  | 1.56 |
|                 | 60                        | 21.9                         | 0.78 | 26.0  | 0.95 | 30.4  | 1.12 | 32.5  | 1.21 | 34.6  | 1.30 | 38.7  | 1.48 | 42.6  | 1.58 |
|                 | 65                        | 21.9                         | 0.80 | 26.0  | 0.97 | 30.4  | 1.14 | 32.5  | 1.24 | 34.6  | 1.33 | 38.7  | 1.51 | 42.3  | 1.65 |
|                 | 70                        | 21.9                         | 0.82 | 26.0  | 1.00 | 30.4  | 1.18 | 32.5  | 1.30 | 34.6  | 1.42 | 38.7  | 1.68 | 41.5  | 1.78 |
|                 | 75                        | 21.9                         | 0.83 | 26.0  | 1.04 | 30.4  | 1.27 | 32.5  | 1.40 | 34.6  | 1.53 | 38.7  | 1.75 | 40.8  | 1.86 |
|                 | 80                        | 21.9                         | 0.94 | 26.0  | 1.18 | 30.4  | 1.45 | 32.5  | 1.59 | 34.6  | 1.75 | 38.7  | 1.94 | 39.7  | 2.02 |
|                 | 85                        | 21.9                         | 1.00 | 26.0  | 1.26 | 30.4  | 1.55 | 32.5  | 1.70 | 34.6  | 1.87 | 38.3  | 2.04 | 39.1  | 2.10 |
|                 | 90                        | 21.9                         | 1.12 | 26.0  | 1.42 | 30.4  | 1.76 | 32.5  | 1.94 | 34.6  | 2.12 | 37.1  | 2.24 | 37.9  | 2.27 |
|                 | 95                        | 21.9                         | 1.20 | 26.0  | 1.51 | 30.4  | 1.87 | 32.5  | 2.06 | 34.6  | 2.27 | 36.5  | 2.32 | 37.3  | 2.35 |
|                 | 100                       | 21.9                         | 1.24 | 26.0  | 1.58 | 30.4  | 1.95 | 32.5  | 2.15 | 34.6  | 2.32 | 36.0  | 2.42 | 36.6  | 2.45 |
|                 | 105                       | 21.9                         | 1.43 | 26.0  | 1.83 | 30.4  | 2.20 | 32.5  | 2.35 | 34.2  | 2.48 | 34.9  | 2.59 | 35.4  | 2.63 |
|                 | 110                       | 21.9                         | 1.65 | 26.0  | 2.11 | 30.4  | 2.42 | 32.5  | 2.54 | 32.8  | 2.69 | 33.2  | 2.79 | 33.5  | 2.82 |
|                 | 115                       | 21.9                         | 1.78 | 26.0  | 2.29 | 28.4  | 2.55 | 30.8  | 2.66 | 31.2  | 2.78 | 31.5  | 2.84 | 31.6  | 2.88 |
|                 | 118                       | 21.9                         | 1.89 | 25.4  | 2.47 | 24.8  | 2.14 | 26.8  | 2.25 | 27.2  | 2.36 | 27.4  | 2.41 | 27.3  | 2.44 |
|                 | 122                       | 20.8                         | 1.88 | 20.4  | 1.88 | 19.7  | 1.63 | 21.4  | 1.70 | 21.8  | 1.79 | 22.0  | 1.83 | 22.0  | 1.86 |
| 80              | -9.9                      | 19.4                         | 0.44 | 23.1  | 0.53 | 27.0  | 0.61 | 28.8  | 0.67 | 30.7  | 0.72 | 34.4  | 0.82 | 38.1  | 0.91 |
|                 | -5                        | 19.4                         | 0.46 | 23.1  | 0.56 | 27.0  | 0.65 | 28.8  | 0.70 | 30.7  | 0.76 | 34.4  | 0.86 | 38.1  | 0.96 |
|                 | 0                         | 19.4                         | 0.48 | 23.1  | 0.58 | 27.0  | 0.67 | 28.8  | 0.73 | 30.7  | 0.79 | 34.4  | 0.90 | 38.1  | 1.00 |
|                 | 5                         | 19.4                         | 0.50 | 23.1  | 0.60 | 27.0  | 0.70 | 28.8  | 0.76 | 30.7  | 0.82 | 34.4  | 0.93 | 38.1  | 1.04 |
|                 | 10                        | 19.4                         | 0.51 | 23.1  | 0.62 | 27.0  | 0.72 | 28.8  | 0.78 | 30.7  | 0.84 | 34.4  | 0.96 | 38.1  | 1.07 |
|                 | 14                        | 19.4                         | 0.53 | 23.1  | 0.64 | 27.0  | 0.74 | 28.8  | 0.81 | 30.7  | 0.87 | 34.4  | 0.99 | 38.1  | 1.11 |
|                 | 20                        | 19.4                         | 0.55 | 23.1  | 0.66 | 27.0  | 0.77 | 28.8  | 0.84 | 30.7  | 0.90 | 34.4  | 1.03 | 38.1  | 1.15 |
|                 | 25                        | 19.4                         | 0.57 | 23.1  | 0.68 | 27.0  | 0.80 | 28.8  | 0.86 | 30.7  | 0.93 | 34.4  | 1.06 | 38.1  | 1.19 |
|                 | 30                        | 19.4                         | 0.59 | 23.1  | 0.70 | 27.0  | 0.82 | 28.8  | 0.89 | 30.7  | 0.95 | 34.4  | 1.09 | 38.1  | 1.22 |
|                 | 35                        | 19.4                         | 0.60 | 23.1  | 0.72 | 27.0  | 0.85 | 28.8  | 0.91 | 30.7  | 0.98 | 34.4  | 1.12 | 38.1  | 1.26 |
|                 | 40                        | 19.4                         | 0.62 | 23.1  | 0.74 | 27.0  | 0.87 | 28.8  | 0.94 | 30.7  | 1.00 | 34.4  | 1.15 | 38.1  | 1.29 |
|                 | 45                        | 19.4                         | 0.63 | 23.1  | 0.75 | 27.0  | 0.88 | 28.8  | 0.95 | 30.7  | 1.02 | 34.4  | 1.17 | 38.1  | 1.31 |
|                 | 50                        | 19.4                         | 0.63 | 23.1  | 0.76 | 27.0  | 0.89 | 28.8  | 0.96 | 30.7  | 1.03 | 34.4  | 1.18 | 38.1  | 1.32 |
|                 | 55                        | 19.4                         | 0.64 | 23.1  | 0.77 | 27.0  | 0.91 | 28.8  | 0.98 | 30.7  | 1.05 | 34.4  | 1.21 | 38.1  | 1.35 |
|                 | 60                        | 19.4                         | 0.67 | 23.1  | 0.80 | 27.0  | 0.94 | 28.8  | 1.02 | 30.7  | 1.09 | 34.4  | 1.25 | 38.1  | 1.40 |
|                 | 65                        | 19.4                         | 0.68 | 23.1  | 0.82 | 27.0  | 0.96 | 28.8  | 1.03 | 30.7  | 1.11 | 34.4  | 1.27 | 38.1  | 1.43 |
|                 | 70                        | 19.4                         | 0.70 | 23.1  | 0.84 | 27.0  | 0.99 | 28.8  | 1.07 | 30.7  | 1.16 | 34.4  | 1.37 | 38.1  | 1.59 |
|                 | 75                        | 19.4                         | 0.71 | 23.1  | 0.85 | 27.0  | 1.04 | 28.8  | 1.14 | 30.7  | 1.24 | 34.4  | 1.46 | 38.1  | 1.67 |
|                 | 80                        | 19.4                         | 0.78 | 23.1  | 0.97 | 27.0  | 1.18 | 28.8  | 1.29 | 30.7  | 1.41 | 34.4  | 1.68 | 38.1  | 1.87 |
|                 | 85                        | 19.4                         | 0.83 | 23.1  | 1.03 | 27.0  | 1.26 | 28.8  | 1.38 | 30.7  | 1.51 | 34.4  | 1.79 | 38.1  | 1.92 |
|                 | 90                        | 19.4                         | 0.93 | 23.1  | 1.17 | 27.0  | 1.42 | 28.8  | 1.57 | 30.7  | 1.72 | 34.4  | 1.96 | 37.5  | 2.03 |
|                 | 95                        | 19.4                         | 0.99 | 23.1  | 1.24 | 27.0  | 1.52 | 28.8  | 1.66 | 30.7  | 1.83 | 34.4  | 2.03 | 36.7  | 2.09 |
|                 | 100                       | 19.4                         | 1.07 | 23.1  | 1.33 | 27.0  | 1.64 | 28.8  | 1.78 | 30.7  | 1.90 | 34.4  | 2.11 | 35.8  | 2.15 |
|                 | 105                       | 19.4                         | 1.22 | 23.1  | 1.53 | 27.0  | 1.83 | 28.8  | 1.91 | 30.7  | 2.04 | 34.0  | 2.20 | 34.8  | 2.26 |
|                 | 110                       | 19.4                         | 1.38 | 23.1  | 1.74 | 27.0  | 1.94 | 28.8  | 2.04 | 30.7  | 2.19 | 32.8  | 2.28 | 32.9  | 2.38 |
|                 | 115                       | 19.4                         | 1.48 | 23.1  | 1.86 | 27.0  | 2.00 | 28.8  | 2.15 | 28.8  | 2.25 | 28.9  | 2.33 | 28.9  | 2.47 |
|                 | 118                       | 19.4                         | 1.57 | 23.1  | 1.98 | 24.8  | 2.14 | 25.3  | 2.04 | 25.0  | 1.91 | 25.2  | 1.98 | 25.0  | 2.10 |
|                 | 122                       | 19.4                         | 1.69 | 20.4  | 1.86 | 19.7  | 1.63 | 20.2  | 1.54 | 20.1  | 1.44 | 20.2  | 1.50 | 20.1  | 1.59 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).



# COOLING CAPACITY

ZRUM036GSS0



Table 32: ZRUM036GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 70              | -9.9                      | 17.0                         | 0.39 | 20.3  | 0.46 | 23.6  | 0.54 | 25.2  | 0.58 | 26.8  | 0.62 | 30.1  | 0.71 | 33.4  | 0.79 |
|                 | -5                        | 17.0                         | 0.41 | 20.3  | 0.49 | 23.6  | 0.57 | 25.2  | 0.61 | 26.8  | 0.65 | 30.1  | 0.75 | 33.4  | 0.83 |
|                 | 0                         | 17.0                         | 0.42 | 20.3  | 0.50 | 23.6  | 0.59 | 25.2  | 0.64 | 26.8  | 0.68 | 30.1  | 0.78 | 33.4  | 0.87 |
|                 | 5                         | 17.0                         | 0.44 | 20.3  | 0.52 | 23.6  | 0.62 | 25.2  | 0.66 | 26.8  | 0.70 | 30.1  | 0.80 | 33.4  | 0.90 |
|                 | 10                        | 17.0                         | 0.45 | 20.3  | 0.54 | 23.6  | 0.63 | 25.2  | 0.68 | 26.8  | 0.72 | 30.1  | 0.83 | 33.4  | 0.93 |
|                 | 14                        | 17.0                         | 0.47 | 20.3  | 0.56 | 23.6  | 0.66 | 25.2  | 0.70 | 26.8  | 0.75 | 30.1  | 0.86 | 33.4  | 0.96 |
|                 | 20                        | 17.0                         | 0.49 | 20.3  | 0.58 | 23.6  | 0.68 | 25.2  | 0.73 | 26.8  | 0.77 | 30.1  | 0.88 | 33.4  | 0.99 |
|                 | 25                        | 17.0                         | 0.50 | 20.3  | 0.59 | 23.6  | 0.69 | 25.2  | 0.74 | 26.8  | 0.80 | 30.1  | 0.91 | 33.4  | 1.02 |
|                 | 30                        | 17.0                         | 0.51 | 20.3  | 0.61 | 23.6  | 0.71 | 25.2  | 0.76 | 26.8  | 0.82 | 30.1  | 0.93 | 33.4  | 1.05 |
|                 | 35                        | 17.0                         | 0.53 | 20.3  | 0.62 | 23.6  | 0.73 | 25.2  | 0.78 | 26.8  | 0.84 | 30.1  | 0.95 | 33.4  | 1.07 |
|                 | 40                        | 17.0                         | 0.54 | 20.3  | 0.64 | 23.6  | 0.75 | 25.2  | 0.80 | 26.8  | 0.86 | 30.1  | 0.98 | 33.4  | 1.10 |
|                 | 45                        | 17.0                         | 0.55 | 20.3  | 0.65 | 23.6  | 0.76 | 25.2  | 0.82 | 26.8  | 0.87 | 30.1  | 1.00 | 33.4  | 1.12 |
|                 | 50                        | 17.0                         | 0.56 | 20.3  | 0.66 | 23.6  | 0.77 | 25.2  | 0.83 | 26.8  | 0.89 | 30.1  | 1.01 | 33.4  | 1.14 |
|                 | 55                        | 17.0                         | 0.57 | 20.3  | 0.67 | 23.6  | 0.79 | 25.2  | 0.84 | 26.8  | 0.91 | 30.1  | 1.03 | 33.4  | 1.16 |
|                 | 60                        | 17.0                         | 0.58 | 20.3  | 0.70 | 23.6  | 0.82 | 25.2  | 0.88 | 26.8  | 0.94 | 30.1  | 1.07 | 33.4  | 1.21 |
|                 | 65                        | 17.0                         | 0.59 | 20.3  | 0.71 | 23.6  | 0.83 | 25.2  | 0.89 | 26.8  | 0.96 | 30.1  | 1.09 | 33.4  | 1.22 |
|                 | 70                        | 17.0                         | 0.61 | 20.3  | 0.73 | 23.6  | 0.85 | 25.2  | 0.92 | 26.8  | 0.99 | 30.1  | 1.13 | 33.4  | 1.30 |
|                 | 75                        | 17.0                         | 0.62 | 20.3  | 0.74 | 23.6  | 0.87 | 25.2  | 0.95 | 26.8  | 1.03 | 30.1  | 1.21 | 33.4  | 1.38 |
|                 | 80                        | 17.0                         | 0.67 | 20.3  | 0.82 | 23.6  | 0.99 | 25.2  | 1.08 | 26.8  | 1.17 | 30.1  | 1.33 | 33.4  | 1.53 |
|                 | 85                        | 17.0                         | 0.71 | 20.3  | 0.87 | 23.6  | 1.05 | 25.2  | 1.15 | 26.8  | 1.26 | 30.1  | 1.42 | 33.4  | 1.59 |
|                 | 90                        | 17.0                         | 0.80 | 20.3  | 0.98 | 23.6  | 1.19 | 25.2  | 1.30 | 26.8  | 1.42 | 30.1  | 1.58 | 33.4  | 1.73 |
|                 | 95                        | 17.0                         | 0.84 | 20.3  | 1.04 | 23.6  | 1.27 | 25.2  | 1.39 | 26.8  | 1.51 | 30.1  | 1.66 | 33.4  | 1.78 |
|                 | 100                       | 17.0                         | 0.91 | 20.3  | 1.13 | 23.6  | 1.37 | 25.2  | 1.50 | 26.8  | 1.56 | 30.1  | 1.74 | 33.4  | 1.83 |
|                 | 105                       | 17.0                         | 1.03 | 20.3  | 1.29 | 23.6  | 1.51 | 25.2  | 1.60 | 26.8  | 1.69 | 30.1  | 1.84 | 33.4  | 1.94 |
|                 | 110                       | 17.0                         | 1.16 | 20.3  | 1.46 | 23.6  | 1.60 | 25.2  | 1.69 | 26.8  | 1.83 | 30.1  | 1.91 | 32.5  | 2.09 |
|                 | 115                       | 17.0                         | 1.25 | 20.3  | 1.55 | 23.6  | 1.65 | 25.2  | 1.79 | 26.8  | 1.89 | 30.1  | 1.97 | 30.6  | 2.22 |
|                 | 118                       | 17.0                         | 1.32 | 20.3  | 1.65 | 23.6  | 1.76 | 25.2  | 1.90 | 24.4  | 1.89 | 25.2  | 1.67 | 25.0  | 1.88 |
|                 | 122                       | 17.0                         | 1.43 | 20.3  | 1.79 | 21.1  | 1.68 | 20.2  | 1.56 | 19.6  | 1.43 | 20.2  | 1.27 | 20.1  | 1.43 |
| 60              | -9.9                      | 14.6                         | 0.34 | 17.4  | 0.39 | 20.3  | 0.46 | 21.5  | 0.49 | 23.0  | 0.53 | 25.9  | 0.60 | 28.6  | 0.67 |
|                 | -5                        | 14.6                         | 0.35 | 17.4  | 0.41 | 20.3  | 0.48 | 21.5  | 0.52 | 23.0  | 0.55 | 25.9  | 0.63 | 28.6  | 0.70 |
|                 | 0                         | 14.6                         | 0.37 | 17.4  | 0.43 | 20.3  | 0.50 | 21.5  | 0.54 | 23.0  | 0.58 | 25.9  | 0.65 | 28.6  | 0.73 |
|                 | 5                         | 14.6                         | 0.38 | 17.4  | 0.44 | 20.3  | 0.52 | 21.5  | 0.56 | 23.0  | 0.60 | 25.9  | 0.68 | 28.6  | 0.76 |
|                 | 10                        | 14.6                         | 0.39 | 17.4  | 0.46 | 20.3  | 0.53 | 21.5  | 0.57 | 23.0  | 0.62 | 25.9  | 0.70 | 28.6  | 0.78 |
|                 | 14                        | 14.6                         | 0.41 | 17.4  | 0.47 | 20.3  | 0.55 | 21.5  | 0.59 | 23.0  | 0.64 | 25.9  | 0.72 | 28.6  | 0.81 |
|                 | 20                        | 14.6                         | 0.42 | 17.4  | 0.49 | 20.3  | 0.57 | 21.5  | 0.61 | 23.0  | 0.66 | 25.9  | 0.75 | 28.6  | 0.84 |
|                 | 25                        | 14.6                         | 0.43 | 17.4  | 0.50 | 20.3  | 0.59 | 21.5  | 0.63 | 23.0  | 0.68 | 25.9  | 0.77 | 28.6  | 0.86 |
|                 | 30                        | 14.6                         | 0.44 | 17.4  | 0.52 | 20.3  | 0.60 | 21.5  | 0.65 | 23.0  | 0.69 | 25.9  | 0.79 | 28.6  | 0.88 |
|                 | 35                        | 14.6                         | 0.45 | 17.4  | 0.53 | 20.3  | 0.62 | 21.5  | 0.66 | 23.0  | 0.71 | 25.9  | 0.81 | 28.6  | 0.90 |
|                 | 40                        | 14.6                         | 0.46 | 17.4  | 0.54 | 20.3  | 0.63 | 21.5  | 0.68 | 23.0  | 0.73 | 25.9  | 0.83 | 28.6  | 0.93 |
|                 | 45                        | 14.6                         | 0.47 | 17.4  | 0.55 | 20.3  | 0.64 | 21.5  | 0.69 | 23.0  | 0.74 | 25.9  | 0.83 | 28.6  | 0.93 |
|                 | 50                        | 14.6                         | 0.47 | 17.4  | 0.55 | 20.3  | 0.64 | 21.5  | 0.69 | 23.0  | 0.74 | 25.9  | 0.84 | 28.6  | 0.94 |
|                 | 55                        | 14.6                         | 0.48 | 17.4  | 0.56 | 20.3  | 0.66 | 21.5  | 0.71 | 23.0  | 0.75 | 25.9  | 0.86 | 28.6  | 0.96 |
|                 | 60                        | 14.6                         | 0.49 | 17.4  | 0.58 | 20.3  | 0.68 | 21.5  | 0.73 | 23.0  | 0.78 | 25.9  | 0.89 | 28.6  | 1.00 |
|                 | 65                        | 14.6                         | 0.50 | 17.4  | 0.59 | 20.3  | 0.69 | 21.5  | 0.74 | 23.0  | 0.80 | 25.9  | 0.91 | 28.6  | 1.02 |
|                 | 70                        | 14.6                         | 0.51 | 17.4  | 0.61 | 20.3  | 0.71 | 21.5  | 0.76 | 23.0  | 0.82 | 25.9  | 0.93 | 28.6  | 1.06 |
|                 | 75                        | 14.6                         | 0.52 | 17.4  | 0.62 | 20.3  | 0.73 | 21.5  | 0.78 | 23.0  | 0.84 | 25.9  | 0.99 | 28.6  | 1.13 |
|                 | 80                        | 14.6                         | 0.55 | 17.4  | 0.68 | 20.3  | 0.81 | 21.5  | 0.89 | 23.0  | 0.96 | 25.9  | 1.10 | 28.6  | 1.27 |
|                 | 85                        | 14.6                         | 0.59 | 17.4  | 0.72 | 20.3  | 0.86 | 21.5  | 0.94 | 23.0  | 1.03 | 25.9  | 1.16 | 28.6  | 1.31 |
|                 | 90                        | 14.6                         | 0.66 | 17.4  | 0.81 | 20.3  | 0.98 | 21.5  | 1.07 | 23.0  | 1.15 | 25.9  | 1.30 | 28.6  | 1.43 |
|                 | 95                        | 14.6                         | 0.70 | 17.4  | 0.86 | 20.3  | 1.04 | 21.5  | 1.14 | 23.0  | 1.22 | 25.9  | 1.36 | 28.6  | 1.51 |
|                 | 100                       | 14.6                         | 0.75 | 17.4  | 0.92 | 20.3  | 1.12 | 21.5  | 1.22 | 23.0  | 1.28 | 25.9  | 1.44 | 28.6  | 1.57 |
|                 | 105                       | 14.6                         | 0.85 | 17.4  | 1.05 | 20.3  | 1.23 | 21.5  | 1.31 | 23.0  | 1.39 | 25.9  | 1.53 | 28.6  | 1.71 |
|                 | 110                       | 14.6                         | 0.96 | 17.4  | 1.20 | 20.3  | 1.33 | 21.5  | 1.39 | 23.0  | 1.50 | 25.9  | 1.64 | 28.6  | 1.87 |
|                 | 115                       | 14.6                         | 1.03 | 17.4  | 1.28 | 20.3  | 1.38 | 21.5  | 1.47 | 23.0  | 1.55 | 25.9  | 1.73 | 28.6  | 2.00 |
|                 | 118                       | 14.6                         | 1.09 | 17.4  | 1.35 | 20.3  | 1.47 | 21.5  | 1.56 | 23.0  | 1.65 | 25.2  | 1.67 | 25.0  | 1.88 |
|                 | 122                       | 14.6                         | 1.17 | 17.4  | 1.46 | 20.3  | 1.59 | 20.1  | 1.58 | 19.5  | 1.46 | 20.2  | 1.27 | 20.1  | 1.43 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 33: ZRUM036GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 50              | -9.9                      | 12.2                         | 0.29 | 14.5  | 0.34 | 16.9  | 0.38 | 18.0  | 0.41 | 19.1  | 0.44 | 21.5  | 0.49 | 23.8  | 0.54 |
|                 | -5                        | 12.2                         | 0.30 | 14.5  | 0.36 | 16.9  | 0.40 | 18.0  | 0.43 | 19.1  | 0.46 | 21.5  | 0.52 | 23.8  | 0.57 |
|                 | 0                         | 12.2                         | 0.32 | 14.5  | 0.37 | 16.9  | 0.42 | 18.0  | 0.45 | 19.1  | 0.48 | 21.5  | 0.54 | 23.8  | 0.59 |
|                 | 5                         | 12.2                         | 0.33 | 14.5  | 0.39 | 16.9  | 0.43 | 18.0  | 0.47 | 19.1  | 0.50 | 21.5  | 0.56 | 23.8  | 0.62 |
|                 | 10                        | 12.2                         | 0.34 | 14.5  | 0.40 | 16.9  | 0.44 | 18.0  | 0.48 | 19.1  | 0.52 | 21.5  | 0.57 | 23.8  | 0.63 |
|                 | 14                        | 12.2                         | 0.35 | 14.5  | 0.41 | 16.9  | 0.46 | 18.0  | 0.50 | 19.1  | 0.53 | 21.5  | 0.59 | 23.8  | 0.66 |
|                 | 20                        | 12.2                         | 0.36 | 14.5  | 0.42 | 16.9  | 0.48 | 18.0  | 0.51 | 19.1  | 0.55 | 21.5  | 0.61 | 23.8  | 0.68 |
|                 | 25                        | 12.2                         | 0.37 | 14.5  | 0.44 | 16.9  | 0.50 | 18.0  | 0.53 | 19.1  | 0.57 | 21.5  | 0.63 | 23.8  | 0.70 |
|                 | 30                        | 12.2                         | 0.38 | 14.5  | 0.45 | 16.9  | 0.51 | 18.0  | 0.54 | 19.1  | 0.58 | 21.5  | 0.65 | 23.8  | 0.72 |
|                 | 35                        | 12.2                         | 0.39 | 14.5  | 0.46 | 16.9  | 0.52 | 18.0  | 0.56 | 19.1  | 0.60 | 21.5  | 0.67 | 23.8  | 0.74 |
|                 | 40                        | 12.2                         | 0.40 | 14.5  | 0.47 | 16.9  | 0.54 | 18.0  | 0.57 | 19.1  | 0.61 | 21.5  | 0.68 | 23.8  | 0.76 |
|                 | 45                        | 12.2                         | 0.41 | 14.5  | 0.48 | 16.9  | 0.55 | 18.0  | 0.58 | 19.1  | 0.62 | 21.5  | 0.69 | 23.8  | 0.77 |
|                 | 50                        | 12.2                         | 0.42 | 14.5  | 0.48 | 16.9  | 0.55 | 18.0  | 0.59 | 19.1  | 0.63 | 21.5  | 0.70 | 23.8  | 0.78 |
|                 | 55                        | 12.2                         | 0.43 | 14.5  | 0.49 | 16.9  | 0.56 | 18.0  | 0.60 | 19.1  | 0.64 | 21.5  | 0.72 | 23.8  | 0.80 |
|                 | 60                        | 12.2                         | 0.43 | 14.5  | 0.50 | 16.9  | 0.58 | 18.0  | 0.62 | 19.1  | 0.66 | 21.5  | 0.74 | 23.8  | 0.83 |
|                 | 65                        | 12.2                         | 0.44 | 14.5  | 0.51 | 16.9  | 0.59 | 18.0  | 0.63 | 19.1  | 0.67 | 21.5  | 0.75 | 23.8  | 0.84 |
|                 | 70                        | 12.2                         | 0.45 | 14.5  | 0.52 | 16.9  | 0.60 | 18.0  | 0.65 | 19.1  | 0.69 | 21.5  | 0.77 | 23.8  | 0.87 |
|                 | 75                        | 12.2                         | 0.46 | 14.5  | 0.53 | 16.9  | 0.62 | 18.0  | 0.66 | 19.1  | 0.70 | 21.5  | 0.79 | 23.8  | 0.89 |
|                 | 80                        | 12.2                         | 0.47 | 14.5  | 0.56 | 16.9  | 0.66 | 18.0  | 0.71 | 19.1  | 0.77 | 21.5  | 0.88 | 23.8  | 1.01 |
|                 | 85                        | 12.2                         | 0.50 | 14.5  | 0.59 | 16.9  | 0.70 | 18.0  | 0.76 | 19.1  | 0.81 | 21.5  | 0.94 | 23.8  | 1.07 |
|                 | 90                        | 12.2                         | 0.56 | 14.5  | 0.66 | 16.9  | 0.79 | 18.0  | 0.85 | 19.1  | 0.92 | 21.5  | 1.06 | 23.8  | 1.21 |
|                 | 95                        | 12.2                         | 0.59 | 14.5  | 0.70 | 16.9  | 0.83 | 18.0  | 0.90 | 19.1  | 0.97 | 21.5  | 1.12 | 23.8  | 1.29 |
|                 | 100                       | 12.2                         | 0.62 | 14.5  | 0.74 | 16.9  | 0.88 | 18.0  | 0.96 | 19.1  | 1.03 | 21.5  | 1.20 | 23.8  | 1.37 |
|                 | 105                       | 12.2                         | 0.68 | 14.5  | 0.82 | 16.9  | 0.97 | 18.0  | 1.06 | 19.1  | 1.14 | 21.5  | 1.32 | 23.8  | 1.52 |
|                 | 110                       | 12.2                         | 0.75 | 14.5  | 0.91 | 16.9  | 1.08 | 18.0  | 1.17 | 19.1  | 1.27 | 21.5  | 1.48 | 23.8  | 1.70 |
|                 | 115                       | 12.2                         | 0.80 | 14.5  | 0.97 | 16.9  | 1.16 | 18.0  | 1.26 | 19.1  | 1.37 | 21.5  | 1.59 | 23.8  | 1.83 |
|                 | 118                       | 12.2                         | 0.87 | 14.5  | 1.06 | 16.9  | 1.26 | 18.0  | 1.37 | 19.1  | 1.49 | 21.5  | 1.67 | 23.8  | 1.88 |
|                 | 122                       | 12.2                         | 0.96 | 14.5  | 1.17 | 16.9  | 1.39 | 18.0  | 1.52 | 19.1  | 1.46 | 20.2  | 1.27 | 20.1  | 1.43 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

# COOLING CAPACITY

ZRUM048GSS0



Table 34: ZRUM048GSS0 Cooling Capacities.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 130             | -9.9                      | 43.6                         | 1.14 | 51.8  | 1.38 | 60.3  | 1.64 | 62.5  | 1.77 | 63.4  | 1.91 | 65.6  | 2.19 | 67.1  | 2.26 |
|                 | -5                        | 43.6                         | 1.20 | 51.8  | 1.46 | 60.3  | 1.73 | 62.5  | 1.87 | 63.4  | 2.02 | 65.6  | 2.31 | 67.1  | 2.39 |
|                 | 0                         | 43.6                         | 1.25 | 51.8  | 1.52 | 60.3  | 1.80 | 62.5  | 1.94 | 63.4  | 2.10 | 65.6  | 2.41 | 67.1  | 2.48 |
|                 | 5                         | 43.6                         | 1.30 | 51.8  | 1.57 | 60.3  | 1.87 | 62.5  | 2.02 | 63.4  | 2.17 | 65.6  | 2.49 | 67.1  | 2.58 |
|                 | 10                        | 43.6                         | 1.33 | 51.8  | 1.62 | 60.3  | 1.92 | 62.5  | 2.07 | 63.4  | 2.24 | 65.6  | 2.56 | 67.1  | 2.65 |
|                 | 14                        | 43.6                         | 1.38 | 51.8  | 1.68 | 60.3  | 1.99 | 62.5  | 2.15 | 63.4  | 2.32 | 65.6  | 2.66 | 67.1  | 2.75 |
|                 | 20                        | 43.6                         | 1.41 | 51.8  | 1.70 | 60.3  | 2.02 | 62.5  | 2.18 | 63.4  | 2.35 | 65.6  | 2.69 | 67.1  | 2.79 |
|                 | 25                        | 43.6                         | 1.43 | 51.8  | 1.73 | 60.3  | 2.04 | 62.5  | 2.21 | 63.4  | 2.38 | 65.6  | 2.73 | 67.1  | 2.82 |
|                 | 30                        | 43.6                         | 1.45 | 51.8  | 1.75 | 60.3  | 2.07 | 62.5  | 2.24 | 63.4  | 2.40 | 65.6  | 2.76 | 67.1  | 2.85 |
|                 | 35                        | 43.6                         | 1.46 | 51.8  | 1.77 | 60.3  | 2.09 | 62.5  | 2.26 | 63.4  | 2.43 | 65.6  | 2.79 | 67.1  | 2.89 |
|                 | 40                        | 43.6                         | 1.48 | 51.8  | 1.79 | 60.3  | 2.12 | 62.5  | 2.29 | 63.4  | 2.46 | 65.6  | 2.82 | 67.1  | 2.92 |
|                 | 45                        | 43.6                         | 1.50 | 51.8  | 1.81 | 60.3  | 2.14 | 62.5  | 2.31 | 63.4  | 2.49 | 65.6  | 2.85 | 67.1  | 2.95 |
|                 | 50                        | 43.6                         | 1.51 | 51.8  | 1.83 | 60.3  | 2.16 | 62.5  | 2.34 | 63.4  | 2.51 | 65.6  | 2.88 | 67.1  | 2.98 |
|                 | 55                        | 43.6                         | 1.54 | 51.8  | 1.86 | 60.3  | 2.20 | 61.6  | 2.39 | 62.5  | 2.56 | 64.7  | 2.93 | 66.2  | 3.00 |
|                 | 60                        | 43.6                         | 1.59 | 51.8  | 1.93 | 59.4  | 2.30 | 60.2  | 2.48 | 60.9  | 2.66 | 63.1  | 3.02 | 64.7  | 3.03 |
|                 | 65                        | 43.6                         | 1.62 | 51.8  | 1.97 | 58.5  | 2.34 | 59.4  | 2.53 | 60.0  | 2.71 | 62.2  | 3.12 | 63.8  | 3.15 |
|                 | 70                        | 43.6                         | 1.56 | 51.8  | 1.89 | 57.4  | 2.33 | 58.1  | 2.56 | 58.9  | 2.81 | 61.1  | 3.12 | 62.7  | 3.15 |
|                 | 75                        | 43.6                         | 1.60 | 51.8  | 2.02 | 56.5  | 2.49 | 57.2  | 2.75 | 58.1  | 3.01 | 60.2  | 3.27 | 61.8  | 3.30 |
|                 | 80                        | 43.6                         | 1.82 | 51.8  | 2.30 | 54.9  | 2.85 | 55.6  | 3.15 | 56.5  | 3.46 | 58.6  | 3.55 | 60.2  | 3.58 |
|                 | 85                        | 43.6                         | 1.93 | 51.8  | 2.45 | 54.1  | 3.05 | 54.9  | 3.36 | 55.6  | 3.67 | 57.7  | 3.70 | 59.3  | 3.73 |
|                 | 90                        | 43.6                         | 2.19 | 51.0  | 2.79 | 52.5  | 3.46 | 53.2  | 3.82 | 54.1  | 3.96 | 56.2  | 3.99 | 57.7  | 4.03 |
|                 | 95                        | 44.1                         | 2.32 | 50.6  | 2.97 | 52.2  | 3.69 | 53.1  | 4.08 | 53.7  | 4.10 | 55.9  | 4.14 | 57.4  | 4.18 |
|                 | 100                       | 44.1                         | 2.51 | 49.7  | 3.21 | 51.3  | 4.00 | 52.2  | 4.30 | 52.8  | 4.32 | 55.2  | 4.36 | 56.8  | 4.40 |
|                 | 105                       | 44.1                         | 2.83 | 48.4  | 3.63 | 49.9  | 4.51 | 50.7  | 4.62 | 51.5  | 4.64 | 53.3  | 4.69 | 54.0  | 4.73 |
|                 | 110                       | 44.1                         | 3.18 | 46.4  | 4.09 | 48.3  | 4.92 | 48.5  | 4.95 | 49.2  | 4.97 | 50.2  | 5.01 | 50.4  | 5.06 |
|                 | 115                       | 43.9                         | 3.68 | 44.7  | 4.71 | 44.7  | 5.19 | 44.7  | 5.19 | 44.7  | 5.19 | 45.3  | 5.20 | 45.5  | 5.21 |
|                 | 118                       | 38.2                         | 3.12 | 38.9  | 3.99 | 38.9  | 4.37 | 38.9  | 4.40 | 38.9  | 4.40 | 39.5  | 4.41 | 39.3  | 4.42 |
|                 | 122                       | 30.5                         | 2.37 | 31.2  | 3.03 | 31.0  | 3.32 | 31.1  | 3.33 | 31.2  | 3.34 | 31.7  | 3.34 | 31.6  | 3.36 |
| 120             | -9.9                      | 39.7                         | 1.07 | 47.4  | 1.30 | 55.1  | 1.54 | 59.0  | 1.66 | 61.7  | 1.79 | 64.5  | 2.06 | 65.8  | 2.12 |
|                 | -5                        | 39.7                         | 1.13 | 47.4  | 1.37 | 55.1  | 1.63 | 59.0  | 1.75 | 61.7  | 1.89 | 64.5  | 2.17 | 65.8  | 2.24 |
|                 | 0                         | 39.7                         | 1.18 | 47.4  | 1.43 | 55.1  | 1.69 | 59.0  | 1.82 | 61.7  | 1.97 | 64.5  | 2.26 | 65.8  | 2.33 |
|                 | 5                         | 39.7                         | 1.22 | 47.4  | 1.48 | 55.1  | 1.75 | 59.0  | 1.89 | 61.7  | 2.04 | 64.5  | 2.34 | 65.8  | 2.42 |
|                 | 10                        | 39.7                         | 1.26 | 47.4  | 1.52 | 55.1  | 1.80 | 59.0  | 1.95 | 61.7  | 2.10 | 64.5  | 2.41 | 65.8  | 2.49 |
|                 | 14                        | 39.7                         | 1.30 | 47.4  | 1.58 | 55.1  | 1.87 | 59.0  | 2.02 | 61.7  | 2.17 | 64.5  | 2.49 | 65.8  | 2.58 |
|                 | 20                        | 39.7                         | 1.32 | 47.4  | 1.60 | 55.1  | 1.90 | 59.0  | 2.05 | 61.7  | 2.21 | 64.5  | 2.53 | 65.8  | 2.61 |
|                 | 25                        | 39.7                         | 1.34 | 47.4  | 1.62 | 55.1  | 1.92 | 59.0  | 2.07 | 61.7  | 2.23 | 64.5  | 2.56 | 65.8  | 2.65 |
|                 | 30                        | 39.7                         | 1.36 | 47.4  | 1.64 | 55.1  | 1.94 | 59.0  | 2.10 | 61.7  | 2.26 | 64.5  | 2.59 | 65.8  | 2.68 |
|                 | 35                        | 39.7                         | 1.38 | 47.4  | 1.66 | 55.1  | 1.97 | 59.0  | 2.13 | 61.7  | 2.28 | 64.5  | 2.62 | 65.8  | 2.71 |
|                 | 40                        | 39.7                         | 1.39 | 47.4  | 1.68 | 55.1  | 1.99 | 59.0  | 2.15 | 61.7  | 2.31 | 64.5  | 2.65 | 65.8  | 2.74 |
|                 | 45                        | 39.7                         | 1.41 | 47.4  | 1.70 | 55.1  | 2.01 | 59.0  | 2.18 | 61.7  | 2.34 | 64.5  | 2.68 | 65.8  | 2.78 |
|                 | 50                        | 39.7                         | 1.42 | 47.4  | 1.72 | 55.1  | 2.04 | 59.0  | 2.20 | 61.7  | 2.37 | 64.5  | 2.71 | 65.8  | 2.81 |
|                 | 55                        | 39.7                         | 1.45 | 47.4  | 1.75 | 55.1  | 2.07 | 59.0  | 2.25 | 61.0  | 2.41 | 63.6  | 2.76 | 65.1  | 2.83 |
|                 | 60                        | 39.7                         | 1.49 | 47.4  | 1.82 | 55.1  | 2.16 | 58.6  | 2.33 | 59.3  | 2.51 | 62.0  | 2.85 | 63.3  | 2.90 |
|                 | 65                        | 39.7                         | 1.52 | 47.4  | 1.85 | 55.1  | 2.20 | 57.7  | 2.38 | 58.6  | 2.55 | 61.1  | 2.94 | 62.7  | 2.96 |
|                 | 70                        | 39.7                         | 1.50 | 47.4  | 1.82 | 55.1  | 2.24 | 56.6  | 2.46 | 57.3  | 2.70 | 60.0  | 3.00 | 61.3  | 3.03 |
|                 | 75                        | 39.7                         | 1.53 | 47.4  | 1.94 | 55.1  | 2.39 | 55.7  | 2.64 | 56.6  | 2.89 | 59.1  | 3.14 | 60.7  | 3.16 |
|                 | 80                        | 39.7                         | 1.74 | 47.4  | 2.21 | 53.5  | 2.74 | 54.2  | 3.02 | 54.9  | 3.32 | 57.5  | 3.41 | 58.9  | 3.44 |
|                 | 85                        | 39.7                         | 1.85 | 47.4  | 2.36 | 52.7  | 2.92 | 53.3  | 3.22 | 54.2  | 3.52 | 56.6  | 3.55 | 58.2  | 3.58 |
|                 | 90                        | 39.7                         | 2.10 | 47.4  | 2.68 | 51.1  | 3.32 | 51.8  | 3.67 | 52.4  | 3.80 | 55.1  | 3.83 | 56.4  | 3.87 |
|                 | 95                        | 40.1                         | 2.23 | 47.9  | 2.85 | 50.8  | 3.54 | 51.4  | 3.92 | 52.3  | 3.93 | 54.7  | 3.97 | 56.3  | 4.01 |
|                 | 100                       | 40.1                         | 2.41 | 47.9  | 3.08 | 49.9  | 3.84 | 50.8  | 4.12 | 51.4  | 4.15 | 54.1  | 4.19 | 55.4  | 4.22 |
|                 | 105                       | 40.1                         | 2.72 | 47.1  | 3.49 | 48.6  | 4.34 | 49.4  | 4.43 | 50.0  | 4.46 | 52.5  | 4.50 | 53.4  | 4.54 |
|                 | 110                       | 40.1                         | 3.05 | 45.9  | 3.93 | 47.4  | 4.73 | 47.6  | 4.75 | 48.3  | 4.77 | 49.8  | 4.81 | 50.0  | 4.86 |
|                 | 115                       | 39.0                         | 3.53 | 44.3  | 4.52 | 44.3  | 4.98 | 44.3  | 4.98 | 44.3  | 4.98 | 45.3  | 4.99 | 45.5  | 5.00 |
|                 | 118                       | 34.8                         | 3.12 | 38.5  | 3.83 | 38.5  | 4.19 | 38.5  | 4.23 | 38.5  | 4.23 | 39.5  | 4.24 | 39.3  | 4.24 |
|                 | 122                       | 27.8                         | 2.37 | 30.9  | 2.91 | 30.7  | 3.19 | 30.8  | 3.20 | 30.9  | 3.20 | 31.7  | 3.21 | 31.6  | 3.22 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 35: ZRUM048GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 110             | -9.9                      | 36.8                         | 0.99 | 43.9  | 1.19 | 51.0  | 1.41 | 54.6  | 1.53 | 58.1  | 1.64 | 64.0  | 1.87 | 65.4  | 1.94 |
|                 | -5                        | 36.8                         | 1.04 | 43.9  | 1.26 | 51.0  | 1.49 | 54.6  | 1.62 | 58.1  | 1.73 | 64.0  | 1.98 | 65.4  | 2.05 |
|                 | 0                         | 36.8                         | 1.09 | 43.9  | 1.31 | 51.0  | 1.55 | 54.6  | 1.68 | 58.1  | 1.80 | 64.0  | 2.06 | 65.4  | 2.13 |
|                 | 5                         | 36.8                         | 1.13 | 43.9  | 1.36 | 51.0  | 1.61 | 54.6  | 1.74 | 58.1  | 1.87 | 64.0  | 2.13 | 65.4  | 2.21 |
|                 | 10                        | 36.8                         | 1.16 | 43.9  | 1.40 | 51.0  | 1.65 | 54.6  | 1.79 | 58.1  | 1.92 | 64.0  | 2.19 | 65.4  | 2.28 |
|                 | 14                        | 36.8                         | 1.20 | 43.9  | 1.45 | 51.0  | 1.71 | 54.6  | 1.86 | 58.1  | 1.99 | 64.0  | 2.27 | 65.4  | 2.36 |
|                 | 20                        | 36.8                         | 1.22 | 43.9  | 1.47 | 51.0  | 1.74 | 54.6  | 1.89 | 58.1  | 2.02 | 64.0  | 2.31 | 65.4  | 2.39 |
|                 | 25                        | 36.8                         | 1.23 | 43.9  | 1.49 | 51.0  | 1.76 | 54.6  | 1.91 | 58.1  | 2.05 | 64.0  | 2.34 | 65.4  | 2.42 |
|                 | 30                        | 36.8                         | 1.25 | 43.9  | 1.51 | 51.0  | 1.78 | 54.6  | 1.93 | 58.1  | 2.07 | 64.0  | 2.38 | 65.4  | 2.46 |
|                 | 35                        | 36.8                         | 1.27 | 43.9  | 1.53 | 51.0  | 1.81 | 54.6  | 1.96 | 58.1  | 2.10 | 64.0  | 2.41 | 65.4  | 2.50 |
|                 | 40                        | 36.8                         | 1.28 | 43.9  | 1.55 | 51.0  | 1.83 | 54.6  | 1.98 | 58.1  | 2.13 | 64.0  | 2.44 | 65.4  | 2.53 |
|                 | 45                        | 36.8                         | 1.30 | 43.9  | 1.58 | 51.0  | 1.86 | 54.6  | 2.02 | 58.1  | 2.17 | 64.0  | 2.48 | 65.4  | 2.57 |
|                 | 50                        | 36.8                         | 1.32 | 43.9  | 1.60 | 51.0  | 1.90 | 54.6  | 2.05 | 58.1  | 2.20 | 64.0  | 2.52 | 65.4  | 2.61 |
|                 | 55                        | 36.8                         | 1.35 | 43.9  | 1.63 | 51.0  | 1.93 | 54.6  | 2.09 | 58.1  | 2.25 | 63.1  | 2.57 | 64.5  | 2.63 |
|                 | 60                        | 36.8                         | 1.39 | 43.9  | 1.69 | 51.0  | 2.01 | 54.6  | 2.17 | 58.1  | 2.33 | 61.5  | 2.65 | 62.9  | 2.67 |
|                 | 65                        | 36.8                         | 1.42 | 43.9  | 1.73 | 51.0  | 2.05 | 54.6  | 2.22 | 58.1  | 2.38 | 60.6  | 2.74 | 62.0  | 2.76 |
|                 | 70                        | 36.8                         | 1.43 | 43.9  | 1.74 | 51.0  | 2.14 | 54.6  | 2.36 | 57.0  | 2.59 | 59.5  | 2.88 | 60.8  | 2.90 |
|                 | 75                        | 36.8                         | 1.47 | 43.9  | 1.86 | 51.0  | 2.29 | 54.6  | 2.53 | 56.1  | 2.78 | 58.6  | 3.01 | 59.9  | 3.03 |
|                 | 80                        | 36.4                         | 1.67 | 43.5  | 2.12 | 50.5  | 2.62 | 53.3  | 2.90 | 54.0  | 3.18 | 56.4  | 3.27 | 57.8  | 3.30 |
|                 | 85                        | 36.4                         | 1.78 | 43.5  | 2.26 | 50.5  | 2.80 | 52.5  | 3.09 | 53.1  | 3.38 | 55.5  | 3.41 | 56.9  | 3.43 |
|                 | 90                        | 36.4                         | 2.01 | 43.5  | 2.57 | 50.3  | 3.18 | 50.9  | 3.52 | 51.6  | 3.64 | 54.0  | 3.67 | 55.3  | 3.71 |
|                 | 95                        | 36.4                         | 2.14 | 43.5  | 2.73 | 49.4  | 3.40 | 50.0  | 3.76 | 50.7  | 3.77 | 53.1  | 3.81 | 54.4  | 3.84 |
|                 | 100                       | 36.4                         | 2.31 | 43.5  | 2.95 | 48.7  | 3.68 | 49.4  | 3.95 | 50.0  | 3.98 | 52.4  | 4.01 | 53.7  | 4.05 |
|                 | 105                       | 36.4                         | 2.61 | 43.5  | 3.34 | 47.2  | 4.16 | 47.9  | 4.25 | 48.5  | 4.28 | 50.8  | 4.31 | 52.1  | 4.35 |
|                 | 110                       | 36.4                         | 2.93 | 43.5  | 3.77 | 45.7  | 4.53 | 45.9  | 4.56 | 46.6  | 4.57 | 48.0  | 4.62 | 48.2  | 4.66 |
|                 | 115                       | 36.4                         | 3.39 | 43.5  | 4.33 | 43.8  | 4.78 | 43.8  | 4.78 | 44.0  | 4.78 | 44.9  | 4.79 | 45.1  | 4.80 |
|                 | 118                       | 35.2                         | 3.09 | 37.8  | 3.67 | 38.1  | 4.02 | 38.1  | 4.05 | 38.3  | 4.05 | 39.1  | 4.06 | 38.9  | 4.07 |
|                 | 122                       | 28.1                         | 2.34 | 30.3  | 2.79 | 30.4  | 3.06 | 30.5  | 3.07 | 30.7  | 3.07 | 31.4  | 3.08 | 31.3  | 3.09 |
| 100             | -9.9                      | 32.4                         | 0.87 | 38.6  | 1.05 | 44.8  | 1.24 | 48.0  | 1.36 | 52.8  | 1.47 | 59.2  | 1.69 | 62.5  | 1.76 |
|                 | -5                        | 32.4                         | 0.92 | 38.6  | 1.11 | 44.8  | 1.31 | 48.0  | 1.43 | 52.8  | 1.55 | 59.2  | 1.79 | 62.5  | 1.86 |
|                 | 0                         | 32.4                         | 0.96 | 38.6  | 1.15 | 44.8  | 1.37 | 48.0  | 1.49 | 52.8  | 1.61 | 59.2  | 1.86 | 62.5  | 1.93 |
|                 | 5                         | 32.4                         | 0.99 | 38.6  | 1.19 | 44.8  | 1.42 | 48.0  | 1.54 | 52.8  | 1.67 | 59.2  | 1.93 | 62.5  | 2.01 |
|                 | 10                        | 32.4                         | 1.02 | 38.6  | 1.23 | 44.8  | 1.46 | 48.0  | 1.59 | 52.8  | 1.72 | 59.2  | 1.98 | 62.5  | 2.06 |
|                 | 14                        | 32.4                         | 1.06 | 38.6  | 1.27 | 44.8  | 1.51 | 48.0  | 1.64 | 52.8  | 1.78 | 59.2  | 2.05 | 62.5  | 2.14 |
|                 | 20                        | 32.4                         | 1.09 | 38.6  | 1.31 | 44.8  | 1.56 | 48.0  | 1.69 | 52.8  | 1.84 | 59.2  | 2.11 | 62.5  | 2.20 |
|                 | 25                        | 32.4                         | 1.12 | 38.6  | 1.35 | 44.8  | 1.60 | 48.0  | 1.73 | 52.8  | 1.88 | 59.2  | 2.16 | 62.5  | 2.25 |
|                 | 30                        | 32.4                         | 1.14 | 38.6  | 1.38 | 44.8  | 1.64 | 48.0  | 1.77 | 52.8  | 1.93 | 59.2  | 2.21 | 62.5  | 2.30 |
|                 | 35                        | 32.4                         | 1.16 | 38.6  | 1.41 | 44.8  | 1.66 | 48.0  | 1.80 | 52.8  | 1.96 | 59.2  | 2.25 | 62.5  | 2.34 |
|                 | 40                        | 32.4                         | 1.18 | 38.6  | 1.43 | 44.8  | 1.69 | 48.0  | 1.83 | 52.8  | 1.99 | 59.2  | 2.28 | 62.5  | 2.37 |
|                 | 45                        | 32.4                         | 1.21 | 38.6  | 1.46 | 44.8  | 1.72 | 48.0  | 1.87 | 52.8  | 2.03 | 59.2  | 2.33 | 62.5  | 2.42 |
|                 | 50                        | 32.4                         | 1.23 | 38.6  | 1.49 | 44.8  | 1.76 | 48.0  | 1.90 | 52.8  | 2.08 | 59.2  | 2.38 | 62.5  | 2.47 |
|                 | 55                        | 32.4                         | 1.25 | 38.6  | 1.52 | 44.8  | 1.79 | 48.0  | 1.94 | 52.8  | 2.12 | 59.2  | 2.42 | 61.8  | 2.51 |
|                 | 60                        | 32.4                         | 1.29 | 38.6  | 1.57 | 44.8  | 1.87 | 48.0  | 2.02 | 52.8  | 2.20 | 58.9  | 2.50 | 60.0  | 2.56 |
|                 | 65                        | 32.4                         | 1.32 | 38.6  | 1.60 | 44.8  | 1.90 | 48.0  | 2.06 | 52.8  | 2.24 | 58.0  | 2.58 | 59.4  | 2.63 |
|                 | 70                        | 32.4                         | 1.36 | 38.6  | 1.65 | 44.8  | 2.03 | 48.0  | 2.24 | 52.8  | 2.49 | 56.9  | 2.77 | 58.0  | 2.81 |
|                 | 75                        | 32.4                         | 1.39 | 38.6  | 1.76 | 44.8  | 2.17 | 48.0  | 2.40 | 52.8  | 2.67 | 56.1  | 2.90 | 57.4  | 2.93 |
|                 | 80                        | 32.4                         | 1.58 | 38.6  | 2.00 | 44.8  | 2.49 | 48.0  | 2.74 | 52.8  | 3.06 | 54.5  | 3.14 | 55.6  | 3.19 |
|                 | 85                        | 32.4                         | 1.68 | 38.6  | 2.14 | 44.8  | 2.66 | 48.0  | 2.93 | 52.5  | 3.25 | 53.6  | 3.28 | 55.0  | 3.32 |
|                 | 90                        | 32.4                         | 1.91 | 38.6  | 2.43 | 44.8  | 3.02 | 48.0  | 3.34 | 50.8  | 3.50 | 52.1  | 3.53 | 53.2  | 3.58 |
|                 | 95                        | 32.4                         | 2.02 | 38.6  | 2.59 | 44.8  | 3.22 | 48.0  | 3.56 | 50.1  | 3.63 | 51.2  | 3.66 | 52.5  | 3.71 |
|                 | 100                       | 32.4                         | 2.19 | 38.6  | 2.79 | 44.8  | 3.48 | 47.1  | 3.74 | 49.2  | 3.81 | 50.5  | 3.85 | 51.7  | 3.90 |
|                 | 105                       | 32.4                         | 2.46 | 38.6  | 3.15 | 44.5  | 3.92 | 45.8  | 4.01 | 47.8  | 4.09 | 49.0  | 4.12 | 50.2  | 4.18 |
|                 | 110                       | 32.4                         | 2.75 | 38.6  | 3.53 | 44.0  | 4.25 | 45.0  | 4.27 | 45.9  | 4.35 | 46.7  | 4.39 | 47.5  | 4.46 |
|                 | 115                       | 32.4                         | 3.15 | 38.6  | 4.04 | 41.9  | 4.45 | 43.2  | 4.45 | 44.3  | 4.52 | 44.7  | 4.52 | 44.9  | 4.56 |
|                 | 118                       | 32.4                         | 3.18 | 33.8  | 3.79 | 36.5  | 3.74 | 37.6  | 3.78 | 38.6  | 3.83 | 38.9  | 3.84 | 38.8  | 3.87 |
|                 | 122                       | 27.7                         | 2.88 | 27.1  | 2.88 | 29.1  | 2.85 | 30.1  | 2.86 | 30.9  | 2.90 | 31.2  | 2.91 | 31.2  | 2.94 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

# COOLING CAPACITY

ZRUM048GSS0



Table 36: ZRUM048GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 90              | -9.9                      | 29.1                         | 0.78 | 34.7  | 0.93 | 40.5  | 1.10 | 43.3  | 1.18 | 46.1  | 1.26 | 51.6  | 1.45 | 57.2  | 1.60 |
|                 | -5                        | 29.1                         | 0.82 | 34.7  | 0.98 | 40.5  | 1.16 | 43.3  | 1.25 | 46.1  | 1.33 | 51.6  | 1.53 | 57.2  | 1.68 |
|                 | 0                         | 29.1                         | 0.85 | 34.7  | 1.02 | 40.5  | 1.21 | 43.3  | 1.30 | 46.1  | 1.39 | 51.6  | 1.60 | 57.2  | 1.75 |
|                 | 5                         | 29.1                         | 0.88 | 34.7  | 1.06 | 40.5  | 1.25 | 43.3  | 1.34 | 46.1  | 1.44 | 51.6  | 1.65 | 57.2  | 1.82 |
|                 | 10                        | 29.1                         | 0.91 | 34.7  | 1.09 | 40.5  | 1.29 | 43.3  | 1.38 | 46.1  | 1.48 | 51.6  | 1.70 | 57.2  | 1.87 |
|                 | 14                        | 29.1                         | 0.94 | 34.7  | 1.13 | 40.5  | 1.33 | 43.3  | 1.43 | 46.1  | 1.53 | 51.6  | 1.76 | 57.2  | 1.94 |
|                 | 20                        | 29.1                         | 0.98 | 34.7  | 1.17 | 40.5  | 1.38 | 43.3  | 1.49 | 46.1  | 1.60 | 51.6  | 1.83 | 57.2  | 2.01 |
|                 | 25                        | 29.1                         | 1.00 | 34.7  | 1.21 | 40.5  | 1.42 | 43.3  | 1.53 | 46.1  | 1.65 | 51.6  | 1.88 | 57.2  | 2.07 |
|                 | 30                        | 29.1                         | 1.03 | 34.7  | 1.24 | 40.5  | 1.47 | 43.3  | 1.58 | 46.1  | 1.70 | 51.6  | 1.93 | 57.2  | 2.13 |
|                 | 35                        | 29.1                         | 1.06 | 34.7  | 1.28 | 40.5  | 1.51 | 43.3  | 1.63 | 46.1  | 1.75 | 51.6  | 1.99 | 57.2  | 2.20 |
|                 | 40                        | 29.1                         | 1.10 | 34.7  | 1.32 | 40.5  | 1.56 | 43.3  | 1.68 | 46.1  | 1.81 | 51.6  | 2.05 | 57.2  | 2.26 |
|                 | 45                        | 29.1                         | 1.12 | 34.7  | 1.35 | 40.5  | 1.59 | 43.3  | 1.72 | 46.1  | 1.85 | 51.6  | 2.10 | 57.2  | 2.32 |
|                 | 50                        | 29.1                         | 1.15 | 34.7  | 1.38 | 40.5  | 1.63 | 43.3  | 1.75 | 46.1  | 1.89 | 51.6  | 2.14 | 57.2  | 2.37 |
|                 | 55                        | 29.1                         | 1.16 | 34.7  | 1.40 | 40.5  | 1.65 | 43.3  | 1.79 | 46.1  | 1.92 | 51.6  | 2.19 | 57.2  | 2.39 |
|                 | 60                        | 29.1                         | 1.20 | 34.7  | 1.46 | 40.5  | 1.72 | 43.3  | 1.86 | 46.1  | 2.00 | 51.6  | 2.27 | 56.7  | 2.42 |
|                 | 65                        | 29.1                         | 1.22 | 34.7  | 1.49 | 40.5  | 1.75 | 43.3  | 1.90 | 46.1  | 2.04 | 51.6  | 2.31 | 56.4  | 2.54 |
|                 | 70                        | 29.1                         | 1.26 | 34.7  | 1.53 | 40.5  | 1.82 | 43.3  | 2.00 | 46.1  | 2.19 | 51.6  | 2.58 | 55.3  | 2.73 |
|                 | 75                        | 29.1                         | 1.28 | 34.7  | 1.60 | 40.5  | 1.94 | 43.3  | 2.14 | 46.1  | 2.35 | 51.6  | 2.69 | 54.4  | 2.85 |
|                 | 80                        | 29.1                         | 1.44 | 34.7  | 1.81 | 40.5  | 2.22 | 43.3  | 2.45 | 46.1  | 2.68 | 51.6  | 2.98 | 52.9  | 3.10 |
|                 | 85                        | 29.1                         | 1.53 | 34.7  | 1.93 | 40.5  | 2.38 | 43.3  | 2.61 | 46.1  | 2.86 | 51.0  | 3.13 | 52.1  | 3.22 |
|                 | 90                        | 29.1                         | 1.73 | 34.7  | 2.19 | 40.5  | 2.69 | 43.3  | 2.97 | 46.1  | 3.26 | 49.5  | 3.43 | 50.6  | 3.48 |
|                 | 95                        | 29.1                         | 1.84 | 34.7  | 2.32 | 40.5  | 2.87 | 43.3  | 3.17 | 46.1  | 3.48 | 48.6  | 3.56 | 49.7  | 3.61 |
|                 | 100                       | 29.1                         | 1.90 | 34.7  | 2.42 | 40.5  | 2.99 | 43.3  | 3.29 | 46.1  | 3.56 | 48.0  | 3.71 | 48.9  | 3.75 |
|                 | 105                       | 29.1                         | 2.20 | 34.7  | 2.81 | 40.5  | 3.38 | 43.3  | 3.61 | 45.6  | 3.81 | 46.5  | 3.98 | 47.1  | 4.03 |
|                 | 110                       | 29.1                         | 2.53 | 34.7  | 3.24 | 40.5  | 3.71 | 43.3  | 3.89 | 43.7  | 4.13 | 44.3  | 4.27 | 44.6  | 4.32 |
|                 | 115                       | 29.1                         | 2.74 | 34.7  | 3.51 | 37.9  | 3.91 | 41.0  | 4.07 | 41.6  | 4.27 | 42.0  | 4.36 | 42.2  | 4.42 |
|                 | 118                       | 29.1                         | 2.91 | 33.8  | 3.79 | 33.0  | 3.29 | 35.7  | 3.46 | 36.2  | 3.62 | 36.6  | 3.70 | 36.4  | 3.75 |
|                 | 122                       | 27.7                         | 2.88 | 27.1  | 2.88 | 26.3  | 2.50 | 28.6  | 2.61 | 29.0  | 2.74 | 29.4  | 2.80 | 29.3  | 2.85 |
| 80              | -9.9                      | 25.9                         | 0.67 | 30.9  | 0.81 | 36.0  | 0.94 | 38.4  | 1.02 | 40.9  | 1.10 | 45.9  | 1.26 | 50.8  | 1.40 |
|                 | -5                        | 25.9                         | 0.71 | 30.9  | 0.85 | 36.0  | 0.99 | 38.4  | 1.08 | 40.9  | 1.16 | 45.9  | 1.33 | 50.8  | 1.48 |
|                 | 0                         | 25.9                         | 0.74 | 30.9  | 0.89 | 36.0  | 1.03 | 38.4  | 1.12 | 40.9  | 1.21 | 45.9  | 1.38 | 50.8  | 1.54 |
|                 | 5                         | 25.9                         | 0.76 | 30.9  | 0.92 | 36.0  | 1.07 | 38.4  | 1.16 | 40.9  | 1.25 | 45.9  | 1.43 | 50.8  | 1.59 |
|                 | 10                        | 25.9                         | 0.79 | 30.9  | 0.95 | 36.0  | 1.10 | 38.4  | 1.20 | 40.9  | 1.29 | 45.9  | 1.47 | 50.8  | 1.64 |
|                 | 14                        | 25.9                         | 0.82 | 30.9  | 0.98 | 36.0  | 1.14 | 38.4  | 1.24 | 40.9  | 1.34 | 45.9  | 1.53 | 50.8  | 1.70 |
|                 | 20                        | 25.9                         | 0.85 | 30.9  | 1.02 | 36.0  | 1.19 | 38.4  | 1.29 | 40.9  | 1.38 | 45.9  | 1.58 | 50.8  | 1.76 |
|                 | 25                        | 25.9                         | 0.87 | 30.9  | 1.05 | 36.0  | 1.22 | 38.4  | 1.32 | 40.9  | 1.42 | 45.9  | 1.63 | 50.8  | 1.82 |
|                 | 30                        | 25.9                         | 0.90 | 30.9  | 1.08 | 36.0  | 1.26 | 38.4  | 1.36 | 40.9  | 1.46 | 45.9  | 1.67 | 50.8  | 1.87 |
|                 | 35                        | 25.9                         | 0.92 | 30.9  | 1.11 | 36.0  | 1.30 | 38.4  | 1.40 | 40.9  | 1.50 | 45.9  | 1.72 | 50.8  | 1.93 |
|                 | 40                        | 25.9                         | 0.95 | 30.9  | 1.14 | 36.0  | 1.33 | 38.4  | 1.44 | 40.9  | 1.54 | 45.9  | 1.77 | 50.8  | 1.98 |
|                 | 45                        | 25.9                         | 0.96 | 30.9  | 1.15 | 36.0  | 1.35 | 38.4  | 1.46 | 40.9  | 1.56 | 45.9  | 1.79 | 50.8  | 2.00 |
|                 | 50                        | 25.9                         | 0.97 | 30.9  | 1.17 | 36.0  | 1.37 | 38.4  | 1.48 | 40.9  | 1.58 | 45.9  | 1.81 | 50.8  | 2.03 |
|                 | 55                        | 25.9                         | 0.99 | 30.9  | 1.19 | 36.0  | 1.39 | 38.4  | 1.50 | 40.9  | 1.61 | 45.9  | 1.85 | 50.8  | 2.07 |
|                 | 60                        | 25.9                         | 1.02 | 30.9  | 1.23 | 36.0  | 1.44 | 38.4  | 1.56 | 40.9  | 1.68 | 45.9  | 1.91 | 50.8  | 2.15 |
|                 | 65                        | 25.9                         | 1.04 | 30.9  | 1.25 | 36.0  | 1.47 | 38.4  | 1.59 | 40.9  | 1.71 | 45.9  | 1.95 | 50.8  | 2.20 |
|                 | 70                        | 25.9                         | 1.07 | 30.9  | 1.29 | 36.0  | 1.52 | 38.4  | 1.64 | 40.9  | 1.78 | 45.9  | 2.10 | 50.8  | 2.43 |
|                 | 75                        | 25.9                         | 1.09 | 30.9  | 1.31 | 36.0  | 1.59 | 38.4  | 1.75 | 40.9  | 1.90 | 45.9  | 2.23 | 50.8  | 2.57 |
|                 | 80                        | 25.9                         | 1.19 | 30.9  | 1.49 | 36.0  | 1.81 | 38.4  | 1.98 | 40.9  | 2.17 | 45.9  | 2.57 | 50.8  | 2.87 |
|                 | 85                        | 25.9                         | 1.27 | 30.9  | 1.58 | 36.0  | 1.93 | 38.4  | 2.12 | 40.9  | 2.32 | 45.9  | 2.74 | 50.8  | 2.94 |
|                 | 90                        | 25.9                         | 1.43 | 30.9  | 1.79 | 36.0  | 2.19 | 38.4  | 2.40 | 40.9  | 2.64 | 45.9  | 3.01 | 50.0  | 3.12 |
|                 | 95                        | 25.9                         | 1.52 | 30.9  | 1.90 | 36.0  | 2.33 | 38.4  | 2.55 | 40.9  | 2.80 | 45.9  | 3.12 | 48.9  | 3.20 |
|                 | 100                       | 25.9                         | 1.64 | 30.9  | 2.05 | 36.0  | 2.52 | 38.4  | 2.73 | 40.9  | 2.91 | 45.9  | 3.24 | 47.8  | 3.30 |
|                 | 105                       | 25.9                         | 1.87 | 30.9  | 2.34 | 36.0  | 2.80 | 38.4  | 2.93 | 40.9  | 3.13 | 45.3  | 3.37 | 46.4  | 3.47 |
|                 | 110                       | 25.9                         | 2.12 | 30.9  | 2.67 | 36.0  | 2.97 | 38.4  | 3.13 | 40.9  | 3.37 | 43.7  | 3.50 | 43.9  | 3.65 |
|                 | 115                       | 25.9                         | 2.26 | 30.9  | 2.85 | 36.0  | 3.07 | 38.4  | 3.29 | 38.4  | 3.45 | 38.6  | 3.57 | 38.6  | 3.79 |
|                 | 118                       | 25.9                         | 2.40 | 30.9  | 3.03 | 33.0  | 3.29 | 33.7  | 3.13 | 33.4  | 2.92 | 33.6  | 3.03 | 33.3  | 3.22 |
|                 | 122                       | 25.9                         | 2.60 | 27.2  | 2.86 | 26.3  | 2.50 | 26.9  | 2.36 | 26.8  | 2.21 | 27.0  | 2.30 | 26.8  | 2.44 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).  
Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.  
The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).



Table 37: ZRUM048GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 70              | -9.9                      | 22.7                         | 0.59 | 27.0  | 0.71 | 31.5  | 0.83 | 33.6  | 0.89 | 35.8  | 0.95 | 40.1  | 1.08 | 44.6  | 1.21 |
|                 | -5                        | 22.7                         | 0.63 | 27.0  | 0.74 | 31.5  | 0.88 | 33.6  | 0.94 | 35.8  | 1.00 | 40.1  | 1.14 | 44.6  | 1.28 |
|                 | 0                         | 22.7                         | 0.65 | 27.0  | 0.77 | 31.5  | 0.91 | 33.6  | 0.98 | 35.8  | 1.04 | 40.1  | 1.19 | 44.6  | 1.33 |
|                 | 5                         | 22.7                         | 0.68 | 27.0  | 0.80 | 31.5  | 0.94 | 33.6  | 1.01 | 35.8  | 1.08 | 40.1  | 1.23 | 44.6  | 1.38 |
|                 | 10                        | 22.7                         | 0.69 | 27.0  | 0.83 | 31.5  | 0.97 | 33.6  | 1.04 | 35.8  | 1.11 | 40.1  | 1.27 | 44.6  | 1.42 |
|                 | 14                        | 22.7                         | 0.72 | 27.0  | 0.86 | 31.5  | 1.01 | 33.6  | 1.08 | 35.8  | 1.15 | 40.1  | 1.32 | 44.6  | 1.47 |
|                 | 20                        | 22.7                         | 0.74 | 27.0  | 0.88 | 31.5  | 1.04 | 33.6  | 1.11 | 35.8  | 1.19 | 40.1  | 1.36 | 44.6  | 1.52 |
|                 | 25                        | 22.7                         | 0.77 | 27.0  | 0.91 | 31.5  | 1.06 | 33.6  | 1.14 | 35.8  | 1.22 | 40.1  | 1.39 | 44.6  | 1.56 |
|                 | 30                        | 22.7                         | 0.79 | 27.0  | 0.93 | 31.5  | 1.09 | 33.6  | 1.17 | 35.8  | 1.25 | 40.1  | 1.43 | 44.6  | 1.60 |
|                 | 35                        | 22.7                         | 0.81 | 27.0  | 0.96 | 31.5  | 1.12 | 33.6  | 1.20 | 35.8  | 1.29 | 40.1  | 1.46 | 44.6  | 1.65 |
|                 | 40                        | 22.7                         | 0.83 | 27.0  | 0.98 | 31.5  | 1.15 | 33.6  | 1.23 | 35.8  | 1.32 | 40.1  | 1.50 | 44.6  | 1.69 |
|                 | 45                        | 22.7                         | 0.84 | 27.0  | 1.00 | 31.5  | 1.17 | 33.6  | 1.26 | 35.8  | 1.34 | 40.1  | 1.53 | 44.6  | 1.72 |
|                 | 50                        | 22.7                         | 0.86 | 27.0  | 1.01 | 31.5  | 1.19 | 33.6  | 1.28 | 35.8  | 1.36 | 40.1  | 1.55 | 44.6  | 1.75 |
|                 | 55                        | 22.7                         | 0.87 | 27.0  | 1.03 | 31.5  | 1.21 | 33.6  | 1.30 | 35.8  | 1.39 | 40.1  | 1.58 | 44.6  | 1.78 |
|                 | 60                        | 22.7                         | 0.89 | 27.0  | 1.07 | 31.5  | 1.25 | 33.6  | 1.34 | 35.8  | 1.44 | 40.1  | 1.64 | 44.6  | 1.85 |
|                 | 65                        | 22.7                         | 0.91 | 27.0  | 1.09 | 31.5  | 1.27 | 33.6  | 1.37 | 35.8  | 1.47 | 40.1  | 1.67 | 44.6  | 1.88 |
|                 | 70                        | 22.7                         | 0.93 | 27.0  | 1.12 | 31.5  | 1.31 | 33.6  | 1.41 | 35.8  | 1.51 | 40.1  | 1.73 | 44.6  | 2.00 |
|                 | 75                        | 22.7                         | 0.95 | 27.0  | 1.14 | 31.5  | 1.34 | 33.6  | 1.46 | 35.8  | 1.58 | 40.1  | 1.85 | 44.6  | 2.12 |
|                 | 80                        | 22.7                         | 1.02 | 27.0  | 1.26 | 31.5  | 1.52 | 33.6  | 1.66 | 35.8  | 1.79 | 40.1  | 2.05 | 44.6  | 2.35 |
|                 | 85                        | 22.7                         | 1.09 | 27.0  | 1.34 | 31.5  | 1.62 | 33.6  | 1.77 | 35.8  | 1.93 | 40.1  | 2.18 | 44.6  | 2.45 |
|                 | 90                        | 22.7                         | 1.22 | 27.0  | 1.51 | 31.5  | 1.83 | 33.6  | 2.00 | 35.8  | 2.19 | 40.1  | 2.43 | 44.6  | 2.65 |
|                 | 95                        | 22.7                         | 1.29 | 27.0  | 1.60 | 31.5  | 1.95 | 33.6  | 2.13 | 35.8  | 2.32 | 40.1  | 2.55 | 44.6  | 2.73 |
|                 | 100                       | 22.7                         | 1.39 | 27.0  | 1.73 | 31.5  | 2.10 | 33.6  | 2.30 | 35.8  | 2.39 | 40.1  | 2.67 | 44.6  | 2.81 |
|                 | 105                       | 22.7                         | 1.58 | 27.0  | 1.97 | 31.5  | 2.32 | 33.6  | 2.45 | 35.8  | 2.60 | 40.1  | 2.82 | 44.6  | 2.98 |
|                 | 110                       | 22.7                         | 1.78 | 27.0  | 2.23 | 31.5  | 2.45 | 33.6  | 2.60 | 35.8  | 2.81 | 40.1  | 2.93 | 43.3  | 3.20 |
|                 | 115                       | 22.7                         | 1.91 | 27.0  | 2.38 | 31.5  | 2.54 | 33.6  | 2.75 | 35.8  | 2.90 | 40.1  | 3.02 | 40.8  | 3.41 |
|                 | 118                       | 22.7                         | 2.03 | 27.0  | 2.53 | 31.5  | 2.69 | 33.6  | 2.91 | 32.6  | 2.90 | 33.6  | 2.56 | 33.3  | 2.89 |
|                 | 122                       | 22.7                         | 2.19 | 27.0  | 2.74 | 28.1  | 2.57 | 26.9  | 2.40 | 26.1  | 2.19 | 27.0  | 1.94 | 26.8  | 2.20 |
| 60              | -9.9                      | 19.5                         | 0.51 | 23.1  | 0.60 | 27.0  | 0.70 | 28.7  | 0.75 | 30.6  | 0.81 | 34.5  | 0.91 | 38.1  | 1.02 |
|                 | -5                        | 19.5                         | 0.54 | 23.1  | 0.63 | 27.0  | 0.74 | 28.7  | 0.79 | 30.6  | 0.85 | 34.5  | 0.96 | 38.1  | 1.08 |
|                 | 0                         | 19.5                         | 0.56 | 23.1  | 0.66 | 27.0  | 0.77 | 28.7  | 0.82 | 30.6  | 0.89 | 34.5  | 1.00 | 38.1  | 1.12 |
|                 | 5                         | 19.5                         | 0.59 | 23.1  | 0.68 | 27.0  | 0.80 | 28.7  | 0.85 | 30.6  | 0.92 | 34.5  | 1.04 | 38.1  | 1.16 |
|                 | 10                        | 19.5                         | 0.60 | 23.1  | 0.70 | 27.0  | 0.82 | 28.7  | 0.88 | 30.6  | 0.94 | 34.5  | 1.07 | 38.1  | 1.19 |
|                 | 14                        | 19.5                         | 0.62 | 23.1  | 0.72 | 27.0  | 0.85 | 28.7  | 0.91 | 30.6  | 0.98 | 34.5  | 1.11 | 38.1  | 1.24 |
|                 | 20                        | 19.5                         | 0.64 | 23.1  | 0.75 | 27.0  | 0.88 | 28.7  | 0.94 | 30.6  | 1.01 | 34.5  | 1.14 | 38.1  | 1.28 |
|                 | 25                        | 19.5                         | 0.66 | 23.1  | 0.77 | 27.0  | 0.90 | 28.7  | 0.97 | 30.6  | 1.04 | 34.5  | 1.17 | 38.1  | 1.32 |
|                 | 30                        | 19.5                         | 0.67 | 23.1  | 0.79 | 27.0  | 0.92 | 28.7  | 0.99 | 30.6  | 1.06 | 34.5  | 1.21 | 38.1  | 1.35 |
|                 | 35                        | 19.5                         | 0.69 | 23.1  | 0.82 | 27.0  | 0.95 | 28.7  | 1.02 | 30.6  | 1.09 | 34.5  | 1.24 | 38.1  | 1.39 |
|                 | 40                        | 19.5                         | 0.71 | 23.1  | 0.84 | 27.0  | 0.97 | 28.7  | 1.04 | 30.6  | 1.12 | 34.5  | 1.27 | 38.1  | 1.42 |
|                 | 45                        | 19.5                         | 0.72 | 23.1  | 0.84 | 27.0  | 0.98 | 28.7  | 1.05 | 30.6  | 1.13 | 34.5  | 1.28 | 38.1  | 1.43 |
|                 | 50                        | 19.5                         | 0.72 | 23.1  | 0.85 | 27.0  | 0.99 | 28.7  | 1.06 | 30.6  | 1.14 | 34.5  | 1.29 | 38.1  | 1.45 |
|                 | 55                        | 19.5                         | 0.73 | 23.1  | 0.87 | 27.0  | 1.01 | 28.7  | 1.08 | 30.6  | 1.16 | 34.5  | 1.32 | 38.1  | 1.47 |
|                 | 60                        | 19.5                         | 0.76 | 23.1  | 0.89 | 27.0  | 1.04 | 28.7  | 1.12 | 30.6  | 1.20 | 34.5  | 1.36 | 38.1  | 1.53 |
|                 | 65                        | 19.5                         | 0.77 | 23.1  | 0.91 | 27.0  | 1.06 | 28.7  | 1.14 | 30.6  | 1.22 | 34.5  | 1.39 | 38.1  | 1.56 |
|                 | 70                        | 19.5                         | 0.79 | 23.1  | 0.93 | 27.0  | 1.09 | 28.7  | 1.17 | 30.6  | 1.26 | 34.5  | 1.43 | 38.1  | 1.62 |
|                 | 75                        | 19.5                         | 0.80 | 23.1  | 0.95 | 27.0  | 1.11 | 28.7  | 1.20 | 30.6  | 1.30 | 34.5  | 1.51 | 38.1  | 1.73 |
|                 | 80                        | 19.5                         | 0.85 | 23.1  | 1.04 | 27.0  | 1.25 | 28.7  | 1.36 | 30.6  | 1.47 | 34.5  | 1.69 | 38.1  | 1.95 |
|                 | 85                        | 19.5                         | 0.90 | 23.1  | 1.10 | 27.0  | 1.33 | 28.7  | 1.45 | 30.6  | 1.58 | 34.5  | 1.78 | 38.1  | 2.01 |
|                 | 90                        | 19.5                         | 1.01 | 23.1  | 1.25 | 27.0  | 1.50 | 28.7  | 1.64 | 30.6  | 1.77 | 34.5  | 1.99 | 38.1  | 2.20 |
|                 | 95                        | 19.5                         | 1.07 | 23.1  | 1.32 | 27.0  | 1.59 | 28.7  | 1.75 | 30.6  | 1.88 | 34.5  | 2.09 | 38.1  | 2.31 |
|                 | 100                       | 19.5                         | 1.15 | 23.1  | 1.42 | 27.0  | 1.72 | 28.7  | 1.88 | 30.6  | 1.96 | 34.5  | 2.21 | 38.1  | 2.41 |
|                 | 105                       | 19.5                         | 1.31 | 23.1  | 1.62 | 27.0  | 1.89 | 28.7  | 2.00 | 30.6  | 2.13 | 34.5  | 2.35 | 38.1  | 2.63 |
|                 | 110                       | 19.5                         | 1.47 | 23.1  | 1.83 | 27.0  | 2.04 | 28.7  | 2.13 | 30.6  | 2.30 | 34.5  | 2.51 | 38.1  | 2.87 |
|                 | 115                       | 19.5                         | 1.58 | 23.1  | 1.96 | 27.0  | 2.12 | 28.7  | 2.25 | 30.6  | 2.39 | 34.5  | 2.66 | 38.1  | 3.07 |
|                 | 118                       | 19.5                         | 1.67 | 23.1  | 2.08 | 27.0  | 2.25 | 28.7  | 2.39 | 30.6  | 2.54 | 33.6  | 2.56 | 33.3  | 2.89 |
|                 | 122                       | 19.5                         | 1.80 | 23.1  | 2.25 | 27.0  | 2.44 | 26.8  | 2.42 | 26.0  | 2.25 | 27.0  | 1.94 | 26.8  | 2.20 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

# COOLING CAPACITY

ZRUM048GSS0



Table 38: ZRUM048GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 50              | -9.9                      | 16.2                         | 0.44 | 19.3  | 0.52 | 22.5  | 0.58 | 24.0  | 0.63 | 25.5  | 0.68 | 28.7  | 0.75 | 31.7  | 0.83 |
|                 | -5                        | 16.2                         | 0.47 | 19.3  | 0.55 | 22.5  | 0.61 | 24.0  | 0.66 | 25.5  | 0.71 | 28.7  | 0.79 | 31.7  | 0.88 |
|                 | 0                         | 16.2                         | 0.49 | 19.3  | 0.57 | 22.5  | 0.64 | 24.0  | 0.69 | 25.5  | 0.74 | 28.7  | 0.82 | 31.7  | 0.91 |
|                 | 5                         | 16.2                         | 0.50 | 19.3  | 0.59 | 22.5  | 0.66 | 24.0  | 0.71 | 25.5  | 0.77 | 28.7  | 0.85 | 31.7  | 0.95 |
|                 | 10                        | 16.2                         | 0.52 | 19.3  | 0.61 | 22.5  | 0.68 | 24.0  | 0.73 | 25.5  | 0.79 | 28.7  | 0.88 | 31.7  | 0.97 |
|                 | 14                        | 16.2                         | 0.54 | 19.3  | 0.63 | 22.5  | 0.71 | 24.0  | 0.76 | 25.5  | 0.82 | 28.7  | 0.91 | 31.7  | 1.01 |
|                 | 20                        | 16.2                         | 0.56 | 19.3  | 0.65 | 22.5  | 0.74 | 24.0  | 0.79 | 25.5  | 0.85 | 28.7  | 0.94 | 31.7  | 1.05 |
|                 | 25                        | 16.2                         | 0.57 | 19.3  | 0.67 | 22.5  | 0.76 | 24.0  | 0.81 | 25.5  | 0.87 | 28.7  | 0.97 | 31.7  | 1.08 |
|                 | 30                        | 16.2                         | 0.59 | 19.3  | 0.68 | 22.5  | 0.78 | 24.0  | 0.83 | 25.5  | 0.89 | 28.7  | 1.00 | 31.7  | 1.11 |
|                 | 35                        | 16.2                         | 0.61 | 19.3  | 0.70 | 22.5  | 0.80 | 24.0  | 0.86 | 25.5  | 0.91 | 28.7  | 1.03 | 31.7  | 1.14 |
|                 | 40                        | 16.2                         | 0.62 | 19.3  | 0.72 | 22.5  | 0.83 | 24.0  | 0.88 | 25.5  | 0.94 | 28.7  | 1.05 | 31.7  | 1.17 |
|                 | 45                        | 16.2                         | 0.63 | 19.3  | 0.73 | 22.5  | 0.84 | 24.0  | 0.89 | 25.5  | 0.95 | 28.7  | 1.06 | 31.7  | 1.19 |
|                 | 50                        | 16.2                         | 0.64 | 19.3  | 0.74 | 22.5  | 0.85 | 24.0  | 0.90 | 25.5  | 0.96 | 28.7  | 1.08 | 31.7  | 1.20 |
|                 | 55                        | 16.2                         | 0.65 | 19.3  | 0.75 | 22.5  | 0.86 | 24.0  | 0.92 | 25.5  | 0.98 | 28.7  | 1.10 | 31.7  | 1.22 |
|                 | 60                        | 16.2                         | 0.67 | 19.3  | 0.77 | 22.5  | 0.89 | 24.0  | 0.95 | 25.5  | 1.01 | 28.7  | 1.13 | 31.7  | 1.27 |
|                 | 65                        | 16.2                         | 0.67 | 19.3  | 0.79 | 22.5  | 0.90 | 24.0  | 0.96 | 25.5  | 1.03 | 28.7  | 1.15 | 31.7  | 1.29 |
|                 | 70                        | 16.2                         | 0.69 | 19.3  | 0.80 | 22.5  | 0.92 | 24.0  | 0.99 | 25.5  | 1.05 | 28.7  | 1.19 | 31.7  | 1.33 |
|                 | 75                        | 16.2                         | 0.70 | 19.3  | 0.82 | 22.5  | 0.94 | 24.0  | 1.01 | 25.5  | 1.07 | 28.7  | 1.21 | 31.7  | 1.36 |
|                 | 80                        | 16.2                         | 0.72 | 19.3  | 0.86 | 22.5  | 1.01 | 24.0  | 1.09 | 25.5  | 1.18 | 28.7  | 1.35 | 31.7  | 1.54 |
|                 | 85                        | 16.2                         | 0.77 | 19.3  | 0.91 | 22.5  | 1.07 | 24.0  | 1.16 | 25.5  | 1.25 | 28.7  | 1.44 | 31.7  | 1.64 |
|                 | 90                        | 16.2                         | 0.86 | 19.3  | 1.02 | 22.5  | 1.21 | 24.0  | 1.30 | 25.5  | 1.41 | 28.7  | 1.62 | 31.7  | 1.86 |
|                 | 95                        | 16.2                         | 0.90 | 19.3  | 1.08 | 22.5  | 1.28 | 24.0  | 1.39 | 25.5  | 1.49 | 28.7  | 1.73 | 31.7  | 1.98 |
|                 | 100                       | 16.2                         | 0.95 | 19.3  | 1.14 | 22.5  | 1.35 | 24.0  | 1.47 | 25.5  | 1.58 | 28.7  | 1.83 | 31.7  | 2.10 |
|                 | 105                       | 16.2                         | 1.04 | 19.3  | 1.26 | 22.5  | 1.50 | 24.0  | 1.62 | 25.5  | 1.75 | 28.7  | 2.03 | 31.7  | 2.34 |
|                 | 110                       | 16.2                         | 1.15 | 19.3  | 1.39 | 22.5  | 1.66 | 24.0  | 1.80 | 25.5  | 1.95 | 28.7  | 2.27 | 31.7  | 2.61 |
|                 | 115                       | 16.2                         | 1.23 | 19.3  | 1.49 | 22.5  | 1.78 | 24.0  | 1.94 | 25.5  | 2.10 | 28.7  | 2.45 | 31.7  | 2.81 |
|                 | 118                       | 16.2                         | 1.33 | 19.3  | 1.62 | 22.5  | 1.93 | 24.0  | 2.11 | 25.5  | 2.29 | 28.7  | 2.56 | 31.7  | 2.89 |
|                 | 122                       | 16.2                         | 1.47 | 19.3  | 1.79 | 22.5  | 2.14 | 24.0  | 2.34 | 25.5  | 2.25 | 27.0  | 1.94 | 26.8  | 2.20 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 39: ZRUM060GSS0 Cooling Capacities.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 130             | -9.9                      | 54.6                         | 1.48 | 64.8  | 1.80 | 75.3  | 2.13 | 78.1  | 2.30 | 79.2  | 2.48 | 82.0  | 2.84 | 83.9  | 2.94 |
|                 | -5                        | 54.6                         | 1.56 | 64.8  | 1.89 | 75.3  | 2.25 | 78.1  | 2.43 | 79.2  | 2.62 | 82.0  | 3.00 | 83.9  | 3.10 |
|                 | 0                         | 54.6                         | 1.62 | 64.8  | 1.97 | 75.3  | 2.34 | 78.1  | 2.52 | 79.2  | 2.72 | 82.0  | 3.12 | 83.9  | 3.22 |
|                 | 5                         | 54.6                         | 1.68 | 64.8  | 2.04 | 75.3  | 2.42 | 78.1  | 2.62 | 79.2  | 2.82 | 82.0  | 3.24 | 83.9  | 3.34 |
|                 | 10                        | 54.6                         | 1.73 | 64.8  | 2.10 | 75.3  | 2.49 | 78.1  | 2.69 | 79.2  | 2.90 | 82.0  | 3.33 | 83.9  | 3.44 |
|                 | 14                        | 54.6                         | 1.79 | 64.8  | 2.18 | 75.3  | 2.58 | 78.1  | 2.79 | 79.2  | 3.01 | 82.0  | 3.45 | 83.9  | 3.56 |
|                 | 20                        | 54.6                         | 1.83 | 64.8  | 2.21 | 75.3  | 2.62 | 78.1  | 2.83 | 79.2  | 3.05 | 82.0  | 3.50 | 83.9  | 3.61 |
|                 | 25                        | 54.6                         | 1.85 | 64.8  | 2.24 | 75.3  | 2.65 | 78.1  | 2.87 | 79.2  | 3.09 | 82.0  | 3.54 | 83.9  | 3.66 |
|                 | 30                        | 54.6                         | 1.88 | 64.8  | 2.27 | 75.3  | 2.68 | 78.1  | 2.90 | 79.2  | 3.12 | 82.0  | 3.58 | 83.9  | 3.70 |
|                 | 35                        | 54.6                         | 1.90 | 64.8  | 2.30 | 75.3  | 2.72 | 78.1  | 2.93 | 79.2  | 3.16 | 82.0  | 3.62 | 83.9  | 3.74 |
|                 | 40                        | 54.6                         | 1.92 | 64.8  | 2.32 | 75.3  | 2.75 | 78.1  | 2.97 | 79.2  | 3.20 | 82.0  | 3.66 | 83.9  | 3.79 |
|                 | 45                        | 54.6                         | 1.94 | 64.8  | 2.35 | 75.3  | 2.78 | 78.1  | 3.00 | 79.2  | 3.23 | 82.0  | 3.70 | 83.9  | 3.83 |
|                 | 50                        | 54.6                         | 1.96 | 64.8  | 2.37 | 75.3  | 2.81 | 78.1  | 3.03 | 79.2  | 3.26 | 82.0  | 3.74 | 83.9  | 3.87 |
|                 | 55                        | 54.6                         | 1.99 | 64.8  | 2.42 | 75.3  | 2.86 | 77.0  | 3.10 | 78.1  | 3.33 | 80.8  | 3.80 | 82.8  | 3.89 |
|                 | 60                        | 54.6                         | 2.06 | 64.8  | 2.50 | 74.2  | 2.98 | 75.3  | 3.22 | 76.2  | 3.46 | 78.9  | 3.92 | 80.8  | 3.94 |
|                 | 65                        | 54.6                         | 2.10 | 64.8  | 2.56 | 73.1  | 3.03 | 74.2  | 3.28 | 75.1  | 3.52 | 77.8  | 4.05 | 79.7  | 4.08 |
|                 | 70                        | 54.6                         | 2.02 | 64.8  | 2.46 | 71.7  | 3.02 | 72.6  | 3.33 | 73.7  | 3.65 | 76.4  | 4.05 | 78.3  | 4.09 |
|                 | 75                        | 54.6                         | 2.07 | 64.8  | 2.62 | 70.6  | 3.23 | 71.5  | 3.57 | 72.6  | 3.91 | 75.2  | 4.25 | 77.2  | 4.28 |
|                 | 80                        | 54.6                         | 2.36 | 64.8  | 2.98 | 68.7  | 3.70 | 69.5  | 4.08 | 70.6  | 4.49 | 73.3  | 4.61 | 75.2  | 4.65 |
|                 | 85                        | 54.6                         | 2.51 | 64.8  | 3.18 | 67.6  | 3.95 | 68.7  | 4.36 | 69.5  | 4.76 | 72.2  | 4.80 | 74.1  | 4.84 |
|                 | 90                        | 54.6                         | 2.84 | 63.7  | 3.62 | 65.6  | 4.49 | 66.5  | 4.96 | 67.6  | 5.14 | 70.2  | 5.18 | 72.2  | 5.23 |
|                 | 95                        | 55.1                         | 3.01 | 63.3  | 3.85 | 65.2  | 4.79 | 66.3  | 5.30 | 67.2  | 5.32 | 69.8  | 5.37 | 71.8  | 5.42 |
|                 | 100                       | 55.1                         | 3.26 | 62.1  | 4.17 | 64.1  | 5.19 | 65.2  | 5.58 | 66.1  | 5.61 | 69.0  | 5.66 | 71.0  | 5.71 |
|                 | 105                       | 55.1                         | 3.68 | 60.5  | 4.71 | 62.4  | 5.86 | 63.4  | 5.99 | 64.4  | 6.03 | 66.6  | 6.08 | 67.5  | 6.14 |
|                 | 110                       | 55.1                         | 4.13 | 58.0  | 5.31 | 60.4  | 6.39 | 60.6  | 6.42 | 61.5  | 6.44 | 62.8  | 6.51 | 63.0  | 6.57 |
|                 | 115                       | 54.9                         | 4.78 | 55.9  | 6.11 | 55.9  | 6.74 | 55.9  | 6.74 | 55.9  | 6.74 | 56.7  | 6.75 | 56.9  | 6.76 |
|                 | 118                       | 47.7                         | 4.05 | 48.6  | 5.18 | 48.6  | 5.67 | 48.6  | 5.72 | 48.6  | 5.72 | 49.3  | 5.73 | 49.1  | 5.74 |
|                 | 122                       | 38.1                         | 3.07 | 39.0  | 3.94 | 38.8  | 4.31 | 38.9  | 4.32 | 39.0  | 4.33 | 39.6  | 4.34 | 39.6  | 4.36 |
| 120             | -9.9                      | 49.7                         | 1.39 | 59.3  | 1.69 | 68.9  | 2.00 | 73.8  | 2.16 | 77.1  | 2.33 | 80.6  | 2.67 | 82.3  | 2.76 |
|                 | -5                        | 49.7                         | 1.47 | 59.3  | 1.78 | 68.9  | 2.11 | 73.8  | 2.28 | 77.1  | 2.46 | 80.6  | 2.81 | 82.3  | 2.91 |
|                 | 0                         | 49.7                         | 1.53 | 59.3  | 1.86 | 68.9  | 2.20 | 73.8  | 2.37 | 77.1  | 2.55 | 80.6  | 2.93 | 82.3  | 3.03 |
|                 | 5                         | 49.7                         | 1.59 | 59.3  | 1.92 | 68.9  | 2.28 | 73.8  | 2.45 | 77.1  | 2.65 | 80.6  | 3.03 | 82.3  | 3.14 |
|                 | 10                        | 49.7                         | 1.63 | 59.3  | 1.98 | 68.9  | 2.34 | 73.8  | 2.53 | 77.1  | 2.72 | 80.6  | 3.12 | 82.3  | 3.23 |
|                 | 14                        | 49.7                         | 1.69 | 59.3  | 2.05 | 68.9  | 2.43 | 73.8  | 2.62 | 77.1  | 2.82 | 80.6  | 3.24 | 82.3  | 3.34 |
|                 | 20                        | 49.7                         | 1.72 | 59.3  | 2.08 | 68.9  | 2.46 | 73.8  | 2.66 | 77.1  | 2.86 | 80.6  | 3.28 | 82.3  | 3.39 |
|                 | 25                        | 49.7                         | 1.74 | 59.3  | 2.11 | 68.9  | 2.49 | 73.8  | 2.69 | 77.1  | 2.90 | 80.6  | 3.32 | 82.3  | 3.43 |
|                 | 30                        | 49.7                         | 1.76 | 59.3  | 2.13 | 68.9  | 2.52 | 73.8  | 2.72 | 77.1  | 2.93 | 80.6  | 3.36 | 82.3  | 3.47 |
|                 | 35                        | 49.7                         | 1.78 | 59.3  | 2.16 | 68.9  | 2.55 | 73.8  | 2.76 | 77.1  | 2.96 | 80.6  | 3.40 | 82.3  | 3.52 |
|                 | 40                        | 49.7                         | 1.81 | 59.3  | 2.18 | 68.9  | 2.58 | 73.8  | 2.79 | 77.1  | 3.00 | 80.6  | 3.44 | 82.3  | 3.56 |
|                 | 45                        | 49.7                         | 1.83 | 59.3  | 2.21 | 68.9  | 2.61 | 73.8  | 2.83 | 77.1  | 3.04 | 80.6  | 3.48 | 82.3  | 3.60 |
|                 | 50                        | 49.7                         | 1.85 | 59.3  | 2.23 | 68.9  | 2.64 | 73.8  | 2.86 | 77.1  | 3.07 | 80.6  | 3.52 | 82.3  | 3.64 |
|                 | 55                        | 49.7                         | 1.88 | 59.3  | 2.27 | 68.9  | 2.69 | 73.8  | 2.92 | 76.3  | 3.13 | 79.5  | 3.58 | 81.4  | 3.67 |
|                 | 60                        | 49.7                         | 1.94 | 59.3  | 2.36 | 68.9  | 2.81 | 73.2  | 3.03 | 74.1  | 3.25 | 77.5  | 3.69 | 79.2  | 3.76 |
|                 | 65                        | 49.7                         | 1.98 | 59.3  | 2.41 | 68.9  | 2.86 | 72.1  | 3.09 | 73.2  | 3.32 | 76.4  | 3.81 | 78.3  | 3.85 |
|                 | 70                        | 49.7                         | 1.94 | 59.3  | 2.36 | 68.9  | 2.90 | 70.8  | 3.19 | 71.6  | 3.50 | 75.0  | 3.89 | 76.7  | 3.93 |
|                 | 75                        | 49.7                         | 1.99 | 59.3  | 2.51 | 68.9  | 3.11 | 69.7  | 3.43 | 70.8  | 3.76 | 73.9  | 4.08 | 75.8  | 4.11 |
|                 | 80                        | 49.7                         | 2.26 | 59.3  | 2.86 | 66.9  | 3.55 | 67.8  | 3.92 | 68.6  | 4.31 | 71.9  | 4.43 | 73.6  | 4.46 |
|                 | 85                        | 49.7                         | 2.41 | 59.3  | 3.06 | 65.8  | 3.79 | 66.7  | 4.18 | 67.8  | 4.57 | 70.8  | 4.61 | 72.7  | 4.65 |
|                 | 90                        | 49.7                         | 2.73 | 59.3  | 3.47 | 63.9  | 4.31 | 64.7  | 4.77 | 65.6  | 4.93 | 68.8  | 4.97 | 70.5  | 5.02 |
|                 | 95                        | 50.2                         | 2.89 | 59.9  | 3.70 | 63.5  | 4.60 | 64.3  | 5.09 | 65.4  | 5.10 | 68.4  | 5.15 | 70.4  | 5.20 |
|                 | 100                       | 50.2                         | 3.13 | 59.9  | 4.00 | 62.4  | 4.99 | 63.5  | 5.35 | 64.3  | 5.38 | 67.6  | 5.43 | 69.3  | 5.48 |
|                 | 105                       | 50.2                         | 3.53 | 58.9  | 4.53 | 60.7  | 5.63 | 61.7  | 5.75 | 62.5  | 5.79 | 65.6  | 5.84 | 66.7  | 5.89 |
|                 | 110                       | 50.2                         | 3.96 | 57.4  | 5.10 | 59.3  | 6.14 | 59.5  | 6.17 | 60.3  | 6.19 | 62.2  | 6.25 | 62.5  | 6.31 |
|                 | 115                       | 48.8                         | 4.58 | 55.3  | 5.86 | 55.3  | 6.47 | 55.3  | 6.47 | 55.3  | 6.47 | 56.7  | 6.48 | 56.9  | 6.49 |
|                 | 118                       | 43.6                         | 4.05 | 48.1  | 4.97 | 48.2  | 5.44 | 48.2  | 5.49 | 48.2  | 5.49 | 49.3  | 5.50 | 49.1  | 5.51 |
|                 | 122                       | 34.8                         | 3.07 | 38.6  | 3.78 | 38.4  | 4.14 | 38.5  | 4.15 | 38.6  | 4.15 | 39.6  | 4.17 | 39.6  | 4.18 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).



# COOLING CAPACITY

ZRUM060GSS0



Table 40: ZRUM060GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 110             | -9.9                      | 46.0                         | 1.28 | 54.9  | 1.55 | 63.8  | 1.84 | 68.2  | 1.99 | 72.6  | 2.13 | 80.0  | 2.43 | 81.7  | 2.52 |
|                 | -5                        | 46.0                         | 1.35 | 54.9  | 1.63 | 63.8  | 1.94 | 68.2  | 2.10 | 72.6  | 2.25 | 80.0  | 2.57 | 81.7  | 2.66 |
|                 | 0                         | 46.0                         | 1.41 | 54.9  | 1.70 | 63.8  | 2.01 | 68.2  | 2.18 | 72.6  | 2.34 | 80.0  | 2.67 | 81.7  | 2.77 |
|                 | 5                         | 46.0                         | 1.46 | 54.9  | 1.76 | 63.8  | 2.09 | 68.2  | 2.26 | 72.6  | 2.43 | 80.0  | 2.77 | 81.7  | 2.87 |
|                 | 10                        | 46.0                         | 1.50 | 54.9  | 1.81 | 63.8  | 2.15 | 68.2  | 2.33 | 72.6  | 2.49 | 80.0  | 2.85 | 81.7  | 2.95 |
|                 | 14                        | 46.0                         | 1.56 | 54.9  | 1.88 | 63.8  | 2.23 | 68.2  | 2.41 | 72.6  | 2.59 | 80.0  | 2.95 | 81.7  | 3.06 |
|                 | 20                        | 46.0                         | 1.58 | 54.9  | 1.91 | 63.8  | 2.26 | 68.2  | 2.45 | 72.6  | 2.62 | 80.0  | 3.00 | 81.7  | 3.11 |
|                 | 25                        | 46.0                         | 1.60 | 54.9  | 1.93 | 63.8  | 2.29 | 68.2  | 2.47 | 72.6  | 2.66 | 80.0  | 3.04 | 81.7  | 3.15 |
|                 | 30                        | 46.0                         | 1.62 | 54.9  | 1.96 | 63.8  | 2.31 | 68.2  | 2.50 | 72.6  | 2.69 | 80.0  | 3.08 | 81.7  | 3.19 |
|                 | 35                        | 46.0                         | 1.64 | 54.9  | 1.99 | 63.8  | 2.35 | 68.2  | 2.54 | 72.6  | 2.73 | 80.0  | 3.13 | 81.7  | 3.24 |
|                 | 40                        | 46.0                         | 1.66 | 54.9  | 2.01 | 63.8  | 2.38 | 68.2  | 2.57 | 72.6  | 2.77 | 80.0  | 3.17 | 81.7  | 3.28 |
|                 | 45                        | 46.0                         | 1.69 | 54.9  | 2.04 | 63.8  | 2.42 | 68.2  | 2.62 | 72.6  | 2.81 | 80.0  | 3.22 | 81.7  | 3.33 |
|                 | 50                        | 46.0                         | 1.72 | 54.9  | 2.08 | 63.8  | 2.46 | 68.2  | 2.66 | 72.6  | 2.86 | 80.0  | 3.28 | 81.7  | 3.39 |
|                 | 55                        | 46.0                         | 1.75 | 54.9  | 2.12 | 63.8  | 2.51 | 68.2  | 2.72 | 72.6  | 2.92 | 78.9  | 3.33 | 80.6  | 3.42 |
|                 | 60                        | 46.0                         | 1.80 | 54.9  | 2.19 | 63.8  | 2.61 | 68.2  | 2.82 | 72.6  | 3.03 | 76.9  | 3.44 | 78.6  | 3.47 |
|                 | 65                        | 46.0                         | 1.84 | 54.9  | 2.24 | 63.8  | 2.66 | 68.2  | 2.88 | 72.6  | 3.09 | 75.8  | 3.55 | 77.5  | 3.58 |
|                 | 70                        | 46.0                         | 1.86 | 54.9  | 2.26 | 63.8  | 2.78 | 68.2  | 3.06 | 71.2  | 3.36 | 74.4  | 3.73 | 76.1  | 3.77 |
|                 | 75                        | 46.0                         | 1.91 | 54.9  | 2.41 | 63.8  | 2.98 | 68.2  | 3.28 | 70.1  | 3.60 | 73.2  | 3.91 | 74.9  | 3.94 |
|                 | 80                        | 45.5                         | 2.17 | 54.3  | 2.75 | 63.1  | 3.41 | 66.7  | 3.76 | 67.5  | 4.13 | 70.5  | 4.24 | 72.2  | 4.28 |
|                 | 85                        | 45.5                         | 2.31 | 54.3  | 2.93 | 63.1  | 3.64 | 65.6  | 4.01 | 66.4  | 4.38 | 69.4  | 4.42 | 71.1  | 4.46 |
|                 | 90                        | 45.5                         | 2.61 | 54.3  | 3.33 | 62.8  | 4.13 | 63.7  | 4.57 | 64.5  | 4.73 | 67.4  | 4.76 | 69.1  | 4.81 |
|                 | 95                        | 45.5                         | 2.77 | 54.3  | 3.55 | 61.7  | 4.41 | 62.6  | 4.88 | 63.4  | 4.89 | 66.3  | 4.94 | 68.0  | 4.99 |
|                 | 100                       | 45.5                         | 3.00 | 54.3  | 3.83 | 60.9  | 4.78 | 61.7  | 5.13 | 62.6  | 5.16 | 65.5  | 5.21 | 67.2  | 5.26 |
|                 | 105                       | 45.5                         | 3.38 | 54.3  | 4.34 | 59.0  | 5.40 | 59.8  | 5.52 | 60.6  | 5.55 | 63.6  | 5.60 | 65.2  | 5.65 |
|                 | 110                       | 45.5                         | 3.80 | 54.3  | 4.89 | 57.2  | 5.88 | 57.4  | 5.91 | 58.2  | 5.93 | 60.0  | 5.99 | 60.2  | 6.05 |
|                 | 115                       | 45.5                         | 4.40 | 54.3  | 5.62 | 54.8  | 6.20 | 54.8  | 6.20 | 55.0  | 6.20 | 56.1  | 6.21 | 56.4  | 6.22 |
|                 | 118                       | 44.0                         | 4.01 | 47.2  | 4.76 | 47.7  | 5.21 | 47.7  | 5.26 | 47.9  | 5.26 | 48.8  | 5.27 | 48.6  | 5.28 |
|                 | 122                       | 35.2                         | 3.04 | 37.9  | 3.62 | 38.0  | 3.97 | 38.1  | 3.98 | 38.4  | 3.98 | 39.2  | 4.00 | 39.2  | 4.01 |
| 100             | -9.9                      | 40.4                         | 1.13 | 48.2  | 1.36 | 56.0  | 1.61 | 60.0  | 1.76 | 65.9  | 1.90 | 73.9  | 2.20 | 78.1  | 2.29 |
|                 | -5                        | 40.4                         | 1.19 | 48.2  | 1.44 | 56.0  | 1.70 | 60.0  | 1.86 | 65.9  | 2.01 | 73.9  | 2.32 | 78.1  | 2.41 |
|                 | 0                         | 40.4                         | 1.24 | 48.2  | 1.50 | 56.0  | 1.77 | 60.0  | 1.93 | 65.9  | 2.09 | 73.9  | 2.41 | 78.1  | 2.51 |
|                 | 5                         | 40.4                         | 1.28 | 48.2  | 1.55 | 56.0  | 1.84 | 60.0  | 2.00 | 65.9  | 2.17 | 73.9  | 2.50 | 78.1  | 2.60 |
|                 | 10                        | 40.4                         | 1.32 | 48.2  | 1.59 | 56.0  | 1.89 | 60.0  | 2.06 | 65.9  | 2.23 | 73.9  | 2.57 | 78.1  | 2.68 |
|                 | 14                        | 40.4                         | 1.37 | 48.2  | 1.65 | 56.0  | 1.96 | 60.0  | 2.13 | 65.9  | 2.31 | 73.9  | 2.66 | 78.1  | 2.77 |
|                 | 20                        | 40.4                         | 1.41 | 48.2  | 1.71 | 56.0  | 2.02 | 60.0  | 2.19 | 65.9  | 2.38 | 73.9  | 2.74 | 78.1  | 2.85 |
|                 | 25                        | 40.4                         | 1.45 | 48.2  | 1.75 | 56.0  | 2.07 | 60.0  | 2.25 | 65.9  | 2.44 | 73.9  | 2.81 | 78.1  | 2.92 |
|                 | 30                        | 40.4                         | 1.48 | 48.2  | 1.80 | 56.0  | 2.12 | 60.0  | 2.30 | 65.9  | 2.51 | 73.9  | 2.87 | 78.1  | 2.99 |
|                 | 35                        | 40.4                         | 1.51 | 48.2  | 1.82 | 56.0  | 2.16 | 60.0  | 2.33 | 65.9  | 2.55 | 73.9  | 2.92 | 78.1  | 3.04 |
|                 | 40                        | 40.4                         | 1.53 | 48.2  | 1.85 | 56.0  | 2.19 | 60.0  | 2.37 | 65.9  | 2.59 | 73.9  | 2.96 | 78.1  | 3.08 |
|                 | 45                        | 40.4                         | 1.57 | 48.2  | 1.89 | 56.0  | 2.24 | 60.0  | 2.42 | 65.9  | 2.64 | 73.9  | 3.03 | 78.1  | 3.15 |
|                 | 50                        | 40.4                         | 1.60 | 48.2  | 1.93 | 56.0  | 2.28 | 60.0  | 2.47 | 65.9  | 2.69 | 73.9  | 3.09 | 78.1  | 3.21 |
|                 | 55                        | 40.4                         | 1.62 | 48.2  | 1.97 | 56.0  | 2.33 | 60.0  | 2.52 | 65.9  | 2.75 | 73.9  | 3.14 | 77.3  | 3.26 |
|                 | 60                        | 40.4                         | 1.68 | 48.2  | 2.04 | 56.0  | 2.42 | 60.0  | 2.62 | 65.9  | 2.85 | 73.7  | 3.24 | 75.0  | 3.32 |
|                 | 65                        | 40.4                         | 1.71 | 48.2  | 2.08 | 56.0  | 2.47 | 60.0  | 2.67 | 65.9  | 2.91 | 72.6  | 3.35 | 74.2  | 3.41 |
|                 | 70                        | 40.4                         | 1.76 | 48.2  | 2.14 | 56.0  | 2.64 | 60.0  | 2.90 | 65.9  | 3.23 | 71.2  | 3.59 | 72.6  | 3.65 |
|                 | 75                        | 40.4                         | 1.81 | 48.2  | 2.28 | 56.0  | 2.82 | 60.0  | 3.11 | 65.9  | 3.46 | 70.1  | 3.76 | 71.7  | 3.80 |
|                 | 80                        | 40.4                         | 2.05 | 48.2  | 2.60 | 56.0  | 3.23 | 60.0  | 3.56 | 65.9  | 3.97 | 68.1  | 4.08 | 69.5  | 4.14 |
|                 | 85                        | 40.4                         | 2.19 | 48.2  | 2.78 | 56.0  | 3.45 | 60.0  | 3.80 | 65.7  | 4.22 | 67.0  | 4.25 | 68.7  | 4.31 |
|                 | 90                        | 40.4                         | 2.48 | 48.2  | 3.16 | 56.0  | 3.91 | 60.0  | 4.33 | 63.5  | 4.55 | 65.1  | 4.58 | 66.5  | 4.65 |
|                 | 95                        | 40.4                         | 2.63 | 48.2  | 3.36 | 56.0  | 4.18 | 60.0  | 4.62 | 62.6  | 4.71 | 64.0  | 4.75 | 65.7  | 4.82 |
|                 | 100                       | 40.4                         | 2.84 | 48.2  | 3.62 | 56.0  | 4.52 | 58.9  | 4.85 | 61.6  | 4.95 | 63.2  | 5.00 | 64.6  | 5.07 |
|                 | 105                       | 40.4                         | 3.19 | 48.2  | 4.08 | 55.7  | 5.08 | 57.3  | 5.20 | 59.7  | 5.30 | 61.3  | 5.35 | 62.8  | 5.42 |
|                 | 110                       | 40.4                         | 3.56 | 48.2  | 4.59 | 55.0  | 5.52 | 56.3  | 5.54 | 57.4  | 5.65 | 58.3  | 5.70 | 59.4  | 5.78 |
|                 | 115                       | 40.4                         | 4.09 | 48.2  | 5.24 | 52.4  | 5.78 | 54.0  | 5.78 | 55.4  | 5.86 | 55.9  | 5.87 | 56.1  | 5.91 |
|                 | 118                       | 40.4                         | 4.13 | 42.3  | 4.91 | 45.6  | 4.86 | 47.0  | 4.90 | 48.2  | 4.97 | 48.6  | 4.98 | 48.4  | 5.02 |
|                 | 122                       | 34.6                         | 3.74 | 33.9  | 3.74 | 36.3  | 3.70 | 37.6  | 3.71 | 38.6  | 3.77 | 39.1  | 3.78 | 39.0  | 3.81 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 41: ZRUM060GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 90              | -9.9                      | 36.4                         | 1.01 | 43.4  | 1.21 | 50.6  | 1.43 | 54.1  | 1.53 | 57.6  | 1.64 | 64.6  | 1.89 | 71.5  | 2.07 |
|                 | -5                        | 36.4                         | 1.06 | 43.4  | 1.27 | 50.6  | 1.50 | 54.1  | 1.62 | 57.6  | 1.73 | 64.6  | 1.99 | 71.5  | 2.19 |
|                 | 0                         | 36.4                         | 1.11 | 43.4  | 1.33 | 50.6  | 1.56 | 54.1  | 1.68 | 57.6  | 1.80 | 64.6  | 2.07 | 71.5  | 2.27 |
|                 | 5                         | 36.4                         | 1.15 | 43.4  | 1.37 | 50.6  | 1.62 | 54.1  | 1.74 | 57.6  | 1.86 | 64.6  | 2.15 | 71.5  | 2.36 |
|                 | 10                        | 36.4                         | 1.18 | 43.4  | 1.41 | 50.6  | 1.67 | 54.1  | 1.79 | 57.6  | 1.92 | 64.6  | 2.21 | 71.5  | 2.42 |
|                 | 14                        | 36.4                         | 1.22 | 43.4  | 1.46 | 50.6  | 1.73 | 54.1  | 1.86 | 57.6  | 1.99 | 64.6  | 2.29 | 71.5  | 2.51 |
|                 | 20                        | 36.4                         | 1.27 | 43.4  | 1.52 | 50.6  | 1.79 | 54.1  | 1.93 | 57.6  | 2.07 | 64.6  | 2.37 | 71.5  | 2.61 |
|                 | 25                        | 36.4                         | 1.30 | 43.4  | 1.57 | 50.6  | 1.85 | 54.1  | 1.99 | 57.6  | 2.14 | 64.6  | 2.44 | 71.5  | 2.69 |
|                 | 30                        | 36.4                         | 1.34 | 43.4  | 1.61 | 50.6  | 1.90 | 54.1  | 2.05 | 57.6  | 2.21 | 64.6  | 2.51 | 71.5  | 2.77 |
|                 | 35                        | 36.4                         | 1.38 | 43.4  | 1.66 | 50.6  | 1.96 | 54.1  | 2.11 | 57.6  | 2.27 | 64.6  | 2.58 | 71.5  | 2.86 |
|                 | 40                        | 36.4                         | 1.42 | 43.4  | 1.71 | 50.6  | 2.02 | 54.1  | 2.18 | 57.6  | 2.34 | 64.6  | 2.66 | 71.5  | 2.94 |
|                 | 45                        | 36.4                         | 1.46 | 43.4  | 1.75 | 50.6  | 2.07 | 54.1  | 2.23 | 57.6  | 2.40 | 64.6  | 2.72 | 71.5  | 3.01 |
|                 | 50                        | 36.4                         | 1.49 | 43.4  | 1.79 | 50.6  | 2.11 | 54.1  | 2.28 | 57.6  | 2.45 | 64.6  | 2.78 | 71.5  | 3.07 |
|                 | 55                        | 36.4                         | 1.51 | 43.4  | 1.82 | 50.6  | 2.15 | 54.1  | 2.32 | 57.6  | 2.50 | 64.6  | 2.84 | 71.5  | 3.10 |
|                 | 60                        | 36.4                         | 1.56 | 43.4  | 1.89 | 50.6  | 2.23 | 54.1  | 2.41 | 57.6  | 2.60 | 64.6  | 2.95 | 70.9  | 3.14 |
|                 | 65                        | 36.4                         | 1.59 | 43.4  | 1.93 | 50.6  | 2.28 | 54.1  | 2.46 | 57.6  | 2.64 | 64.6  | 3.00 | 70.4  | 3.29 |
|                 | 70                        | 36.4                         | 1.63 | 43.4  | 1.98 | 50.6  | 2.36 | 54.1  | 2.60 | 57.6  | 2.84 | 64.6  | 3.35 | 69.1  | 3.54 |
|                 | 75                        | 36.4                         | 1.66 | 43.4  | 2.07 | 50.6  | 2.52 | 54.1  | 2.78 | 57.6  | 3.05 | 64.6  | 3.49 | 68.0  | 3.70 |
|                 | 80                        | 36.4                         | 1.86 | 43.4  | 2.35 | 50.6  | 2.88 | 54.1  | 3.18 | 57.6  | 3.48 | 64.6  | 3.86 | 66.2  | 4.02 |
|                 | 85                        | 36.4                         | 1.98 | 43.4  | 2.51 | 50.6  | 3.08 | 54.1  | 3.39 | 57.6  | 3.72 | 63.8  | 4.07 | 65.1  | 4.19 |
|                 | 90                        | 36.4                         | 2.24 | 43.4  | 2.84 | 50.6  | 3.50 | 54.1  | 3.85 | 57.6  | 4.23 | 61.9  | 4.45 | 63.2  | 4.52 |
|                 | 95                        | 36.4                         | 2.39 | 43.4  | 3.01 | 50.6  | 3.73 | 54.1  | 4.11 | 57.6  | 4.52 | 60.8  | 4.62 | 62.1  | 4.68 |
|                 | 100                       | 36.4                         | 2.46 | 43.4  | 3.14 | 50.6  | 3.88 | 54.1  | 4.27 | 57.6  | 4.62 | 60.0  | 4.82 | 61.1  | 4.87 |
|                 | 105                       | 36.4                         | 2.86 | 43.4  | 3.64 | 50.6  | 4.39 | 54.1  | 4.68 | 56.9  | 4.95 | 58.1  | 5.17 | 58.9  | 5.23 |
|                 | 110                       | 36.4                         | 3.28 | 43.4  | 4.20 | 50.6  | 4.81 | 54.1  | 5.05 | 54.6  | 5.37 | 55.4  | 5.55 | 55.8  | 5.61 |
|                 | 115                       | 36.4                         | 3.55 | 43.4  | 4.55 | 47.4  | 5.07 | 51.3  | 5.29 | 52.0  | 5.54 | 52.5  | 5.66 | 52.7  | 5.73 |
|                 | 118                       | 36.4                         | 3.77 | 42.3  | 4.91 | 41.3  | 4.26 | 44.7  | 4.49 | 45.3  | 4.70 | 45.7  | 4.80 | 45.5  | 4.86 |
|                 | 122                       | 34.6                         | 3.74 | 33.9  | 3.74 | 32.9  | 3.25 | 35.7  | 3.39 | 36.3  | 3.56 | 36.7  | 3.64 | 36.7  | 3.69 |
| 80              | -9.9                      | 32.4                         | 0.87 | 38.6  | 1.05 | 45.0  | 1.22 | 47.9  | 1.33 | 51.2  | 1.43 | 57.3  | 1.63 | 63.5  | 1.82 |
|                 | -5                        | 32.4                         | 0.92 | 38.6  | 1.11 | 45.0  | 1.29 | 47.9  | 1.40 | 51.2  | 1.51 | 57.3  | 1.72 | 63.5  | 1.92 |
|                 | 0                         | 32.4                         | 0.96 | 38.6  | 1.15 | 45.0  | 1.34 | 47.9  | 1.46 | 51.2  | 1.57 | 57.3  | 1.79 | 63.5  | 2.00 |
|                 | 5                         | 32.4                         | 0.99 | 38.6  | 1.20 | 45.0  | 1.39 | 47.9  | 1.51 | 51.2  | 1.63 | 57.3  | 1.86 | 63.5  | 2.07 |
|                 | 10                        | 32.4                         | 1.02 | 38.6  | 1.23 | 45.0  | 1.43 | 47.9  | 1.55 | 51.2  | 1.67 | 57.3  | 1.91 | 63.5  | 2.13 |
|                 | 14                        | 32.4                         | 1.06 | 38.6  | 1.27 | 45.0  | 1.48 | 47.9  | 1.61 | 51.2  | 1.73 | 57.3  | 1.98 | 63.5  | 2.21 |
|                 | 20                        | 32.4                         | 1.10 | 38.6  | 1.32 | 45.0  | 1.54 | 47.9  | 1.67 | 51.2  | 1.79 | 57.3  | 2.05 | 63.5  | 2.29 |
|                 | 25                        | 32.4                         | 1.13 | 38.6  | 1.36 | 45.0  | 1.59 | 47.9  | 1.72 | 51.2  | 1.84 | 57.3  | 2.11 | 63.5  | 2.36 |
|                 | 30                        | 32.4                         | 1.17 | 38.6  | 1.40 | 45.0  | 1.64 | 47.9  | 1.77 | 51.2  | 1.89 | 57.3  | 2.17 | 63.5  | 2.43 |
|                 | 35                        | 32.4                         | 1.20 | 38.6  | 1.44 | 45.0  | 1.69 | 47.9  | 1.82 | 51.2  | 1.95 | 57.3  | 2.23 | 63.5  | 2.50 |
|                 | 40                        | 32.4                         | 1.23 | 38.6  | 1.47 | 45.0  | 1.73 | 47.9  | 1.87 | 51.2  | 2.00 | 57.3  | 2.29 | 63.5  | 2.57 |
|                 | 45                        | 32.4                         | 1.25 | 38.6  | 1.49 | 45.0  | 1.76 | 47.9  | 1.89 | 51.2  | 2.02 | 57.3  | 2.32 | 63.5  | 2.60 |
|                 | 50                        | 32.4                         | 1.26 | 38.6  | 1.51 | 45.0  | 1.78 | 47.9  | 1.92 | 51.2  | 2.05 | 57.3  | 2.35 | 63.5  | 2.64 |
|                 | 55                        | 32.4                         | 1.28 | 38.6  | 1.54 | 45.0  | 1.81 | 47.9  | 1.95 | 51.2  | 2.09 | 57.3  | 2.40 | 63.5  | 2.68 |
|                 | 60                        | 32.4                         | 1.33 | 38.6  | 1.59 | 45.0  | 1.87 | 47.9  | 2.02 | 51.2  | 2.18 | 57.3  | 2.48 | 63.5  | 2.79 |
|                 | 65                        | 32.4                         | 1.35 | 38.6  | 1.62 | 45.0  | 1.91 | 47.9  | 2.06 | 51.2  | 2.22 | 57.3  | 2.53 | 63.5  | 2.86 |
|                 | 70                        | 32.4                         | 1.39 | 38.6  | 1.67 | 45.0  | 1.97 | 47.9  | 2.12 | 51.2  | 2.31 | 57.3  | 2.73 | 63.5  | 3.16 |
|                 | 75                        | 32.4                         | 1.41 | 38.6  | 1.70 | 45.0  | 2.07 | 47.9  | 2.27 | 51.2  | 2.46 | 57.3  | 2.90 | 63.5  | 3.33 |
|                 | 80                        | 32.4                         | 1.55 | 38.6  | 1.93 | 45.0  | 2.35 | 47.9  | 2.57 | 51.2  | 2.81 | 57.3  | 3.34 | 63.5  | 3.72 |
|                 | 85                        | 32.4                         | 1.65 | 38.6  | 2.05 | 45.0  | 2.51 | 47.9  | 2.75 | 51.2  | 3.01 | 57.3  | 3.55 | 63.5  | 3.82 |
|                 | 90                        | 32.4                         | 1.85 | 38.6  | 2.33 | 45.0  | 2.84 | 47.9  | 3.12 | 51.2  | 3.42 | 57.3  | 3.91 | 62.4  | 4.04 |
|                 | 95                        | 32.4                         | 1.97 | 38.6  | 2.46 | 45.0  | 3.03 | 47.9  | 3.31 | 51.2  | 3.64 | 57.3  | 4.04 | 61.1  | 4.15 |
|                 | 100                       | 32.4                         | 2.12 | 38.6  | 2.66 | 45.0  | 3.27 | 47.9  | 3.55 | 51.2  | 3.78 | 57.3  | 4.21 | 59.7  | 4.29 |
|                 | 105                       | 32.4                         | 2.42 | 38.6  | 3.04 | 45.0  | 3.64 | 47.9  | 3.81 | 51.2  | 4.06 | 56.6  | 4.38 | 58.0  | 4.50 |
|                 | 110                       | 32.4                         | 2.75 | 38.6  | 3.47 | 45.0  | 3.86 | 47.9  | 4.07 | 51.2  | 4.37 | 54.6  | 4.54 | 54.9  | 4.73 |
|                 | 115                       | 32.4                         | 2.94 | 38.6  | 3.70 | 45.0  | 3.99 | 47.9  | 4.27 | 47.9  | 4.47 | 48.2  | 4.64 | 48.2  | 4.92 |
|                 | 118                       | 32.4                         | 3.12 | 38.6  | 3.94 | 41.3  | 4.26 | 42.1  | 4.06 | 41.7  | 3.79 | 42.0  | 3.94 | 41.6  | 4.17 |
|                 | 122                       | 32.4                         | 3.37 | 34.0  | 3.71 | 32.9  | 3.25 | 33.6  | 3.07 | 33.4  | 2.87 | 33.7  | 2.98 | 33.5  | 3.17 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

# COOLING CAPACITY

ZRUM060GSS0



Table 42: ZRUM060GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 70              | -9.9                      | 28.4                         | 0.77 | 33.8  | 0.92 | 39.4  | 1.08 | 42.1  | 1.15 | 44.7  | 1.23 | 50.1  | 1.41 | 55.7  | 1.58 |
|                 | -5                        | 28.4                         | 0.81 | 33.8  | 0.97 | 39.4  | 1.14 | 42.1  | 1.22 | 44.7  | 1.30 | 50.1  | 1.49 | 55.7  | 1.66 |
|                 | 0                         | 28.4                         | 0.85 | 33.8  | 1.00 | 39.4  | 1.18 | 42.1  | 1.27 | 44.7  | 1.35 | 50.1  | 1.54 | 55.7  | 1.73 |
|                 | 5                         | 28.4                         | 0.88 | 33.8  | 1.04 | 39.4  | 1.23 | 42.1  | 1.31 | 44.7  | 1.40 | 50.1  | 1.60 | 55.7  | 1.79 |
|                 | 10                        | 28.4                         | 0.90 | 33.8  | 1.07 | 39.4  | 1.26 | 42.1  | 1.35 | 44.7  | 1.44 | 50.1  | 1.65 | 55.7  | 1.84 |
|                 | 14                        | 28.4                         | 0.93 | 33.8  | 1.11 | 39.4  | 1.31 | 42.1  | 1.40 | 44.7  | 1.49 | 50.1  | 1.71 | 55.7  | 1.91 |
|                 | 20                        | 28.4                         | 0.97 | 33.8  | 1.15 | 39.4  | 1.35 | 42.1  | 1.44 | 44.7  | 1.54 | 50.1  | 1.76 | 55.7  | 1.97 |
|                 | 25                        | 28.4                         | 0.99 | 33.8  | 1.18 | 39.4  | 1.38 | 42.1  | 1.48 | 44.7  | 1.58 | 50.1  | 1.81 | 55.7  | 2.03 |
|                 | 30                        | 28.4                         | 1.02 | 33.8  | 1.21 | 39.4  | 1.42 | 42.1  | 1.52 | 44.7  | 1.63 | 50.1  | 1.85 | 55.7  | 2.08 |
|                 | 35                        | 28.4                         | 1.05 | 33.8  | 1.24 | 39.4  | 1.46 | 42.1  | 1.56 | 44.7  | 1.67 | 50.1  | 1.90 | 55.7  | 2.14 |
|                 | 40                        | 28.4                         | 1.07 | 33.8  | 1.27 | 39.4  | 1.49 | 42.1  | 1.60 | 44.7  | 1.71 | 50.1  | 1.95 | 55.7  | 2.19 |
|                 | 45                        | 28.4                         | 1.09 | 33.8  | 1.29 | 39.4  | 1.52 | 42.1  | 1.63 | 44.7  | 1.74 | 50.1  | 1.98 | 55.7  | 2.23 |
|                 | 50                        | 28.4                         | 1.11 | 33.8  | 1.32 | 39.4  | 1.54 | 42.1  | 1.66 | 44.7  | 1.77 | 50.1  | 2.01 | 55.7  | 2.27 |
|                 | 55                        | 28.4                         | 1.13 | 33.8  | 1.34 | 39.4  | 1.57 | 42.1  | 1.68 | 44.7  | 1.80 | 50.1  | 2.05 | 55.7  | 2.31 |
|                 | 60                        | 28.4                         | 1.16 | 33.8  | 1.39 | 39.4  | 1.62 | 42.1  | 1.75 | 44.7  | 1.87 | 50.1  | 2.13 | 55.7  | 2.40 |
|                 | 65                        | 28.4                         | 1.18 | 33.8  | 1.41 | 39.4  | 1.65 | 42.1  | 1.78 | 44.7  | 1.91 | 50.1  | 2.17 | 55.7  | 2.44 |
|                 | 70                        | 28.4                         | 1.21 | 33.8  | 1.45 | 39.4  | 1.70 | 42.1  | 1.83 | 44.7  | 1.96 | 50.1  | 2.25 | 55.7  | 2.59 |
|                 | 75                        | 28.4                         | 1.23 | 33.8  | 1.48 | 39.4  | 1.73 | 42.1  | 1.89 | 44.7  | 2.05 | 50.1  | 2.40 | 55.7  | 2.75 |
|                 | 80                        | 28.4                         | 1.33 | 33.8  | 1.63 | 39.4  | 1.97 | 42.1  | 2.15 | 44.7  | 2.33 | 50.1  | 2.65 | 55.7  | 3.04 |
|                 | 85                        | 28.4                         | 1.41 | 33.8  | 1.73 | 39.4  | 2.10 | 42.1  | 2.29 | 44.7  | 2.51 | 50.1  | 2.83 | 55.7  | 3.17 |
|                 | 90                        | 28.4                         | 1.58 | 33.8  | 1.96 | 39.4  | 2.37 | 42.1  | 2.59 | 44.7  | 2.84 | 50.1  | 3.15 | 55.7  | 3.44 |
|                 | 95                        | 28.4                         | 1.67 | 33.8  | 2.08 | 39.4  | 2.53 | 42.1  | 2.77 | 44.7  | 3.01 | 50.1  | 3.31 | 55.7  | 3.55 |
|                 | 100                       | 28.4                         | 1.81 | 33.8  | 2.25 | 39.4  | 2.73 | 42.1  | 2.98 | 44.7  | 3.10 | 50.1  | 3.47 | 55.7  | 3.65 |
|                 | 105                       | 28.4                         | 2.05 | 33.8  | 2.56 | 39.4  | 3.01 | 42.1  | 3.18 | 44.7  | 3.37 | 50.1  | 3.65 | 55.7  | 3.86 |
|                 | 110                       | 28.4                         | 2.31 | 33.8  | 2.90 | 39.4  | 3.18 | 42.1  | 3.38 | 44.7  | 3.65 | 50.1  | 3.81 | 54.1  | 4.15 |
|                 | 115                       | 28.4                         | 2.48 | 33.8  | 3.09 | 39.4  | 3.29 | 42.1  | 3.57 | 44.7  | 3.76 | 50.1  | 3.92 | 51.0  | 4.42 |
|                 | 118                       | 28.4                         | 2.64 | 33.8  | 3.29 | 39.4  | 3.50 | 42.1  | 3.78 | 40.7  | 3.76 | 42.0  | 3.33 | 41.6  | 3.75 |
|                 | 122                       | 28.4                         | 2.84 | 33.8  | 3.56 | 35.1  | 3.34 | 33.6  | 3.11 | 32.6  | 2.85 | 33.7  | 2.52 | 33.5  | 2.85 |
| 60              | -9.9                      | 24.4                         | 0.67 | 28.9  | 0.78 | 33.8  | 0.91 | 35.9  | 0.97 | 38.3  | 1.05 | 43.1  | 1.19 | 47.7  | 1.32 |
|                 | -5                        | 24.4                         | 0.70 | 28.9  | 0.82 | 33.8  | 0.96 | 35.9  | 1.03 | 38.3  | 1.10 | 43.1  | 1.25 | 47.7  | 1.40 |
|                 | 0                         | 24.4                         | 0.73 | 28.9  | 0.85 | 33.8  | 1.00 | 35.9  | 1.07 | 38.3  | 1.15 | 43.1  | 1.30 | 47.7  | 1.45 |
|                 | 5                         | 24.4                         | 0.76 | 28.9  | 0.88 | 33.8  | 1.03 | 35.9  | 1.11 | 38.3  | 1.19 | 43.1  | 1.35 | 47.7  | 1.51 |
|                 | 10                        | 24.4                         | 0.78 | 28.9  | 0.91 | 33.8  | 1.06 | 35.9  | 1.14 | 38.3  | 1.23 | 43.1  | 1.39 | 47.7  | 1.55 |
|                 | 14                        | 24.4                         | 0.81 | 28.9  | 0.94 | 33.8  | 1.10 | 35.9  | 1.18 | 38.3  | 1.27 | 43.1  | 1.44 | 47.7  | 1.61 |
|                 | 20                        | 24.4                         | 0.83 | 28.9  | 0.97 | 33.8  | 1.14 | 35.9  | 1.22 | 38.3  | 1.31 | 43.1  | 1.48 | 47.7  | 1.66 |
|                 | 25                        | 24.4                         | 0.85 | 28.9  | 1.00 | 33.8  | 1.17 | 35.9  | 1.25 | 38.3  | 1.34 | 43.1  | 1.52 | 47.7  | 1.71 |
|                 | 30                        | 24.4                         | 0.88 | 28.9  | 1.03 | 33.8  | 1.20 | 35.9  | 1.29 | 38.3  | 1.38 | 43.1  | 1.56 | 47.7  | 1.76 |
|                 | 35                        | 24.4                         | 0.90 | 28.9  | 1.06 | 33.8  | 1.23 | 35.9  | 1.32 | 38.3  | 1.41 | 43.1  | 1.60 | 47.7  | 1.80 |
|                 | 40                        | 24.4                         | 0.92 | 28.9  | 1.08 | 33.8  | 1.26 | 35.9  | 1.36 | 38.3  | 1.45 | 43.1  | 1.65 | 47.7  | 1.85 |
|                 | 45                        | 24.4                         | 0.93 | 28.9  | 1.09 | 33.8  | 1.27 | 35.9  | 1.37 | 38.3  | 1.46 | 43.1  | 1.66 | 47.7  | 1.86 |
|                 | 50                        | 24.4                         | 0.94 | 28.9  | 1.10 | 33.8  | 1.28 | 35.9  | 1.38 | 38.3  | 1.48 | 43.1  | 1.67 | 47.7  | 1.88 |
|                 | 55                        | 24.4                         | 0.95 | 28.9  | 1.12 | 33.8  | 1.31 | 35.9  | 1.41 | 38.3  | 1.50 | 43.1  | 1.71 | 47.7  | 1.91 |
|                 | 60                        | 24.4                         | 0.98 | 28.9  | 1.16 | 33.8  | 1.35 | 35.9  | 1.46 | 38.3  | 1.56 | 43.1  | 1.76 | 47.7  | 1.99 |
|                 | 65                        | 24.4                         | 0.99 | 28.9  | 1.18 | 33.8  | 1.38 | 35.9  | 1.48 | 38.3  | 1.58 | 43.1  | 1.80 | 47.7  | 2.03 |
|                 | 70                        | 24.4                         | 1.02 | 28.9  | 1.21 | 33.8  | 1.42 | 35.9  | 1.52 | 38.3  | 1.63 | 43.1  | 1.85 | 47.7  | 2.10 |
|                 | 75                        | 24.4                         | 1.04 | 28.9  | 1.23 | 33.8  | 1.44 | 35.9  | 1.55 | 38.3  | 1.68 | 43.1  | 1.96 | 47.7  | 2.24 |
|                 | 80                        | 24.4                         | 1.10 | 28.9  | 1.35 | 33.8  | 1.62 | 35.9  | 1.76 | 38.3  | 1.91 | 43.1  | 2.20 | 47.7  | 2.53 |
|                 | 85                        | 24.4                         | 1.17 | 28.9  | 1.43 | 33.8  | 1.72 | 35.9  | 1.88 | 38.3  | 2.05 | 43.1  | 2.32 | 47.7  | 2.61 |
|                 | 90                        | 24.4                         | 1.32 | 28.9  | 1.62 | 33.8  | 1.94 | 35.9  | 2.12 | 38.3  | 2.30 | 43.1  | 2.59 | 47.7  | 2.85 |
|                 | 95                        | 24.4                         | 1.39 | 28.9  | 1.71 | 33.8  | 2.07 | 35.9  | 2.27 | 38.3  | 2.43 | 43.1  | 2.71 | 47.7  | 3.00 |
|                 | 100                       | 24.4                         | 1.50 | 28.9  | 1.84 | 33.8  | 2.23 | 35.9  | 2.44 | 38.3  | 2.54 | 43.1  | 2.87 | 47.7  | 3.13 |
|                 | 105                       | 24.4                         | 1.70 | 28.9  | 2.10 | 33.8  | 2.46 | 35.9  | 2.60 | 38.3  | 2.77 | 43.1  | 3.05 | 47.7  | 3.41 |
|                 | 110                       | 24.4                         | 1.91 | 28.9  | 2.38 | 33.8  | 2.65 | 35.9  | 2.76 | 38.3  | 2.99 | 43.1  | 3.26 | 47.7  | 3.72 |
|                 | 115                       | 24.4                         | 2.05 | 28.9  | 2.54 | 33.8  | 2.76 | 35.9  | 2.92 | 38.3  | 3.10 | 43.1  | 3.45 | 47.7  | 3.98 |
|                 | 118                       | 24.4                         | 2.17 | 28.9  | 2.69 | 33.8  | 2.93 | 35.9  | 3.10 | 38.3  | 3.30 | 42.0  | 3.33 | 41.6  | 3.75 |
|                 | 122                       | 24.4                         | 2.34 | 28.9  | 2.91 | 33.8  | 3.17 | 33.5  | 3.15 | 32.4  | 2.91 | 33.7  | 2.52 | 33.5  | 2.85 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 43: ZRUM060GSS0 Cooling Capacities, continued.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 50              | -9.9                      | 20.3                         | 0.57 | 24.1  | 0.68 | 28.1  | 0.76 | 30.0  | 0.81 | 31.9  | 0.88 | 35.9  | 0.97 | 39.6  | 1.08 |
|                 | -5                        | 20.3                         | 0.61 | 24.1  | 0.71 | 28.1  | 0.80 | 30.0  | 0.86 | 31.9  | 0.93 | 35.9  | 1.03 | 39.6  | 1.14 |
|                 | 0                         | 20.3                         | 0.63 | 24.1  | 0.74 | 28.1  | 0.83 | 30.0  | 0.89 | 31.9  | 0.96 | 35.9  | 1.07 | 39.6  | 1.18 |
|                 | 5                         | 20.3                         | 0.65 | 24.1  | 0.77 | 28.1  | 0.86 | 30.0  | 0.93 | 31.9  | 1.00 | 35.9  | 1.11 | 39.6  | 1.23 |
|                 | 10                        | 20.3                         | 0.67 | 24.1  | 0.79 | 28.1  | 0.88 | 30.0  | 0.95 | 31.9  | 1.03 | 35.9  | 1.14 | 39.6  | 1.26 |
|                 | 14                        | 20.3                         | 0.70 | 24.1  | 0.82 | 28.1  | 0.92 | 30.0  | 0.99 | 31.9  | 1.06 | 35.9  | 1.18 | 39.6  | 1.31 |
|                 | 20                        | 20.3                         | 0.72 | 24.1  | 0.84 | 28.1  | 0.95 | 30.0  | 1.02 | 31.9  | 1.10 | 35.9  | 1.22 | 39.6  | 1.36 |
|                 | 25                        | 20.3                         | 0.74 | 24.1  | 0.87 | 28.1  | 0.99 | 30.0  | 1.05 | 31.9  | 1.13 | 35.9  | 1.26 | 39.6  | 1.40 |
|                 | 30                        | 20.3                         | 0.77 | 24.1  | 0.89 | 28.1  | 1.02 | 30.0  | 1.08 | 31.9  | 1.16 | 35.9  | 1.29 | 39.6  | 1.44 |
|                 | 35                        | 20.3                         | 0.79 | 24.1  | 0.91 | 28.1  | 1.04 | 30.0  | 1.11 | 31.9  | 1.19 | 35.9  | 1.33 | 39.6  | 1.48 |
|                 | 40                        | 20.3                         | 0.81 | 24.1  | 0.93 | 28.1  | 1.07 | 30.0  | 1.14 | 31.9  | 1.22 | 35.9  | 1.36 | 39.6  | 1.52 |
|                 | 45                        | 20.3                         | 0.82 | 24.1  | 0.95 | 28.1  | 1.09 | 30.0  | 1.16 | 31.9  | 1.23 | 35.9  | 1.38 | 39.6  | 1.54 |
|                 | 50                        | 20.3                         | 0.83 | 24.1  | 0.96 | 28.1  | 1.10 | 30.0  | 1.17 | 31.9  | 1.25 | 35.9  | 1.40 | 39.6  | 1.56 |
|                 | 55                        | 20.3                         | 0.85 | 24.1  | 0.98 | 28.1  | 1.12 | 30.0  | 1.19 | 31.9  | 1.27 | 35.9  | 1.43 | 39.6  | 1.59 |
|                 | 60                        | 20.3                         | 0.86 | 24.1  | 1.01 | 28.1  | 1.16 | 30.0  | 1.23 | 31.9  | 1.31 | 35.9  | 1.47 | 39.6  | 1.65 |
|                 | 65                        | 20.3                         | 0.87 | 24.1  | 1.02 | 28.1  | 1.17 | 30.0  | 1.25 | 31.9  | 1.33 | 35.9  | 1.50 | 39.6  | 1.68 |
|                 | 70                        | 20.3                         | 0.90 | 24.1  | 1.04 | 28.1  | 1.20 | 30.0  | 1.29 | 31.9  | 1.37 | 35.9  | 1.54 | 39.6  | 1.73 |
|                 | 75                        | 20.3                         | 0.91 | 24.1  | 1.06 | 28.1  | 1.23 | 30.0  | 1.30 | 31.9  | 1.39 | 35.9  | 1.57 | 39.6  | 1.76 |
|                 | 80                        | 20.3                         | 0.93 | 24.1  | 1.12 | 28.1  | 1.31 | 30.0  | 1.42 | 31.9  | 1.53 | 35.9  | 1.75 | 39.6  | 2.00 |
|                 | 85                        | 20.3                         | 1.00 | 24.1  | 1.18 | 28.1  | 1.39 | 30.0  | 1.51 | 31.9  | 1.62 | 35.9  | 1.87 | 39.6  | 2.13 |
|                 | 90                        | 20.3                         | 1.11 | 24.1  | 1.32 | 28.1  | 1.57 | 30.0  | 1.69 | 31.9  | 1.83 | 35.9  | 2.11 | 39.6  | 2.42 |
|                 | 95                        | 20.3                         | 1.17 | 24.1  | 1.40 | 28.1  | 1.66 | 30.0  | 1.80 | 31.9  | 1.94 | 35.9  | 2.24 | 39.6  | 2.57 |
|                 | 100                       | 20.3                         | 1.23 | 24.1  | 1.48 | 28.1  | 1.75 | 30.0  | 1.90 | 31.9  | 2.05 | 35.9  | 2.38 | 39.6  | 2.72 |
|                 | 105                       | 20.3                         | 1.35 | 24.1  | 1.64 | 28.1  | 1.94 | 30.0  | 2.10 | 31.9  | 2.27 | 35.9  | 2.64 | 39.6  | 3.03 |
|                 | 110                       | 20.3                         | 1.49 | 24.1  | 1.81 | 28.1  | 2.15 | 30.0  | 2.34 | 31.9  | 2.53 | 35.9  | 2.94 | 39.6  | 3.39 |
|                 | 115                       | 20.3                         | 1.60 | 24.1  | 1.94 | 28.1  | 2.31 | 30.0  | 2.51 | 31.9  | 2.72 | 35.9  | 3.17 | 39.6  | 3.65 |
|                 | 118                       | 20.3                         | 1.72 | 24.1  | 2.10 | 28.1  | 2.51 | 30.0  | 2.73 | 31.9  | 2.97 | 35.9  | 3.33 | 39.6  | 3.75 |
|                 | 122                       | 20.3                         | 1.90 | 24.1  | 2.33 | 28.1  | 2.78 | 30.0  | 3.03 | 31.9  | 2.91 | 33.7  | 2.52 | 33.5  | 2.85 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).  
Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.  
The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

# MAXIMUM COOLING CAPACITY

ZRUN024GSS0



Table 44: ZRUN024GSS0 Maximum Cooling Capacities.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 100%            | -9.9                      | 17.9                         | 0.45 | 21.3  | 0.55 | 24.7  | 0.65 | 26.5  | 0.71 | 29.1  | 0.77 | 32.7  | 0.88 | 34.5  | 0.92 |
|                 | -4                        | 17.9                         | 0.48 | 21.3  | 0.58 | 24.7  | 0.69 | 26.5  | 0.75 | 29.1  | 0.81 | 32.7  | 0.93 | 34.5  | 0.97 |
|                 | 0                         | 17.9                         | 0.50 | 21.3  | 0.60 | 24.7  | 0.71 | 26.5  | 0.78 | 29.1  | 0.84 | 32.7  | 0.97 | 34.5  | 1.01 |
|                 | 5                         | 17.9                         | 0.52 | 21.3  | 0.62 | 24.7  | 0.74 | 26.5  | 0.81 | 29.1  | 0.87 | 32.7  | 1.01 | 34.5  | 1.05 |
|                 | 10                        | 17.9                         | 0.53 | 21.3  | 0.64 | 24.7  | 0.76 | 26.5  | 0.83 | 29.1  | 0.90 | 32.7  | 1.04 | 34.5  | 1.08 |
|                 | 14                        | 17.9                         | 0.55 | 21.3  | 0.67 | 24.7  | 0.79 | 26.5  | 0.86 | 29.1  | 0.93 | 32.7  | 1.07 | 34.5  | 1.12 |
|                 | 20                        | 17.9                         | 0.57 | 21.3  | 0.69 | 24.7  | 0.81 | 26.5  | 0.88 | 29.1  | 0.96 | 32.7  | 1.10 | 34.5  | 1.15 |
|                 | 25                        | 17.9                         | 0.58 | 21.3  | 0.70 | 24.7  | 0.83 | 26.5  | 0.90 | 29.1  | 0.98 | 32.7  | 1.13 | 34.5  | 1.18 |
|                 | 30                        | 17.9                         | 0.60 | 21.3  | 0.72 | 24.7  | 0.85 | 26.5  | 0.92 | 29.1  | 1.01 | 32.7  | 1.16 | 34.5  | 1.20 |
|                 | 35                        | 17.9                         | 0.61 | 21.3  | 0.73 | 24.7  | 0.87 | 26.5  | 0.94 | 29.1  | 1.02 | 32.7  | 1.18 | 34.5  | 1.22 |
|                 | 40                        | 17.9                         | 0.62 | 21.3  | 0.75 | 24.7  | 0.88 | 26.5  | 0.95 | 29.1  | 1.04 | 32.7  | 1.19 | 34.5  | 1.24 |
|                 | 45                        | 17.9                         | 0.63 | 21.3  | 0.76 | 24.7  | 0.90 | 26.5  | 0.97 | 29.1  | 1.06 | 32.7  | 1.22 | 34.5  | 1.27 |
|                 | 50                        | 17.9                         | 0.64 | 21.3  | 0.78 | 24.7  | 0.92 | 26.5  | 0.99 | 29.1  | 1.08 | 32.7  | 1.24 | 34.5  | 1.29 |
|                 | 55                        | 17.9                         | 0.65 | 21.3  | 0.79 | 24.7  | 0.94 | 26.5  | 1.02 | 29.1  | 1.11 | 32.7  | 1.26 | 34.1  | 1.31 |
|                 | 60                        | 17.9                         | 0.67 | 21.3  | 0.82 | 24.7  | 0.98 | 26.5  | 1.05 | 29.1  | 1.15 | 32.5  | 1.30 | 33.1  | 1.34 |
|                 | 65                        | 17.9                         | 0.69 | 21.3  | 0.84 | 24.7  | 0.99 | 26.5  | 1.08 | 29.1  | 1.17 | 32.0  | 1.35 | 32.8  | 1.37 |
|                 | 70                        | 17.9                         | 0.71 | 21.3  | 0.86 | 24.7  | 1.06 | 26.5  | 1.17 | 29.1  | 1.30 | 31.4  | 1.44 | 32.0  | 1.47 |
|                 | 75                        | 17.9                         | 0.73 | 21.3  | 0.92 | 24.7  | 1.14 | 26.5  | 1.25 | 29.1  | 1.39 | 31.0  | 1.51 | 31.7  | 1.53 |
|                 | 80                        | 17.9                         | 0.83 | 21.3  | 1.05 | 24.7  | 1.30 | 26.5  | 1.43 | 29.1  | 1.60 | 30.1  | 1.64 | 30.7  | 1.67 |
|                 | 85                        | 17.9                         | 0.88 | 21.3  | 1.12 | 24.7  | 1.39 | 26.5  | 1.53 | 29.0  | 1.70 | 29.6  | 1.71 | 30.3  | 1.73 |
|                 | 90                        | 17.9                         | 1.00 | 21.3  | 1.27 | 24.7  | 1.58 | 26.5  | 1.74 | 28.0  | 1.83 | 28.8  | 1.84 | 29.4  | 1.87 |
|                 | 95                        | 17.9                         | 1.06 | 21.3  | 1.35 | 24.7  | 1.68 | 26.5  | 1.86 | 27.7  | 1.90 | 28.3  | 1.91 | 29.0  | 1.94 |
|                 | 100                       | 17.9                         | 1.14 | 21.3  | 1.46 | 24.7  | 1.82 | 26.0  | 1.95 | 27.2  | 1.99 | 27.9  | 2.01 | 28.5  | 2.04 |
|                 | 105                       | 17.9                         | 1.28 | 21.3  | 1.64 | 24.6  | 2.05 | 25.3  | 2.09 | 26.4  | 2.14 | 27.1  | 2.15 | 27.7  | 2.18 |
|                 | 110                       | 17.9                         | 1.43 | 21.3  | 1.85 | 24.3  | 2.22 | 24.9  | 2.23 | 25.4  | 2.27 | 25.8  | 2.30 | 26.2  | 2.33 |
|                 | 115                       | 17.9                         | 1.65 | 21.3  | 2.11 | 23.1  | 2.33 | 23.9  | 2.33 | 24.4  | 2.36 | 24.7  | 2.36 | 24.8  | 2.38 |
|                 | 118                       | 17.9                         | 1.66 | 18.7  | 1.98 | 20.1  | 1.96 | 20.8  | 1.97 | 21.3  | 2.00 | 21.5  | 2.01 | 21.4  | 2.02 |
|                 | 122                       | 15.3                         | 1.51 | 15.0  | 1.50 | 16.1  | 1.49 | 16.6  | 1.49 | 17.0  | 1.52 | 17.3  | 1.52 | 17.2  | 1.53 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 45: ZRUM036GSS0 Maximum Cooling Capacities.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 100%            | -9.9                      | 26.2                         | 0.63 | 31.3  | 0.76 | 36.3  | 0.90 | 38.9  | 0.98 | 42.8  | 1.06 | 47.9  | 1.23 | 50.6  | 1.28 |
|                 | -4                        | 26.2                         | 0.66 | 31.3  | 0.80 | 36.3  | 0.95 | 38.9  | 1.04 | 42.8  | 1.12 | 47.9  | 1.29 | 50.6  | 1.35 |
|                 | 0                         | 26.2                         | 0.69 | 31.3  | 0.83 | 36.3  | 0.99 | 38.9  | 1.08 | 42.8  | 1.17 | 47.9  | 1.35 | 50.6  | 1.40 |
|                 | 5                         | 26.2                         | 0.72 | 31.3  | 0.86 | 36.3  | 1.03 | 38.9  | 1.12 | 42.8  | 1.21 | 47.9  | 1.39 | 50.6  | 1.45 |
|                 | 10                        | 26.2                         | 0.74 | 31.3  | 0.89 | 36.3  | 1.05 | 38.9  | 1.15 | 42.8  | 1.24 | 47.9  | 1.43 | 50.6  | 1.49 |
|                 | 14                        | 26.2                         | 0.76 | 31.3  | 0.92 | 36.3  | 1.09 | 38.9  | 1.19 | 42.8  | 1.29 | 47.9  | 1.49 | 50.6  | 1.55 |
|                 | 20                        | 26.2                         | 0.79 | 31.3  | 0.95 | 36.3  | 1.13 | 38.9  | 1.22 | 42.8  | 1.33 | 47.9  | 1.53 | 50.6  | 1.59 |
|                 | 25                        | 26.2                         | 0.81 | 31.3  | 0.98 | 36.3  | 1.16 | 38.9  | 1.25 | 42.8  | 1.36 | 47.9  | 1.57 | 50.6  | 1.63 |
|                 | 30                        | 26.2                         | 0.83 | 31.3  | 1.00 | 36.3  | 1.19 | 38.9  | 1.28 | 42.8  | 1.40 | 47.9  | 1.60 | 50.6  | 1.67 |
|                 | 35                        | 26.2                         | 0.84 | 31.3  | 1.02 | 36.3  | 1.20 | 38.9  | 1.30 | 42.8  | 1.42 | 47.9  | 1.63 | 50.6  | 1.69 |
|                 | 40                        | 26.2                         | 0.85 | 31.3  | 1.03 | 36.3  | 1.22 | 38.9  | 1.32 | 42.8  | 1.44 | 47.9  | 1.65 | 50.6  | 1.72 |
|                 | 45                        | 26.2                         | 0.87 | 31.3  | 1.06 | 36.3  | 1.25 | 38.9  | 1.35 | 42.8  | 1.47 | 47.9  | 1.69 | 50.6  | 1.76 |
|                 | 50                        | 26.2                         | 0.89 | 31.3  | 1.08 | 36.3  | 1.27 | 38.9  | 1.38 | 42.8  | 1.50 | 47.9  | 1.72 | 50.6  | 1.79 |
|                 | 55                        | 26.2                         | 0.91 | 31.3  | 1.10 | 36.3  | 1.30 | 38.9  | 1.41 | 42.8  | 1.53 | 47.9  | 1.75 | 50.1  | 1.82 |
|                 | 60                        | 26.2                         | 0.93 | 31.3  | 1.14 | 36.3  | 1.35 | 38.9  | 1.46 | 42.8  | 1.59 | 47.8  | 1.81 | 48.7  | 1.85 |
|                 | 65                        | 26.2                         | 0.95 | 31.3  | 1.16 | 36.3  | 1.38 | 38.9  | 1.49 | 42.8  | 1.62 | 47.0  | 1.87 | 48.1  | 1.90 |
|                 | 70                        | 26.2                         | 0.98 | 31.3  | 1.20 | 36.3  | 1.47 | 38.9  | 1.62 | 42.8  | 1.80 | 46.1  | 2.00 | 47.0  | 2.04 |
|                 | 75                        | 26.2                         | 1.01 | 31.3  | 1.27 | 36.3  | 1.57 | 38.9  | 1.74 | 42.8  | 1.93 | 45.4  | 2.10 | 46.5  | 2.12 |
|                 | 80                        | 26.2                         | 1.15 | 31.3  | 1.45 | 36.3  | 1.80 | 38.9  | 1.99 | 42.8  | 2.22 | 44.2  | 2.28 | 45.1  | 2.31 |
|                 | 85                        | 26.2                         | 1.22 | 31.3  | 1.55 | 36.3  | 1.92 | 38.9  | 2.12 | 42.6  | 2.35 | 43.5  | 2.37 | 44.5  | 2.40 |
|                 | 90                        | 26.2                         | 1.38 | 31.3  | 1.76 | 36.3  | 2.18 | 38.9  | 2.42 | 41.1  | 2.54 | 42.2  | 2.56 | 43.1  | 2.59 |
|                 | 95                        | 26.2                         | 1.47 | 31.3  | 1.87 | 36.3  | 2.33 | 38.9  | 2.58 | 40.6  | 2.63 | 41.5  | 2.65 | 42.6  | 2.69 |
|                 | 100                       | 26.2                         | 1.58 | 31.3  | 2.02 | 36.3  | 2.52 | 38.2  | 2.71 | 39.9  | 2.76 | 41.0  | 2.79 | 41.9  | 2.83 |
|                 | 105                       | 26.2                         | 1.78 | 31.3  | 2.28 | 36.1  | 2.84 | 37.1  | 2.90 | 38.7  | 2.96 | 39.7  | 2.99 | 40.7  | 3.03 |
|                 | 110                       | 26.2                         | 1.99 | 31.3  | 2.56 | 35.7  | 3.08 | 36.5  | 3.09 | 37.2  | 3.15 | 37.8  | 3.18 | 38.5  | 3.23 |
|                 | 115                       | 26.2                         | 2.28 | 31.3  | 2.92 | 34.0  | 3.22 | 35.0  | 3.22 | 35.9  | 3.27 | 36.2  | 3.28 | 36.4  | 3.30 |
|                 | 118                       | 26.2                         | 2.30 | 27.4  | 2.74 | 29.6  | 2.71 | 30.5  | 2.73 | 31.2  | 2.78 | 31.5  | 2.78 | 31.4  | 2.80 |
|                 | 122                       | 22.4                         | 2.09 | 22.0  | 2.08 | 23.6  | 2.06 | 24.4  | 2.07 | 25.0  | 2.10 | 25.3  | 2.11 | 25.3  | 2.13 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).  
Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.  
The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).



# MAXIMUM COOLING CAPACITY

ZRUM048GSS0



Table 46: ZRUM048GSS0 Maximum Cooling Capacities.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 100%            | -9.9                      | 34.6                         | 0.95 | 41.3  | 1.15 | 48.0  | 1.36 | 51.4  | 1.49 | 56.5  | 1.61 | 63.3  | 1.85 | 66.9  | 1.93 |
|                 | -4                        | 34.6                         | 1.01 | 41.3  | 1.21 | 48.0  | 1.44 | 51.4  | 1.57 | 56.5  | 1.70 | 63.3  | 1.96 | 66.9  | 2.04 |
|                 | 0                         | 34.6                         | 1.05 | 41.3  | 1.26 | 48.0  | 1.50 | 51.4  | 1.63 | 56.5  | 1.76 | 63.3  | 2.04 | 66.9  | 2.12 |
|                 | 5                         | 34.6                         | 1.08 | 41.3  | 1.31 | 48.0  | 1.55 | 51.4  | 1.69 | 56.5  | 1.83 | 63.3  | 2.11 | 66.9  | 2.20 |
|                 | 10                        | 34.6                         | 1.12 | 41.3  | 1.35 | 48.0  | 1.60 | 51.4  | 1.74 | 56.5  | 1.88 | 63.3  | 2.17 | 66.9  | 2.26 |
|                 | 14                        | 34.6                         | 1.16 | 41.3  | 1.40 | 48.0  | 1.65 | 51.4  | 1.80 | 56.5  | 1.95 | 63.3  | 2.25 | 66.9  | 2.34 |
|                 | 20                        | 34.6                         | 1.19 | 41.3  | 1.44 | 48.0  | 1.71 | 51.4  | 1.85 | 56.5  | 2.01 | 63.3  | 2.31 | 66.9  | 2.41 |
|                 | 25                        | 34.6                         | 1.22 | 41.3  | 1.48 | 48.0  | 1.75 | 51.4  | 1.90 | 56.5  | 2.06 | 63.3  | 2.37 | 66.9  | 2.46 |
|                 | 30                        | 34.6                         | 1.25 | 41.3  | 1.52 | 48.0  | 1.79 | 51.4  | 1.94 | 56.5  | 2.11 | 63.3  | 2.42 | 66.9  | 2.52 |
|                 | 35                        | 34.6                         | 1.27 | 41.3  | 1.54 | 48.0  | 1.82 | 51.4  | 1.97 | 56.5  | 2.15 | 63.3  | 2.46 | 66.9  | 2.56 |
|                 | 40                        | 34.6                         | 1.29 | 41.3  | 1.56 | 48.0  | 1.85 | 51.4  | 2.00 | 56.5  | 2.18 | 63.3  | 2.50 | 66.9  | 2.60 |
|                 | 45                        | 34.6                         | 1.32 | 41.3  | 1.60 | 48.0  | 1.89 | 51.4  | 2.04 | 56.5  | 2.23 | 63.3  | 2.55 | 66.9  | 2.66 |
|                 | 50                        | 34.6                         | 1.35 | 41.3  | 1.63 | 48.0  | 1.93 | 51.4  | 2.08 | 56.5  | 2.27 | 63.3  | 2.61 | 66.9  | 2.71 |
|                 | 55                        | 34.6                         | 1.37 | 41.3  | 1.66 | 48.0  | 1.96 | 51.4  | 2.13 | 56.5  | 2.32 | 63.3  | 2.65 | 66.2  | 2.75 |
|                 | 60                        | 34.6                         | 1.41 | 41.3  | 1.72 | 48.0  | 2.05 | 51.4  | 2.21 | 56.5  | 2.41 | 63.1  | 2.73 | 64.3  | 2.80 |
|                 | 65                        | 34.6                         | 1.44 | 41.3  | 1.76 | 48.0  | 2.08 | 51.4  | 2.26 | 56.5  | 2.46 | 62.2  | 2.83 | 63.6  | 2.88 |
|                 | 70                        | 34.6                         | 1.49 | 41.3  | 1.81 | 48.0  | 2.23 | 51.4  | 2.45 | 56.5  | 2.73 | 61.0  | 3.03 | 62.2  | 3.08 |
|                 | 75                        | 34.6                         | 1.53 | 41.3  | 1.93 | 48.0  | 2.38 | 51.4  | 2.63 | 56.5  | 2.92 | 60.0  | 3.17 | 61.5  | 3.21 |
|                 | 80                        | 34.6                         | 1.73 | 41.3  | 2.20 | 48.0  | 2.72 | 51.4  | 3.01 | 56.5  | 3.35 | 58.4  | 3.44 | 59.6  | 3.49 |
|                 | 85                        | 34.6                         | 1.85 | 41.3  | 2.34 | 48.0  | 2.91 | 51.4  | 3.21 | 56.3  | 3.56 | 57.4  | 3.59 | 58.9  | 3.64 |
|                 | 90                        | 34.6                         | 2.09 | 41.3  | 2.66 | 48.0  | 3.30 | 51.4  | 3.65 | 54.4  | 3.84 | 55.8  | 3.87 | 57.0  | 3.92 |
|                 | 95                        | 34.6                         | 2.22 | 41.3  | 2.84 | 48.0  | 3.53 | 51.4  | 3.90 | 53.7  | 3.97 | 54.8  | 4.01 | 56.3  | 4.07 |
|                 | 100                       | 34.6                         | 2.40 | 41.3  | 3.06 | 48.0  | 3.82 | 50.5  | 4.10 | 52.7  | 4.18 | 54.1  | 4.22 | 55.3  | 4.28 |
|                 | 105                       | 34.6                         | 2.69 | 41.3  | 3.45 | 47.7  | 4.29 | 49.1  | 4.39 | 51.1  | 4.48 | 52.5  | 4.52 | 53.8  | 4.58 |
|                 | 110                       | 34.6                         | 3.01 | 41.3  | 3.87 | 47.1  | 4.66 | 48.2  | 4.68 | 49.2  | 4.77 | 50.0  | 4.81 | 50.9  | 4.88 |
|                 | 115                       | 34.6                         | 3.46 | 41.3  | 4.42 | 44.9  | 4.88 | 46.3  | 4.88 | 47.4  | 4.95 | 47.9  | 4.96 | 48.1  | 4.99 |
|                 | 118                       | 34.6                         | 3.49 | 36.2  | 4.15 | 39.1  | 4.10 | 40.3  | 4.14 | 41.3  | 4.20 | 41.7  | 4.21 | 41.5  | 4.23 |
|                 | 122                       | 29.6                         | 3.16 | 29.1  | 3.15 | 31.1  | 3.12 | 32.2  | 3.13 | 33.1  | 3.18 | 33.5  | 3.19 | 33.4  | 3.22 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).  
Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.  
The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping, 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).

Table 47: ZRUM060GSS0 Maximum Cooling Capacities.

| Combination (%) | Outdoor Air Temp. (°F DB) | Indoor Air Temp. °F DB/°F WB |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------|---------------------------|------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                 |                           | 68/57                        |      | 73/61 |      | 79/64 |      | 80/67 |      | 85/70 |      | 88/73 |      | 91/76 |      |
|                 |                           | TC                           | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   | TC    | PI   |
|                 |                           | MBh                          | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   | MBh   | kW   |
| 100%            | -9.9                      | 42.5                         | 1.21 | 50.6  | 1.46 | 58.8  | 1.73 | 63.0  | 1.88 | 69.2  | 2.04 | 77.6  | 2.35 | 82.0  | 2.45 |
|                 | -4                        | 42.5                         | 1.27 | 50.6  | 1.54 | 58.8  | 1.82 | 63.0  | 1.99 | 69.2  | 2.15 | 77.6  | 2.48 | 82.0  | 2.58 |
|                 | 0                         | 42.5                         | 1.33 | 50.6  | 1.60 | 58.8  | 1.90 | 63.0  | 2.07 | 69.2  | 2.23 | 77.6  | 2.58 | 82.0  | 2.69 |
|                 | 5                         | 42.5                         | 1.37 | 50.6  | 1.66 | 58.8  | 1.96 | 63.0  | 2.14 | 69.2  | 2.32 | 77.6  | 2.67 | 82.0  | 2.78 |
|                 | 10                        | 42.5                         | 1.41 | 50.6  | 1.71 | 58.8  | 2.02 | 63.0  | 2.20 | 69.2  | 2.38 | 77.6  | 2.75 | 82.0  | 2.86 |
|                 | 14                        | 42.5                         | 1.46 | 50.6  | 1.77 | 58.8  | 2.09 | 63.0  | 2.28 | 69.2  | 2.47 | 77.6  | 2.85 | 82.0  | 2.97 |
|                 | 20                        | 42.5                         | 1.51 | 50.6  | 1.82 | 58.8  | 2.16 | 63.0  | 2.35 | 69.2  | 2.55 | 77.6  | 2.93 | 82.0  | 3.05 |
|                 | 25                        | 42.5                         | 1.55 | 50.6  | 1.87 | 58.8  | 2.22 | 63.0  | 2.40 | 69.2  | 2.61 | 77.6  | 3.00 | 82.0  | 3.12 |
|                 | 30                        | 42.5                         | 1.59 | 50.6  | 1.92 | 58.8  | 2.27 | 63.0  | 2.45 | 69.2  | 2.68 | 77.6  | 3.07 | 82.0  | 3.19 |
|                 | 35                        | 42.5                         | 1.61 | 50.6  | 1.95 | 58.8  | 2.31 | 63.0  | 2.49 | 69.2  | 2.72 | 77.6  | 3.12 | 82.0  | 3.25 |
|                 | 40                        | 42.5                         | 1.64 | 50.6  | 1.98 | 58.8  | 2.34 | 63.0  | 2.53 | 69.2  | 2.77 | 77.6  | 3.17 | 82.0  | 3.30 |
|                 | 45                        | 42.5                         | 1.67 | 50.6  | 2.03 | 58.8  | 2.39 | 63.0  | 2.59 | 69.2  | 2.82 | 77.6  | 3.24 | 82.0  | 3.36 |
|                 | 50                        | 42.5                         | 1.71 | 50.6  | 2.06 | 58.8  | 2.44 | 63.0  | 2.64 | 69.2  | 2.88 | 77.6  | 3.30 | 82.0  | 3.43 |
|                 | 55                        | 42.5                         | 1.73 | 50.6  | 2.10 | 58.8  | 2.49 | 63.0  | 2.70 | 69.2  | 2.94 | 77.6  | 3.36 | 81.1  | 3.48 |
|                 | 60                        | 42.5                         | 1.79 | 50.6  | 2.18 | 58.8  | 2.59 | 63.0  | 2.80 | 69.2  | 3.05 | 77.3  | 3.46 | 78.8  | 3.55 |
|                 | 65                        | 42.5                         | 1.83 | 50.6  | 2.22 | 58.8  | 2.64 | 63.0  | 2.86 | 69.2  | 3.11 | 76.2  | 3.58 | 77.9  | 3.65 |
|                 | 70                        | 42.5                         | 1.89 | 50.6  | 2.29 | 58.8  | 2.82 | 63.0  | 3.10 | 69.2  | 3.45 | 74.7  | 3.84 | 76.2  | 3.90 |
|                 | 75                        | 42.5                         | 1.93 | 50.6  | 2.44 | 58.8  | 3.02 | 63.0  | 3.33 | 69.2  | 3.70 | 73.6  | 4.02 | 75.3  | 4.07 |
|                 | 80                        | 42.5                         | 2.20 | 50.6  | 2.78 | 58.8  | 3.45 | 63.0  | 3.81 | 69.2  | 4.25 | 71.6  | 4.36 | 73.0  | 4.42 |
|                 | 85                        | 42.5                         | 2.34 | 50.6  | 2.97 | 58.8  | 3.69 | 63.0  | 4.06 | 68.9  | 4.51 | 70.4  | 4.55 | 72.1  | 4.61 |
|                 | 90                        | 42.5                         | 2.65 | 50.6  | 3.38 | 58.8  | 4.19 | 63.0  | 4.63 | 66.6  | 4.86 | 68.4  | 4.90 | 69.8  | 4.97 |
|                 | 95                        | 42.5                         | 2.81 | 50.6  | 3.59 | 58.8  | 4.47 | 63.0  | 4.94 | 65.8  | 5.03 | 67.2  | 5.08 | 68.9  | 5.15 |
|                 | 100                       | 42.5                         | 3.03 | 50.6  | 3.88 | 58.8  | 4.83 | 61.9  | 5.19 | 64.6  | 5.29 | 66.3  | 5.34 | 67.8  | 5.42 |
|                 | 105                       | 42.5                         | 3.41 | 50.6  | 4.37 | 58.5  | 5.43 | 60.2  | 5.56 | 62.7  | 5.67 | 64.3  | 5.72 | 65.9  | 5.80 |
|                 | 110                       | 42.5                         | 3.81 | 50.6  | 4.90 | 57.8  | 5.90 | 59.1  | 5.93 | 60.3  | 6.04 | 61.2  | 6.10 | 62.4  | 6.18 |
|                 | 115                       | 42.5                         | 4.38 | 50.6  | 5.60 | 55.0  | 6.18 | 56.7  | 6.18 | 58.1  | 6.27 | 58.7  | 6.28 | 58.9  | 6.32 |
|                 | 118                       | 42.5                         | 4.42 | 44.4  | 5.25 | 47.9  | 5.19 | 49.4  | 5.24 | 50.6  | 5.32 | 51.1  | 5.33 | 50.9  | 5.36 |
|                 | 122                       | 36.3                         | 4.00 | 35.6  | 3.99 | 38.2  | 3.95 | 39.4  | 3.96 | 40.5  | 4.03 | 41.0  | 4.04 | 40.9  | 4.08 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).  
Cooling range with the Low Ambient Baffle Kit (sold separately) is -9.9°F to +122°F.  
The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping. 0 ft. level difference between outdoor and indoor units.

Nominal cooling capacity rating obtained with air entering the indoor unit at 80°F dry bulb (DB) and 67°F wet bulb (WB), and outdoor ambient conditions of 95°F dry bulb (DB) and 75°F wet bulb (WB).



# HEATING CAPACITY

ZRUN024GSS0



Table 48: ZRUN024GSS0 Heating Capacities.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|-------------------|-------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | °F DB             | °F WB | 59                     |      | 61   |      | 64   |      | 67   |      | 70   |      | 73   |      | 76   |      | 80   |      |
|                 |                   |       | TC                     | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   |
| 130             | -21.6             | -22.0 | 14.1                   | 0.94 | 14.1 | 1.07 | 14.0 | 1.27 | 13.9 | 1.45 | 13.8 | 1.63 | 13.7 | 1.87 | 13.6 | 2.00 | 13.5 | 2.18 |
|                 | -17.1             | -17.5 | 16.7                   | 1.13 | 16.6 | 1.24 | 16.4 | 1.44 | 16.3 | 1.62 | 16.2 | 1.81 | 16.0 | 2.05 | 16.0 | 2.24 | 15.9 | 2.41 |
|                 | -12.6             | -13.0 | 19.2                   | 1.31 | 19.1 | 1.41 | 18.9 | 1.61 | 18.7 | 1.79 | 18.5 | 1.99 | 18.4 | 2.22 | 18.3 | 2.49 | 18.2 | 2.63 |
|                 | -7.0              | -7.6  | 22.4                   | 1.55 | 22.2 | 1.62 | 21.9 | 1.82 | 21.7 | 2.01 | 21.5 | 2.21 | 21.3 | 2.45 | 21.2 | 2.79 | 21.0 | 2.91 |
|                 | -4.0              | -4.4  | 24.1                   | 1.67 | 23.8 | 1.73 | 23.5 | 1.94 | 23.3 | 2.12 | 23.0 | 2.33 | 22.8 | 2.56 | 22.7 | 2.95 | 22.6 | 3.06 |
|                 | 0.0               | -0.4  | 26.3                   | 1.84 | 26.1 | 1.88 | 25.7 | 2.09 | 25.4 | 2.27 | 25.1 | 2.49 | 24.9 | 2.72 | 24.8 | 3.17 | 24.6 | 3.26 |
|                 | 5.0               | 4.5   | 29.2                   | 2.05 | 28.8 | 2.07 | 28.4 | 2.28 | 28.1 | 2.47 | 27.7 | 2.69 | 27.5 | 2.92 | 27.4 | 3.43 | 27.2 | 3.51 |
|                 | 10.0              | 9.0   | 31.4                   | 2.25 | 31.2 | 2.26 | 30.9 | 2.47 | 30.5 | 2.66 | 30.2 | 2.89 | 29.3 | 3.12 | 28.6 | 3.34 | 27.6 | 3.38 |
|                 | 15.0              | 14.0  | 33.7                   | 2.46 | 33.6 | 2.45 | 33.4 | 2.66 | 33.0 | 2.85 | 32.6 | 3.09 | 31.1 | 3.32 | 29.8 | 3.31 | 28.0 | 3.30 |
|                 | 20.0              | 19.0  | 36.0                   | 2.67 | 36.1 | 2.64 | 35.9 | 2.85 | 35.5 | 3.04 | 35.0 | 3.29 | 32.9 | 3.22 | 31.0 | 3.15 | 28.4 | 3.06 |
|                 | 25.0              | 23.0  | 36.0                   | 2.88 | 36.1 | 2.83 | 36.1 | 3.04 | 35.6 | 3.23 | 35.0 | 3.19 | 32.9 | 3.05 | 31.0 | 2.98 | 28.4 | 2.89 |
|                 | 30.0              | 28.0  | 36.1                   | 3.08 | 36.1 | 3.01 | 36.1 | 3.23 | 35.5 | 3.12 | 35.0 | 3.00 | 32.9 | 2.88 | 31.0 | 2.81 | 28.4 | 2.72 |
|                 | 35.0              | 32.0  | 36.1                   | 3.29 | 36.1 | 3.20 | 36.1 | 3.07 | 35.5 | 2.95 | 35.0 | 2.82 | 32.9 | 2.70 | 31.0 | 2.64 | 28.4 | 2.55 |
|                 | 40.0              | 36.0  | 36.1                   | 3.12 | 36.1 | 3.01 | 36.1 | 2.83 | 35.5 | 2.74 | 35.0 | 2.64 | 32.9 | 2.53 | 31.0 | 2.46 | 28.4 | 2.38 |
|                 | 45.0              | 41.0  | 36.1                   | 2.74 | 36.1 | 2.68 | 36.1 | 2.60 | 35.5 | 2.52 | 35.0 | 2.45 | 32.9 | 2.35 | 31.0 | 2.29 | 28.4 | 2.21 |
|                 | 47.0              | 43.0  | 36.1                   | 2.63 | 36.1 | 2.58 | 36.1 | 2.49 | 35.5 | 2.42 | 35.0 | 2.35 | 32.9 | 2.25 | 31.0 | 2.20 | 28.4 | 2.12 |
|                 | 50.0              | 46.0  | 36.1                   | 2.54 | 36.1 | 2.48 | 36.1 | 2.40 | 35.5 | 2.33 | 35.0 | 2.26 | 32.9 | 2.17 | 31.0 | 2.12 | 28.4 | 2.04 |
|                 | 55.0              | 51.0  | 36.1                   | 2.38 | 36.1 | 2.33 | 36.1 | 2.25 | 35.5 | 2.19 | 35.0 | 2.13 | 32.9 | 2.04 | 31.0 | 1.99 | 28.4 | 1.92 |
|                 | 60.0              | 56.0  | 36.1                   | 2.21 | 36.1 | 2.17 | 36.1 | 2.10 | 35.5 | 2.04 | 35.0 | 1.98 | 32.9 | 1.90 | 31.0 | 1.85 | 28.4 | 1.78 |
| 120             | -21.6             | -22.0 | 14.0                   | 1.16 | 14.0 | 1.26 | 13.9 | 1.40 | 13.8 | 1.53 | 13.7 | 1.66 | 13.6 | 1.74 | 13.5 | 1.76 | 13.4 | 1.78 |
|                 | -17.1             | -17.5 | 16.5                   | 1.35 | 16.4 | 1.45 | 16.3 | 1.59 | 16.2 | 1.72 | 16.1 | 1.86 | 15.9 | 1.94 | 15.8 | 1.96 | 15.7 | 1.98 |
|                 | -12.6             | -13.0 | 19.0                   | 1.53 | 18.9 | 1.65 | 18.7 | 1.77 | 18.5 | 1.91 | 18.4 | 2.07 | 18.2 | 2.15 | 18.2 | 2.16 | 17.9 | 2.17 |
|                 | -7.0              | -7.6  | 22.1                   | 1.76 | 22.0 | 1.90 | 21.7 | 2.00 | 21.5 | 2.15 | 21.3 | 2.33 | 21.1 | 2.41 | 21.0 | 2.41 | 20.6 | 2.42 |
|                 | -4.0              | -4.4  | 23.8                   | 1.89 | 23.6 | 2.03 | 23.3 | 2.12 | 23.1 | 2.27 | 22.9 | 2.47 | 22.7 | 2.54 | 22.6 | 2.55 | 22.1 | 2.55 |
|                 | 0.0               | -0.4  | 26.0                   | 2.06 | 25.8 | 2.21 | 25.4 | 2.29 | 25.2 | 2.44 | 24.9 | 2.65 | 24.7 | 2.73 | 24.6 | 2.73 | 24.1 | 2.72 |
|                 | 5.0               | 4.5   | 28.8                   | 2.26 | 28.5 | 2.43 | 28.1 | 2.49 | 27.8 | 2.65 | 27.5 | 2.88 | 27.3 | 2.96 | 27.2 | 2.95 | 26.6 | 2.94 |
|                 | 10.0              | 9.0   | 30.9                   | 2.47 | 30.6 | 2.65 | 30.2 | 2.69 | 29.7 | 2.86 | 29.3 | 3.11 | 28.5 | 3.19 | 27.8 | 3.18 | 26.6 | 3.16 |
|                 | 15.0              | 14.0  | 33.0                   | 2.68 | 32.7 | 2.87 | 32.3 | 2.90 | 31.7 | 3.08 | 31.1 | 3.34 | 29.7 | 3.41 | 28.4 | 3.40 | 26.6 | 3.38 |
|                 | 20.0              | 19.0  | 35.1                   | 2.88 | 34.8 | 3.09 | 34.3 | 3.10 | 33.6 | 3.29 | 32.9 | 3.30 | 31.0 | 3.24 | 29.1 | 3.22 | 26.6 | 3.19 |
|                 | 25.0              | 23.0  | 36.0                   | 3.09 | 35.8 | 3.31 | 35.4 | 3.31 | 34.1 | 3.21 | 32.9 | 3.11 | 31.0 | 3.06 | 29.1 | 3.03 | 26.6 | 3.00 |
|                 | 30.0              | 28.0  | 36.0                   | 3.30 | 35.8 | 3.22 | 35.4 | 3.10 | 34.1 | 3.01 | 32.9 | 2.93 | 31.0 | 2.88 | 29.1 | 2.85 | 26.6 | 2.82 |
|                 | 35.0              | 32.0  | 36.0                   | 3.06 | 35.8 | 2.99 | 35.4 | 2.89 | 34.1 | 2.81 | 32.9 | 2.74 | 31.0 | 2.70 | 29.1 | 2.67 | 26.6 | 2.63 |
|                 | 40.0              | 36.0  | 36.0                   | 2.82 | 35.8 | 2.76 | 35.4 | 2.67 | 34.1 | 2.62 | 32.9 | 2.56 | 31.0 | 2.51 | 29.1 | 2.48 | 26.6 | 2.44 |
|                 | 45.0              | 41.0  | 36.0                   | 2.57 | 35.8 | 2.53 | 35.4 | 2.46 | 34.1 | 2.41 | 32.9 | 2.37 | 31.0 | 2.33 | 29.1 | 2.29 | 26.6 | 2.25 |
|                 | 47.0              | 43.0  | 36.0                   | 2.47 | 35.8 | 2.43 | 35.4 | 2.36 | 34.1 | 2.32 | 32.9 | 2.27 | 31.0 | 2.24 | 29.1 | 2.20 | 26.6 | 2.16 |
|                 | 50.0              | 46.0  | 36.0                   | 2.38 | 35.8 | 2.34 | 35.4 | 2.28 | 34.1 | 2.23 | 32.9 | 2.19 | 31.0 | 2.15 | 29.1 | 2.12 | 26.6 | 2.08 |
|                 | 55.0              | 51.0  | 36.0                   | 2.24 | 35.8 | 2.20 | 35.4 | 2.14 | 34.1 | 2.10 | 32.9 | 2.06 | 31.0 | 2.02 | 29.1 | 1.99 | 26.6 | 1.95 |
|                 | 60.0              | 56.0  | 36.0                   | 2.08 | 35.8 | 2.04 | 35.4 | 1.99 | 34.1 | 1.95 | 32.9 | 1.91 | 31.0 | 1.88 | 29.1 | 1.85 | 26.6 | 1.81 |
| 110             | -21.6             | -22.0 | 14.0                   | 1.47 | 13.9 | 1.55 | 13.8 | 1.66 | 13.7 | 1.78 | 13.6 | 1.90 | 13.5 | 2.12 | 13.5 | 2.30 | 13.4 | 2.54 |
|                 | -17.1             | -17.5 | 16.4                   | 1.69 | 16.3 | 1.75 | 16.2 | 1.84 | 16.1 | 2.06 | 16.0 | 2.19 | 15.8 | 2.40 | 15.6 | 2.56 | 15.2 | 2.86 |
|                 | -12.6             | -13.0 | 18.8                   | 1.90 | 18.7 | 1.95 | 18.5 | 2.02 | 18.4 | 2.35 | 18.3 | 2.48 | 18.1 | 2.69 | 17.8 | 2.83 | 17.0 | 3.18 |
|                 | -7.0              | -7.6  | 21.9                   | 2.16 | 21.7 | 2.20 | 21.5 | 2.25 | 21.3 | 2.71 | 21.2 | 2.84 | 20.9 | 3.05 | 20.5 | 3.16 | 19.3 | 3.57 |
|                 | -4.0              | -4.4  | 23.5                   | 2.30 | 23.3 | 2.33 | 23.1 | 2.37 | 22.9 | 2.90 | 22.7 | 3.03 | 22.5 | 3.24 | 21.9 | 3.33 | 20.5 | 3.78 |
|                 | 0.0               | -0.4  | 25.7                   | 2.49 | 25.5 | 2.51 | 25.2 | 2.53 | 25.0 | 3.15 | 24.8 | 3.29 | 24.5 | 3.49 | 23.8 | 3.57 | 22.1 | 4.06 |
|                 | 5.0               | 4.5   | 28.4                   | 2.73 | 28.1 | 2.73 | 27.8 | 2.73 | 27.6 | 3.47 | 27.4 | 3.61 | 27.0 | 3.81 | 26.2 | 3.86 | 24.1 | 3.93 |
|                 | 10.0              | 9.0   | 29.6                   | 2.96 | 29.3 | 2.95 | 28.9 | 2.93 | 28.7 | 3.42 | 28.4 | 3.55 | 27.2 | 3.51 | 26.2 | 3.44 | 24.1 | 3.35 |
|                 | 15.0              | 14.0  | 32.5                   | 3.20 | 32.1 | 3.17 | 31.6 | 3.13 | 30.6 | 3.34 | 29.5 | 3.33 | 27.8 | 3.24 | 26.2 | 3.14 | 24.1 | 3.00 |
|                 | 20.0              | 19.0  | 35.6                   | 3.43 | 34.4 | 3.39 | 32.5 | 3.34 | 31.0 | 3.25 | 29.5 | 3.16 | 27.8 | 3.07 | 26.2 | 2.97 | 24.1 | 2.85 |
|                 | 25.0              | 23.0  | 35.6                   | 3.35 | 34.4 | 3.28 | 32.5 | 3.17 | 31.0 | 3.08 | 29.5 | 2.98 | 27.8 | 2.89 | 26.2 | 2.81 | 24.1 | 2.69 |
|                 | 30.0              | 28.0  | 35.6                   | 3.15 | 34.4 | 3.07 | 32.5 | 2.95 | 31.0 | 2.88 | 29.5 | 2.80 | 27.8 | 2.72 | 26.2 | 2.64 | 24.1 | 2.53 |
|                 | 35.0              | 32.0  | 35.6                   | 2.89 | 34.4 | 2.83 | 32.5 | 2.74 | 31.0 | 2.68 | 29.5 | 2.62 | 27.8 | 2.55 | 26.2 | 2.47 | 24.1 | 2.38 |
|                 | 40.0              | 36.0  | 35.6                   | 2.62 | 34.4 | 2.58 | 32.5 | 2.52 | 31.0 | 2.48 | 29.5 | 2.44 | 27.8 | 2.37 | 26.2 | 2.31 | 24.1 | 2.22 |
|                 | 45.0              | 41.0  | 35.6                   | 2.36 | 34.4 | 2.34 | 32.5 | 2.30 | 31.0 | 2.28 | 29.5 | 2.25 | 27.8 | 2.19 | 26.2 | 2.14 | 24.1 | 2.06 |
|                 | 47.0              | 43.0  | 35.6                   | 2.27 | 34.4 | 2.25 | 32.5 | 2.21 | 31.0 | 2.19 | 29.5 | 2.16 | 27.8 | 2.11 | 26.2 | 2.05 | 24.1 | 1.98 |
|                 | 50.0              | 46.0  | 35.6                   | 2.19 | 34.4 | 2.16 | 32.5 | 2.13 | 31.0 | 2.11 | 29.5 | 2.08 | 27.8 | 2.03 | 26.2 | 1.98 | 24.1 | 1.91 |
|                 | 55.0              | 51.0  | 35.6                   | 2.05 | 34.4 | 2.03 | 32.5 | 2.00 | 31.0 | 1.98 | 29.5 | 1.95 | 27.8 | 1.91 | 26.2 | 1.86 | 24.1 | 1.79 |
|                 | 60.0              | 56.0  | 35.6                   | 1.91 | 34.4 | 1.89 | 32.5 | 1.86 | 31.0 | 1.84 | 29.5 | 1.82 | 27.8 | 1.77 | 26.2 | 1.73 | 24.1 | 1.66 |

TC = Total Capacity (MBh). PI = Power Input (KW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

Table 49: ZRUN024GSS0 Heating Capacities, continued.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |
|-----------------|-------------------|-------|------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 |                   |       | 59                     |       | 61     |       | 64     |       | 67     |       | 70     |       | 73     |       | 76     |       | 80     |       |
|                 | °F DB             | °F WB | TC MBh                 | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW |
| 100             | -21.6             | -22.0 | 13.9                   | 1.20  | 13.8   | 1.37  | 13.8   | 1.63  | 13.7   | 1.81  | 13.6   | 1.98  | 13.5   | 2.23  | 13.4   | 2.38  | 13.3   | 2.58  |
|                 | -17.1             | -17.5 | 16.3                   | 1.40  | 16.2   | 1.58  | 16.1   | 1.84  | 16.0   | 2.09  | 15.9   | 2.27  | 15.5   | 2.49  | 15.2   | 2.61  | 14.8   | 2.78  |
|                 | -12.6             | -13.0 | 18.6                   | 1.61  | 18.6   | 1.79  | 18.4   | 2.04  | 18.3   | 2.38  | 18.1   | 2.55  | 17.5   | 2.75  | 17.0   | 2.84  | 16.2   | 2.97  |
|                 | -7.0              | -7.6  | 21.6                   | 1.86  | 21.5   | 2.04  | 21.4   | 2.30  | 21.2   | 2.73  | 20.9   | 2.91  | 20.0   | 3.07  | 19.2   | 3.13  | 18.1   | 3.21  |
|                 | -4.0              | -4.4  | 23.2                   | 1.99  | 23.1   | 2.18  | 22.9   | 2.44  | 22.7   | 2.92  | 22.5   | 3.10  | 21.4   | 3.24  | 20.4   | 3.29  | 19.0   | 3.34  |
|                 | 0.0               | -0.4  | 25.3                   | 2.17  | 25.2   | 2.37  | 25.0   | 2.62  | 24.7   | 3.17  | 24.5   | 3.35  | 23.2   | 3.47  | 21.9   | 3.49  | 20.3   | 3.52  |
|                 | 5.0               | 4.5   | 27.9                   | 2.40  | 27.8   | 2.60  | 27.6   | 2.85  | 27.3   | 3.49  | 27.0   | 3.67  | 25.4   | 3.76  | 23.9   | 3.75  | 21.9   | 3.73  |
|                 | 10.0              | 9.0   | 29.6                   | 2.63  | 29.2   | 2.83  | 28.6   | 3.08  | 27.8   | 3.37  | 27.0   | 3.47  | 25.4   | 3.41  | 23.9   | 3.33  | 21.9   | 3.22  |
|                 | 15.0              | 14.0  | 31.4                   | 2.85  | 30.7   | 3.06  | 29.7   | 3.31  | 28.3   | 3.29  | 27.0   | 3.27  | 25.4   | 3.10  | 23.9   | 3.00  | 21.9   | 2.88  |
|                 | 20.0              | 19.0  | 32.7                   | 3.08  | 31.5   | 3.29  | 29.7   | 3.24  | 28.3   | 3.15  | 27.0   | 3.07  | 25.4   | 2.90  | 23.9   | 2.82  | 21.9   | 2.70  |
|                 | 25.0              | 23.0  | 32.7                   | 3.30  | 31.5   | 3.17  | 29.7   | 2.97  | 28.3   | 2.92  | 27.0   | 2.87  | 25.4   | 2.71  | 23.9   | 2.63  | 21.9   | 2.52  |
|                 | 30.0              | 28.0  | 32.7                   | 3.05  | 31.5   | 2.94  | 29.7   | 2.77  | 28.3   | 2.72  | 27.0   | 2.66  | 25.4   | 2.52  | 23.9   | 2.44  | 21.9   | 2.34  |
|                 | 35.0              | 32.0  | 32.7                   | 2.81  | 31.5   | 2.72  | 29.7   | 2.58  | 28.3   | 2.52  | 27.0   | 2.46  | 25.4   | 2.33  | 23.9   | 2.25  | 21.9   | 2.16  |
|                 | 40.0              | 36.0  | 32.7                   | 2.56  | 31.5   | 2.49  | 29.7   | 2.39  | 28.3   | 2.32  | 27.0   | 2.26  | 25.4   | 2.13  | 23.9   | 2.07  | 21.9   | 1.98  |
|                 | 45.0              | 41.0  | 32.7                   | 2.31  | 31.5   | 2.26  | 29.7   | 2.19  | 28.3   | 2.13  | 27.0   | 2.06  | 25.4   | 1.94  | 23.9   | 1.88  | 21.9   | 1.80  |
|                 | 47.0              | 43.0  | 32.7                   | 2.22  | 31.5   | 2.17  | 29.7   | 2.11  | 28.3   | 2.04  | 27.0   | 1.98  | 25.4   | 1.87  | 23.9   | 1.81  | 21.9   | 1.73  |
|                 | 50.0              | 46.0  | 32.7                   | 2.14  | 31.5   | 2.09  | 29.7   | 2.03  | 28.3   | 1.97  | 27.0   | 1.91  | 25.4   | 1.80  | 23.9   | 1.74  | 21.9   | 1.66  |
|                 | 55.0              | 51.0  | 32.7                   | 2.01  | 31.5   | 1.97  | 29.7   | 1.90  | 28.3   | 1.85  | 27.0   | 1.79  | 25.4   | 1.69  | 23.9   | 1.63  | 21.9   | 1.56  |
|                 | 60.0              | 56.0  | 32.7                   | 1.87  | 31.5   | 1.83  | 29.7   | 1.77  | 28.3   | 1.72  | 27.0   | 1.66  | 25.4   | 1.57  | 23.9   | 1.52  | 21.9   | 1.45  |
| 90              | -21.6             | -22.0 | 13.8                   | 1.55  | 13.8   | 1.64  | 13.7   | 1.78  | 13.6   | 1.96  | 13.5   | 2.15  | 13.4   | 2.28  | 13.4   | 2.40  | 13.3   | 2.56  |
|                 | -17.1             | -17.5 | 16.1                   | 1.72  | 16.0   | 1.82  | 15.8   | 1.99  | 15.6   | 2.15  | 15.4   | 2.43  | 15.1   | 2.53  | 14.8   | 2.69  | 14.4   | 2.86  |
|                 | -12.6             | -13.0 | 18.3                   | 1.89  | 18.2   | 2.01  | 17.9   | 2.21  | 17.6   | 2.34  | 17.3   | 2.71  | 16.8   | 2.78  | 16.2   | 2.98  | 15.5   | 3.15  |
|                 | -7.0              | -7.6  | 21.1                   | 2.11  | 20.9   | 2.23  | 20.6   | 2.48  | 20.1   | 2.57  | 19.7   | 3.06  | 18.8   | 3.09  | 18.0   | 3.34  | 16.9   | 3.52  |
|                 | -4.0              | -4.4  | 22.6                   | 2.22  | 22.4   | 2.36  | 22.0   | 2.62  | 21.5   | 2.70  | 20.9   | 3.25  | 19.9   | 3.26  | 19.0   | 3.32  | 17.7   | 3.42  |
|                 | 0.0               | -0.4  | 24.6                   | 2.38  | 24.3   | 2.52  | 23.9   | 2.81  | 23.3   | 2.86  | 22.6   | 3.50  | 21.4   | 3.48  | 20.3   | 3.28  | 18.7   | 3.29  |
|                 | 5.0               | 4.5   | 27.1                   | 2.57  | 26.8   | 2.72  | 26.3   | 3.05  | 25.5   | 3.07  | 24.7   | 3.38  | 23.3   | 3.33  | 21.9   | 3.24  | 20.0   | 3.13  |
|                 | 10.0              | 9.0   | 29.6                   | 2.76  | 28.6   | 2.93  | 27.1   | 3.29  | 25.9   | 3.28  | 24.7   | 3.27  | 23.3   | 3.12  | 21.9   | 2.98  | 20.0   | 2.79  |
|                 | 15.0              | 14.0  | 29.9                   | 2.95  | 28.8   | 3.13  | 27.1   | 3.12  | 25.9   | 3.05  | 24.7   | 2.98  | 23.3   | 2.82  | 21.9   | 2.69  | 20.0   | 2.52  |
|                 | 20.0              | 19.0  | 29.9                   | 3.14  | 28.8   | 3.08  | 27.1   | 2.98  | 25.9   | 2.89  | 24.7   | 2.80  | 23.3   | 2.65  | 21.9   | 2.53  | 20.0   | 2.36  |
|                 | 25.0              | 23.0  | 29.9                   | 2.94  | 28.8   | 2.88  | 27.1   | 2.79  | 25.9   | 2.70  | 24.7   | 2.61  | 23.3   | 2.47  | 21.9   | 2.36  | 20.0   | 2.21  |
|                 | 30.0              | 28.0  | 29.9                   | 2.73  | 28.8   | 2.68  | 27.1   | 2.59  | 25.9   | 2.51  | 24.7   | 2.43  | 23.3   | 2.30  | 21.9   | 2.20  | 20.0   | 2.05  |
|                 | 35.0              | 32.0  | 29.9                   | 2.52  | 28.8   | 2.47  | 27.1   | 2.40  | 25.9   | 2.32  | 24.7   | 2.25  | 23.3   | 2.13  | 21.9   | 2.03  | 20.0   | 1.90  |
|                 | 40.0              | 36.0  | 29.9                   | 2.32  | 28.8   | 2.27  | 27.1   | 2.20  | 25.9   | 2.13  | 24.7   | 2.07  | 23.3   | 1.96  | 21.9   | 1.87  | 20.0   | 1.74  |
|                 | 45.0              | 41.0  | 29.9                   | 2.11  | 28.8   | 2.07  | 27.1   | 2.00  | 25.9   | 1.94  | 24.7   | 1.88  | 23.3   | 1.79  | 21.9   | 1.70  | 20.0   | 1.58  |
|                 | 47.0              | 43.0  | 29.9                   | 2.03  | 28.8   | 1.99  | 27.1   | 1.93  | 25.9   | 1.87  | 24.7   | 1.81  | 23.3   | 1.72  | 21.9   | 1.63  | 20.0   | 1.52  |
|                 | 50.0              | 46.0  | 29.9                   | 1.95  | 28.8   | 1.91  | 27.1   | 1.86  | 25.9   | 1.80  | 24.7   | 1.74  | 23.3   | 1.65  | 21.9   | 1.57  | 20.0   | 1.47  |
|                 | 55.0              | 51.0  | 29.9                   | 1.83  | 28.8   | 1.80  | 27.1   | 1.74  | 25.9   | 1.69  | 24.7   | 1.64  | 23.3   | 1.55  | 21.9   | 1.48  | 20.0   | 1.38  |
|                 | 60.0              | 56.0  | 29.9                   | 1.70  | 28.8   | 1.67  | 27.1   | 1.62  | 25.9   | 1.57  | 24.7   | 1.52  | 23.3   | 1.44  | 21.9   | 1.37  | 20.0   | 1.28  |
| 80              | -21.6             | -22.0 | 13.8                   | 1.56  | 13.7   | 1.66  | 13.6   | 1.81  | 13.6   | 1.92  | 13.5   | 2.03  | 13.4   | 2.32  | 13.3   | 2.47  | 13.2   | 2.67  |
|                 | -17.1             | -17.5 | 15.6                   | 1.71  | 15.4   | 1.92  | 15.4   | 2.08  | 15.2   | 2.17  | 15.3   | 2.25  | 14.9   | 2.47  | 14.6   | 2.70  | 14.2   | 2.91  |
|                 | -12.6             | -13.0 | 17.5                   | 1.86  | 17.2   | 2.17  | 17.3   | 2.35  | 16.8   | 2.41  | 17.1   | 2.47  | 16.5   | 2.63  | 15.9   | 2.75  | 15.2   | 2.92  |
|                 | -7.0              | -7.6  | 19.8                   | 2.05  | 19.3   | 2.49  | 19.5   | 2.68  | 18.9   | 2.71  | 19.3   | 2.75  | 18.4   | 2.82  | 17.5   | 2.80  | 16.4   | 2.93  |
|                 | -4.0              | -4.4  | 21.0                   | 2.15  | 20.4   | 2.66  | 20.7   | 2.86  | 20.0   | 2.88  | 20.5   | 2.89  | 19.4   | 2.92  | 18.4   | 2.83  | 17.0   | 2.94  |
|                 | 0.0               | -0.4  | 22.7                   | 2.28  | 22.0   | 2.89  | 22.3   | 3.10  | 21.4   | 3.09  | 22.1   | 3.09  | 20.8   | 3.06  | 19.5   | 2.87  | 17.9   | 2.94  |
|                 | 5.0               | 4.5   | 24.7                   | 2.45  | 23.9   | 3.17  | 24.3   | 3.17  | 23.2   | 3.16  | 22.1   | 3.15  | 20.8   | 3.01  | 19.5   | 2.92  | 17.9   | 2.80  |
|                 | 10.0              | 9.0   | 26.8                   | 2.61  | 25.8   | 2.91  | 24.3   | 2.91  | 23.2   | 2.86  | 22.1   | 2.82  | 20.8   | 2.64  | 19.5   | 2.55  | 17.9   | 2.44  |
|                 | 15.0              | 14.0  | 26.8                   | 2.78  | 25.8   | 2.77  | 24.3   | 2.75  | 23.2   | 2.65  | 22.1   | 2.54  | 20.8   | 2.38  | 19.5   | 2.31  | 17.9   | 2.21  |
|                 | 20.0              | 19.0  | 26.8                   | 2.69  | 25.8   | 2.64  | 24.3   | 2.57  | 23.2   | 2.48  | 22.1   | 2.39  | 20.8   | 2.24  | 19.5   | 2.17  | 17.9   | 2.07  |
|                 | 25.0              | 23.0  | 26.8                   | 2.51  | 25.8   | 2.47  | 24.3   | 2.40  | 23.2   | 2.31  | 22.1   | 2.23  | 20.8   | 2.09  | 19.5   | 2.02  | 17.9   | 1.93  |
|                 | 30.0              | 28.0  | 26.8                   | 2.33  | 25.8   | 2.29  | 24.3   | 2.23  | 23.2   | 2.15  | 22.1   | 2.07  | 20.8   | 1.95  | 19.5   | 1.88  | 17.9   | 1.79  |
|                 | 35.0              | 32.0  | 26.8                   | 2.15  | 25.8   | 2.11  | 24.3   | 2.06  | 23.2   | 1.98  | 22.1   | 1.91  | 20.8   | 1.80  | 19.5   | 1.74  | 17.9   | 1.65  |
|                 | 40.0              | 36.0  | 26.8                   | 1.97  | 25.8   | 1.94  | 24.3   | 1.88  | 23.2   | 1.82  | 22.1   | 1.75  | 20.8   | 1.66  | 19.5   | 1.60  | 17.9   | 1.51  |
|                 | 45.0              | 41.0  | 26.8                   | 1.80  | 25.8   | 1.76  | 24.3   | 1.71  | 23.2   | 1.65  | 22.1   | 1.59  | 20.8   | 1.51  | 19.5   | 1.45  | 17.9   | 1.38  |
|                 | 47.0              | 43.0  | 26.8                   | 1.73  | 25.8   | 1.69  | 24.3   | 1.64  | 23.2   | 1.59  | 22.1   | 1.53  | 20.8   | 1.45  | 19.5   | 1.40  | 17.9   | 1.32  |
|                 | 50.0              | 46.0  | 26.8                   | 1.66  | 25.8   | 1.63  | 24.3   | 1.58  | 23.2   | 1.53  | 22.1   | 1.47  | 20.8   | 1.40  | 19.5   | 1.35  | 17.9   | 1.27  |
|                 | 55.0              | 51.0  | 26.8                   | 1.56  | 25.8   | 1.53  | 24.3   | 1.49  | 23.2   | 1.43  | 22.1   | 1.38  | 20.8   | 1.31  | 19.5   | 1.26  | 17.9   | 1.20  |
|                 | 60.0              | 56.0  | 26.8                   | 1.45  | 25.8   | 1.42  | 24.3   | 1.38  | 23.2   | 1.33  | 22.1   | 1.29  | 20.8   | 1.22  | 19.5   | 1.17  | 17.9   | 1.11  |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.

0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

# HEATING CAPACITY

ZRUN024GSS0



Table 50: ZRUN024GSS0 Heating Capacities, continued.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |
|-----------------|-------------------|-------|------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 |                   |       | 59                     |       | 61     |       | 64     |       | 67     |       | 70     |       | 73     |       | 76     |       | 80     |       |
|                 | °F DB             | °F WB | TC MBh                 | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW |
| 70              | -21.6             | -22.0 | 13.7                   | 1.67  | 13.6   | 1.72  | 13.6   | 1.79  | 13.5   | 1.97  | 13.4   | 2.16  | 13.3   | 2.41  | 13.2   | 2.56  | 13.1   | 2.76  |
|                 | -17.1             | -17.5 | 15.9                   | 1.95  | 15.8   | 1.98  | 15.7   | 2.04  | 15.4   | 2.21  | 15.1   | 2.38  | 14.7   | 2.50  | 14.3   | 2.62  | 13.8   | 2.80  |
|                 | -12.6             | -13.0 | 18.0                   | 2.22  | 18.0   | 2.25  | 17.9   | 2.29  | 17.3   | 2.45  | 16.7   | 2.60  | 16.0   | 2.59  | 15.4   | 2.68  | 14.5   | 2.83  |
|                 | -7.0              | -7.6  | 20.7                   | 2.56  | 20.7   | 2.57  | 20.7   | 2.59  | 19.7   | 2.75  | 18.8   | 2.87  | 17.7   | 2.86  | 16.7   | 2.75  | 15.4   | 2.87  |
|                 | -4.0              | -4.4  | 21.5                   | 2.75  | 21.2   | 2.75  | 20.7   | 2.76  | 19.7   | 2.91  | 18.8   | 2.91  | 17.7   | 2.90  | 16.7   | 2.79  | 15.4   | 2.89  |
|                 | 0.0               | -0.4  | 22.7                   | 2.99  | 21.9   | 2.98  | 20.7   | 2.98  | 19.7   | 2.97  | 18.8   | 2.97  | 17.7   | 2.88  | 16.7   | 2.84  | 15.4   | 2.77  |
|                 | 5.0               | 4.5   | 22.7                   | 3.04  | 21.9   | 3.04  | 20.7   | 3.03  | 19.7   | 2.98  | 18.8   | 2.93  | 17.7   | 2.80  | 16.7   | 2.74  | 15.4   | 2.67  |
|                 | 10.0              | 9.0   | 22.7                   | 2.79  | 21.9   | 2.78  | 20.7   | 2.77  | 19.7   | 2.66  | 18.8   | 2.55  | 17.7   | 2.43  | 16.7   | 2.38  | 15.4   | 2.31  |
|                 | 15.0              | 14.0  | 22.7                   | 2.69  | 21.9   | 2.62  | 20.7   | 2.50  | 19.7   | 2.40  | 18.8   | 2.29  | 17.7   | 2.18  | 16.7   | 2.13  | 15.4   | 2.06  |
|                 | 20.0              | 19.0  | 22.7                   | 2.50  | 21.9   | 2.43  | 20.7   | 2.33  | 19.7   | 2.23  | 18.8   | 2.13  | 17.7   | 2.03  | 16.7   | 1.98  | 15.4   | 1.90  |
|                 | 25.0              | 23.0  | 22.7                   | 2.32  | 21.9   | 2.25  | 20.7   | 2.16  | 19.7   | 2.07  | 18.8   | 1.98  | 17.7   | 1.88  | 16.7   | 1.82  | 15.4   | 1.75  |
|                 | 30.0              | 28.0  | 22.7                   | 2.13  | 21.9   | 2.07  | 20.7   | 1.98  | 19.7   | 1.90  | 18.8   | 1.82  | 17.7   | 1.73  | 16.7   | 1.67  | 15.4   | 1.59  |
|                 | 35.0              | 32.0  | 22.7                   | 1.94  | 21.9   | 1.89  | 20.7   | 1.81  | 19.7   | 1.74  | 18.8   | 1.67  | 17.7   | 1.58  | 16.7   | 1.52  | 15.4   | 1.44  |
|                 | 40.0              | 36.0  | 22.7                   | 1.76  | 21.9   | 1.71  | 20.7   | 1.64  | 19.7   | 1.58  | 18.8   | 1.51  | 17.7   | 1.43  | 16.7   | 1.37  | 15.4   | 1.28  |
|                 | 45.0              | 41.0  | 22.7                   | 1.57  | 21.9   | 1.53  | 20.7   | 1.47  | 19.7   | 1.42  | 18.8   | 1.36  | 17.7   | 1.29  | 16.7   | 1.22  | 15.4   | 1.13  |
|                 | 47.0              | 43.0  | 22.7                   | 1.51  | 21.9   | 1.47  | 20.7   | 1.41  | 19.7   | 1.36  | 18.8   | 1.31  | 17.7   | 1.24  | 16.7   | 1.17  | 15.4   | 1.09  |
|                 | 50.0              | 46.0  | 22.7                   | 1.46  | 21.9   | 1.42  | 20.7   | 1.36  | 19.7   | 1.31  | 18.8   | 1.26  | 17.7   | 1.19  | 16.7   | 1.13  | 15.4   | 1.05  |
|                 | 55.0              | 51.0  | 22.7                   | 1.37  | 21.9   | 1.33  | 20.7   | 1.28  | 19.7   | 1.23  | 18.8   | 1.18  | 17.7   | 1.12  | 16.7   | 1.06  | 15.4   | 0.98  |
|                 | 60.0              | 56.0  | 22.7                   | 1.27  | 21.9   | 1.24  | 20.7   | 1.19  | 19.7   | 1.14  | 18.8   | 1.10  | 17.7   | 1.04  | 16.7   | 0.99  | 15.4   | 0.92  |
| 60              | -21.6             | -22.0 | 12.7                   | 1.54  | 12.6   | 1.59  | 12.6   | 1.66  | 12.5   | 1.84  | 12.4   | 2.03  | 12.3   | 2.28  | 12.2   | 2.43  | 12.2   | 2.63  |
|                 | -17.1             | -17.5 | 14.8                   | 1.71  | 14.5   | 1.85  | 14.2   | 1.90  | 13.9   | 2.08  | 13.5   | 2.32  | 13.1   | 2.51  | 12.7   | 2.50  | 12.5   | 2.65  |
|                 | -12.6             | -13.0 | 16.8                   | 1.87  | 16.4   | 2.11  | 15.8   | 2.15  | 15.2   | 2.31  | 14.7   | 2.62  | 13.8   | 2.60  | 13.1   | 2.60  | 12.8   | 2.67  |
|                 | -7.0              | -7.6  | 19.4                   | 2.08  | 18.8   | 2.43  | 17.8   | 2.45  | 16.9   | 2.60  | 16.1   | 2.72  | 15.2   | 2.71  | 14.3   | 2.71  | 13.2   | 2.70  |
|                 | -4.0              | -4.4  | 19.4                   | 2.19  | 18.8   | 2.60  | 17.8   | 2.61  | 16.9   | 2.76  | 16.1   | 2.75  | 15.2   | 2.71  | 14.3   | 2.63  | 13.2   | 2.52  |
|                 | 0.0               | -0.4  | 19.4                   | 2.34  | 18.8   | 2.83  | 17.8   | 2.83  | 16.9   | 2.79  | 16.1   | 2.75  | 15.2   | 2.65  | 14.3   | 2.56  | 13.2   | 2.44  |
|                 | 5.0               | 4.5   | 19.4                   | 2.52  | 18.8   | 2.89  | 17.8   | 2.88  | 16.9   | 2.77  | 16.1   | 2.66  | 15.2   | 2.56  | 14.3   | 2.47  | 13.2   | 2.35  |
|                 | 10.0              | 9.0   | 19.4                   | 2.71  | 18.8   | 2.65  | 17.8   | 2.56  | 16.9   | 2.43  | 16.1   | 2.30  | 15.2   | 2.21  | 14.3   | 2.13  | 13.2   | 2.02  |
|                 | 15.0              | 14.0  | 19.4                   | 2.46  | 18.8   | 2.39  | 17.8   | 2.29  | 16.9   | 2.17  | 16.1   | 2.06  | 15.2   | 1.97  | 14.3   | 1.90  | 13.2   | 1.79  |
|                 | 20.0              | 19.0  | 19.4                   | 2.29  | 18.8   | 2.22  | 17.8   | 2.12  | 16.9   | 2.01  | 16.1   | 1.91  | 15.2   | 1.82  | 14.3   | 1.75  | 13.2   | 1.65  |
|                 | 25.0              | 23.0  | 19.4                   | 2.11  | 18.8   | 2.05  | 17.8   | 1.95  | 16.9   | 1.85  | 16.1   | 1.76  | 15.2   | 1.68  | 14.3   | 1.60  | 13.2   | 1.50  |
|                 | 30.0              | 28.0  | 19.4                   | 1.94  | 18.8   | 1.87  | 17.8   | 1.78  | 16.9   | 1.69  | 16.1   | 1.61  | 15.2   | 1.53  | 14.3   | 1.46  | 13.2   | 1.36  |
|                 | 35.0              | 32.0  | 19.4                   | 1.76  | 18.8   | 1.70  | 17.8   | 1.61  | 16.9   | 1.53  | 16.1   | 1.46  | 15.2   | 1.38  | 14.3   | 1.31  | 13.2   | 1.22  |
|                 | 40.0              | 36.0  | 19.4                   | 1.59  | 18.8   | 1.53  | 17.8   | 1.44  | 16.9   | 1.38  | 16.1   | 1.31  | 15.2   | 1.23  | 14.3   | 1.16  | 13.2   | 1.07  |
|                 | 45.0              | 41.0  | 19.4                   | 1.42  | 18.8   | 1.36  | 17.8   | 1.27  | 16.9   | 1.22  | 16.1   | 1.17  | 15.2   | 1.09  | 14.3   | 1.02  | 13.2   | 0.94  |
|                 | 47.0              | 43.0  | 19.4                   | 1.36  | 18.8   | 1.31  | 17.8   | 1.22  | 16.9   | 1.17  | 16.1   | 1.12  | 15.2   | 1.05  | 14.3   | 0.98  | 13.2   | 0.90  |
|                 | 50.0              | 46.0  | 19.4                   | 1.31  | 18.8   | 1.26  | 17.8   | 1.18  | 16.9   | 1.13  | 16.1   | 1.08  | 15.2   | 1.01  | 14.3   | 0.95  | 13.2   | 0.87  |
|                 | 55.0              | 51.0  | 19.4                   | 1.23  | 18.8   | 1.18  | 17.8   | 1.11  | 16.9   | 1.06  | 16.1   | 1.01  | 15.2   | 0.95  | 14.3   | 0.89  | 13.2   | 0.81  |
|                 | 60.0              | 56.0  | 19.4                   | 1.15  | 18.8   | 1.10  | 17.8   | 1.03  | 16.9   | 0.99  | 16.1   | 0.94  | 15.2   | 0.88  | 14.3   | 0.83  | 13.2   | 0.76  |
| 50              | -21.6             | -22.0 | 11.7                   | 1.32  | 11.7   | 1.37  | 11.6   | 1.44  | 11.6   | 1.62  | 11.5   | 1.81  | 11.3   | 2.06  | 11.1   | 2.21  | 10.9   | 2.41  |
|                 | -17.1             | -17.5 | 14.0                   | 1.55  | 13.7   | 1.62  | 13.2   | 1.68  | 12.8   | 1.85  | 12.5   | 2.01  | 12.0   | 2.19  | 11.5   | 2.18  | 10.9   | 2.17  |
|                 | -12.6             | -13.0 | 16.3                   | 1.78  | 15.7   | 1.87  | 14.8   | 1.91  | 14.1   | 2.07  | 13.4   | 2.21  | 12.6   | 2.20  | 11.9   | 2.19  | 10.9   | 2.18  |
|                 | -7.0              | -7.6  | 16.3                   | 2.07  | 15.7   | 2.18  | 14.8   | 2.20  | 14.1   | 2.35  | 13.4   | 2.47  | 12.6   | 2.40  | 11.9   | 2.29  | 10.9   | 2.13  |
|                 | -4.0              | -4.4  | 16.3                   | 2.23  | 15.7   | 2.35  | 14.8   | 2.35  | 14.1   | 2.50  | 13.4   | 2.50  | 12.6   | 2.35  | 11.9   | 2.24  | 10.9   | 2.08  |
|                 | 0.0               | -0.4  | 16.3                   | 2.43  | 15.7   | 2.57  | 14.8   | 2.56  | 14.1   | 2.50  | 13.4   | 2.44  | 12.6   | 2.29  | 11.9   | 2.18  | 10.9   | 2.03  |
|                 | 5.0               | 4.5   | 16.3                   | 2.69  | 15.7   | 2.62  | 14.8   | 2.51  | 14.1   | 2.43  | 13.4   | 2.35  | 12.6   | 2.20  | 11.9   | 2.09  | 10.9   | 1.95  |
|                 | 10.0              | 9.0   | 16.3                   | 2.42  | 15.7   | 2.32  | 14.8   | 2.17  | 14.1   | 2.09  | 13.4   | 2.02  | 12.6   | 1.90  | 11.9   | 1.80  | 10.9   | 1.68  |
|                 | 15.0              | 14.0  | 16.3                   | 2.16  | 15.7   | 2.06  | 14.8   | 1.93  | 14.1   | 1.86  | 13.4   | 1.80  | 12.6   | 1.69  | 11.9   | 1.60  | 10.9   | 1.49  |
|                 | 20.0              | 19.0  | 16.3                   | 1.98  | 15.7   | 1.90  | 14.8   | 1.78  | 14.1   | 1.71  | 13.4   | 1.65  | 12.6   | 1.55  | 11.9   | 1.47  | 10.9   | 1.36  |
|                 | 25.0              | 23.0  | 16.3                   | 1.81  | 15.7   | 1.74  | 14.8   | 1.62  | 14.1   | 1.56  | 13.4   | 1.51  | 12.6   | 1.42  | 11.9   | 1.34  | 10.9   | 1.24  |
|                 | 30.0              | 28.0  | 16.3                   | 1.64  | 15.7   | 1.58  | 14.8   | 1.47  | 14.1   | 1.42  | 13.4   | 1.36  | 12.6   | 1.28  | 11.9   | 1.21  | 10.9   | 1.12  |
|                 | 35.0              | 32.0  | 16.3                   | 1.47  | 15.7   | 1.41  | 14.8   | 1.32  | 14.1   | 1.27  | 13.4   | 1.22  | 12.6   | 1.15  | 11.9   | 1.09  | 10.9   | 1.00  |
|                 | 40.0              | 36.0  | 16.3                   | 1.31  | 15.7   | 1.25  | 14.8   | 1.17  | 14.1   | 1.12  | 13.4   | 1.08  | 12.6   | 1.02  | 11.9   | 0.96  | 10.9   | 0.88  |
|                 | 45.0              | 41.0  | 16.3                   | 1.14  | 15.7   | 1.10  | 14.8   | 1.03  | 14.1   | 0.98  | 13.4   | 0.94  | 12.6   | 0.89  | 11.9   | 0.84  | 10.9   | 0.77  |
|                 | 47.0              | 43.0  | 16.3                   | 1.10  | 15.7   | 1.05  | 14.8   | 0.99  | 14.1   | 0.95  | 13.4   | 0.90  | 12.6   | 0.85  | 11.9   | 0.80  | 10.9   | 0.74  |
|                 | 50.0              | 46.0  | 16.3                   | 1.06  | 15.7   | 1.02  | 14.8   | 0.95  | 14.1   | 0.91  | 13.4   | 0.87  | 12.6   | 0.82  | 11.9   | 0.77  | 10.9   | 0.71  |
|                 | 55.0              | 51.0  | 16.3                   | 0.99  | 15.7   | 0.95  | 14.8   | 0.89  | 14.1   | 0.85  | 13.4   | 0.82  | 12.6   | 0.77  | 11.9   | 0.73  | 10.9   | 0.67  |
|                 | 60.0              | 56.0  | 16.3                   | 0.92  | 15.7   | 0.89  | 14.8   | 0.83  | 14.1   | 0.79  | 13.4   | 0.76  | 12.6   | 0.72  | 11.9   | 0.68  | 10.9   | 0.62  |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.

0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

Table 51: ZRUM036GSS0 Heating Capacities.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |
|-----------------|-------------------|-------|------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 | °F DB             | °F WB | 59                     |       | 61     |       | 64     |       | 67     |       | 70     |       | 73     |       | 76     |       | 80     |       |
|                 |                   |       | TC MBh                 | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW |
| 130             | -21.6             | -22.0 | 22.0                   | 1.05  | 21.9   | 1.19  | 21.8   | 1.41  | 21.6   | 1.61  | 21.5   | 1.81  | 21.3   | 2.08  | 21.2   | 2.22  | 21.1   | 2.42  |
|                 | -17.1             | -17.5 | 25.9                   | 1.29  | 25.8   | 1.42  | 25.5   | 1.65  | 25.3   | 1.87  | 25.2   | 2.11  | 25.0   | 2.39  | 24.8   | 2.70  | 24.7   | 2.88  |
|                 | -12.6             | -13.0 | 29.9                   | 1.54  | 29.7   | 1.64  | 29.3   | 1.90  | 29.1   | 2.14  | 28.8   | 2.40  | 28.6   | 2.71  | 28.4   | 3.17  | 28.2   | 3.33  |
|                 | -7.0              | -7.6  | 34.8                   | 1.84  | 34.5   | 1.92  | 34.0   | 2.20  | 33.7   | 2.47  | 33.4   | 2.77  | 33.1   | 3.11  | 32.9   | 3.75  | 32.7   | 3.90  |
|                 | -4.0              | -4.4  | 37.4                   | 2.01  | 37.1   | 2.07  | 36.6   | 2.36  | 36.2   | 2.64  | 35.8   | 2.96  | 35.5   | 3.32  | 35.3   | 4.07  | 35.1   | 4.21  |
|                 | 0.0               | -0.4  | 41.0                   | 2.23  | 40.5   | 2.27  | 39.9   | 2.58  | 39.5   | 2.88  | 39.1   | 3.22  | 38.8   | 3.61  | 38.6   | 4.48  | 38.3   | 4.61  |
|                 | 5.0               | 4.5   | 45.4                   | 2.50  | 44.9   | 2.53  | 44.1   | 2.85  | 43.6   | 3.17  | 43.1   | 3.55  | 42.8   | 3.96  | 42.6   | 5.01  | 42.3   | 5.12  |
|                 | 10.0              | 9.0   | 48.9                   | 2.77  | 48.6   | 2.78  | 48.0   | 3.13  | 47.5   | 3.46  | 46.9   | 3.88  | 45.6   | 4.31  | 44.4   | 4.78  | 42.9   | 4.85  |
|                 | 15.0              | 14.0  | 52.5                   | 3.05  | 52.3   | 3.03  | 51.9   | 3.40  | 51.3   | 3.75  | 50.7   | 4.20  | 48.4   | 4.67  | 46.3   | 4.66  | 43.5   | 4.65  |
|                 | 20.0              | 19.0  | 56.0                   | 3.32  | 56.1   | 3.28  | 55.8   | 3.67  | 55.2   | 4.05  | 54.5   | 4.53  | 51.2   | 4.44  | 48.2   | 4.35  | 44.1   | 4.22  |
|                 | 25.0              | 23.0  | 56.0                   | 3.59  | 56.1   | 3.53  | 56.2   | 3.94  | 55.4   | 4.34  | 54.5   | 4.28  | 51.2   | 4.10  | 48.2   | 4.01  | 44.1   | 3.89  |
|                 | 30.0              | 28.0  | 56.1                   | 3.87  | 56.1   | 3.78  | 56.1   | 4.22  | 55.3   | 4.07  | 54.5   | 3.92  | 51.2   | 3.75  | 48.2   | 3.67  | 44.1   | 3.55  |
|                 | 35.0              | 32.0  | 56.1                   | 4.14  | 56.1   | 4.03  | 56.1   | 3.87  | 55.3   | 3.71  | 54.5   | 3.55  | 51.2   | 3.40  | 48.2   | 3.32  | 44.1   | 3.21  |
|                 | 40.0              | 36.0  | 56.1                   | 3.76  | 56.1   | 3.62  | 56.1   | 3.41  | 55.3   | 3.30  | 54.5   | 3.18  | 51.2   | 3.04  | 48.2   | 2.97  | 44.1   | 2.87  |
|                 | 45.0              | 41.0  | 56.1                   | 3.12  | 56.1   | 3.06  | 56.1   | 2.96  | 55.3   | 2.88  | 54.5   | 2.79  | 51.2   | 2.68  | 48.2   | 2.61  | 44.1   | 2.52  |
|                 | 47.0              | 43.0  | 56.1                   | 2.92  | 56.1   | 2.86  | 56.1   | 2.77  | 55.3   | 2.69  | 54.5   | 2.61  | 51.2   | 2.50  | 48.2   | 2.44  | 44.1   | 2.36  |
|                 | 50.0              | 46.0  | 56.1                   | 2.82  | 56.1   | 2.76  | 56.1   | 2.67  | 55.3   | 2.59  | 54.5   | 2.52  | 51.2   | 2.41  | 48.2   | 2.35  | 44.1   | 2.27  |
|                 | 55.0              | 51.0  | 56.1                   | 2.64  | 56.1   | 2.59  | 56.1   | 2.50  | 55.3   | 2.43  | 54.5   | 2.36  | 51.2   | 2.26  | 48.2   | 2.21  | 44.1   | 2.13  |
|                 | 60.0              | 56.0  | 56.1                   | 2.46  | 56.1   | 2.41  | 56.1   | 2.33  | 55.3   | 2.26  | 54.5   | 2.20  | 51.2   | 2.11  | 48.2   | 2.05  | 44.1   | 1.98  |
| 120             | -21.6             | -22.0 | 21.8                   | 1.29  | 21.7   | 1.40  | 21.6   | 1.56  | 21.5   | 1.70  | 21.3   | 1.84  | 21.2   | 1.93  | 21.1   | 1.95  | 20.9   | 1.98  |
|                 | -17.1             | -17.5 | 25.7                   | 1.55  | 25.6   | 1.69  | 25.3   | 1.84  | 25.2   | 2.01  | 25.0   | 2.19  | 24.8   | 2.28  | 24.6   | 2.30  | 24.4   | 2.32  |
|                 | -12.6             | -13.0 | 29.6                   | 1.81  | 29.4   | 1.99  | 29.1   | 2.12  | 28.8   | 2.31  | 28.6   | 2.55  | 28.4   | 2.64  | 28.2   | 2.65  | 27.8   | 2.66  |
|                 | -7.0              | -7.6  | 34.4                   | 2.14  | 34.1   | 2.35  | 33.7   | 2.46  | 33.4   | 2.69  | 33.1   | 2.98  | 32.9   | 3.08  | 32.7   | 3.08  | 32.1   | 3.09  |
|                 | -4.0              | -4.4  | 37.0                   | 2.32  | 36.7   | 2.55  | 36.2   | 2.65  | 35.9   | 2.90  | 35.6   | 3.22  | 35.3   | 3.31  | 35.1   | 3.31  | 34.4   | 3.32  |
|                 | 0.0               | -0.4  | 40.5                   | 2.55  | 40.1   | 2.81  | 39.6   | 2.90  | 39.2   | 3.17  | 38.8   | 3.53  | 38.5   | 3.63  | 38.3   | 3.62  | 37.5   | 3.62  |
|                 | 5.0               | 4.5   | 44.8                   | 2.84  | 44.3   | 3.14  | 43.7   | 3.21  | 43.3   | 3.51  | 42.8   | 3.92  | 42.5   | 4.02  | 42.3   | 4.01  | 41.3   | 4.00  |
|                 | 10.0              | 9.0   | 48.1                   | 3.14  | 47.6   | 3.47  | 46.9   | 3.52  | 46.3   | 3.85  | 45.6   | 4.32  | 44.4   | 4.41  | 43.3   | 4.40  | 41.3   | 4.38  |
|                 | 15.0              | 14.0  | 51.4                   | 3.43  | 50.9   | 3.80  | 50.2   | 3.82  | 49.3   | 4.19  | 48.4   | 4.71  | 46.3   | 4.81  | 44.2   | 4.79  | 41.3   | 4.76  |
|                 | 20.0              | 19.0  | 54.6                   | 3.72  | 54.1   | 4.12  | 53.4   | 4.13  | 52.3   | 4.53  | 51.1   | 4.54  | 48.2   | 4.46  | 45.2   | 4.43  | 41.3   | 4.40  |
|                 | 25.0              | 23.0  | 56.0                   | 4.01  | 55.6   | 4.45  | 55.0   | 4.44  | 53.1   | 4.31  | 51.1   | 4.18  | 48.2   | 4.11  | 45.2   | 4.08  | 41.3   | 4.04  |
|                 | 30.0              | 28.0  | 56.0                   | 4.30  | 55.6   | 4.20  | 55.0   | 4.04  | 53.1   | 3.93  | 51.1   | 3.82  | 48.2   | 3.75  | 45.2   | 3.72  | 41.3   | 3.67  |
|                 | 35.0              | 32.0  | 56.0                   | 3.85  | 55.6   | 3.76  | 55.0   | 3.63  | 53.1   | 3.54  | 51.1   | 3.45  | 48.2   | 3.39  | 45.2   | 3.36  | 41.3   | 3.31  |
|                 | 40.0              | 36.0  | 56.0                   | 3.39  | 55.6   | 3.33  | 55.0   | 3.22  | 53.1   | 3.15  | 51.1   | 3.08  | 48.2   | 3.03  | 45.2   | 2.99  | 41.3   | 2.94  |
|                 | 45.0              | 41.0  | 56.0                   | 2.94  | 55.6   | 2.88  | 55.0   | 2.81  | 53.1   | 2.75  | 51.1   | 2.70  | 48.2   | 2.65  | 45.2   | 2.61  | 41.3   | 2.56  |
|                 | 47.0              | 43.0  | 56.0                   | 2.75  | 55.6   | 2.70  | 55.0   | 2.63  | 53.1   | 2.58  | 51.1   | 2.53  | 48.2   | 2.49  | 45.2   | 2.45  | 41.3   | 2.40  |
|                 | 50.0              | 46.0  | 56.0                   | 2.65  | 55.6   | 2.60  | 55.0   | 2.53  | 53.1   | 2.48  | 51.1   | 2.43  | 48.2   | 2.39  | 45.2   | 2.36  | 41.3   | 2.31  |
|                 | 55.0              | 51.0  | 56.0                   | 2.49  | 55.6   | 2.44  | 55.0   | 2.37  | 53.1   | 2.33  | 51.1   | 2.28  | 48.2   | 2.25  | 45.2   | 2.21  | 41.3   | 2.17  |
|                 | 60.0              | 56.0  | 56.0                   | 2.31  | 55.6   | 2.27  | 55.0   | 2.21  | 53.1   | 2.17  | 51.1   | 2.12  | 48.2   | 2.09  | 45.2   | 2.06  | 41.3   | 2.02  |
| 110             | -21.6             | -22.0 | 21.7                   | 1.64  | 21.6   | 1.72  | 21.5   | 1.84  | 21.4   | 1.97  | 21.2   | 2.11  | 21.1   | 2.36  | 20.9   | 2.56  | 20.8   | 2.83  |
|                 | -17.1             | -17.5 | 25.5                   | 1.97  | 25.4   | 2.04  | 25.2   | 2.14  | 25.0   | 2.50  | 24.8   | 2.64  | 24.6   | 2.90  | 24.3   | 3.08  | 23.6   | 3.44  |
|                 | -12.6             | -13.0 | 29.3                   | 2.31  | 29.1   | 2.36  | 28.8   | 2.44  | 28.6   | 3.02  | 28.5   | 3.18  | 28.2   | 3.44  | 27.6   | 3.60  | 26.5   | 4.05  |
|                 | -7.0              | -7.6  | 34.0                   | 2.72  | 33.8   | 2.76  | 33.4   | 2.81  | 33.2   | 3.67  | 33.0   | 3.84  | 32.6   | 4.11  | 31.8   | 4.24  | 30.0   | 4.81  |
|                 | -4.0              | -4.4  | 36.6                   | 2.95  | 36.3   | 2.97  | 35.9   | 3.01  | 35.6   | 4.01  | 35.4   | 4.20  | 34.9   | 4.47  | 34.1   | 4.59  | 31.8   | 5.22  |
|                 | 0.0               | -0.4  | 39.9                   | 3.24  | 39.6   | 3.25  | 39.1   | 3.27  | 38.9   | 4.48  | 38.6   | 4.67  | 38.1   | 4.95  | 37.0   | 5.05  | 34.4   | 5.77  |
|                 | 5.0               | 4.5   | 44.2                   | 3.62  | 43.8   | 3.61  | 43.2   | 3.60  | 42.9   | 5.06  | 42.6   | 5.27  | 42.0   | 5.55  | 40.8   | 5.62  | 37.5   | 5.72  |
|                 | 10.0              | 9.0   | 46.0                   | 3.99  | 45.6   | 3.97  | 44.9   | 3.93  | 44.6   | 4.91  | 44.3   | 5.10  | 42.4   | 5.03  | 40.8   | 4.94  | 37.5   | 4.81  |
|                 | 15.0              | 14.0  | 50.5                   | 4.36  | 50.0   | 4.32  | 49.2   | 4.26  | 47.5   | 4.70  | 45.9   | 4.69  | 43.2   | 4.56  | 40.8   | 4.42  | 37.5   | 4.22  |
|                 | 20.0              | 19.0  | 55.4                   | 4.73  | 53.5   | 4.68  | 50.6   | 4.60  | 48.2   | 4.48  | 45.9   | 4.36  | 43.2   | 4.23  | 40.8   | 4.09  | 37.5   | 3.92  |
|                 | 25.0              | 23.0  | 55.4                   | 4.50  | 53.5   | 4.41  | 50.6   | 4.26  | 48.2   | 4.14  | 45.9   | 4.01  | 43.2   | 3.89  | 40.8   | 3.77  | 37.5   | 3.61  |
|                 | 30.0              | 28.0  | 55.4                   | 4.11  | 53.5   | 4.01  | 50.6   | 3.85  | 48.2   | 3.75  | 45.9   | 3.65  | 43.2   | 3.55  | 40.8   | 3.44  | 37.5   | 3.31  |
|                 | 35.0              | 32.0  | 55.4                   | 3.64  | 53.5   | 3.56  | 50.6   | 3.45  | 48.2   | 3.37  | 45.9   | 3.30  | 43.2   | 3.21  | 40.8   | 3.11  | 37.5   | 2.99  |
|                 | 40.0              | 36.0  | 55.4                   | 3.16  | 53.5   | 3.11  | 50.6   | 3.04  | 48.2   | 2.99  | 45.9   | 2.93  | 43.2   | 2.86  | 40.8   | 2.78  | 37.5   | 2.68  |
|                 | 45.0              | 41.0  | 55.4                   | 2.69  | 53.5   | 2.67  | 50.6   | 2.63  | 48.2   | 2.60  | 45.9   | 2.56  | 43.2   | 2.50  | 40.8   | 2.44  | 37.5   | 2.35  |
|                 | 47.0              | 43.0  | 55.4                   | 2.52  | 53.5   | 2.50  | 50.6   | 2.46  | 48.2   | 2.43  | 45.9   | 2.40  | 43.2   | 2.34  | 40.8   | 2.28  | 37.5   | 2.20  |
|                 | 50.0              | 46.0  | 55.4                   | 2.43  | 53.5   | 2.40  | 50.6   | 2.37  | 48.2   | 2.34  | 45.9   | 2.31  | 43.2   | 2.26  | 40.8   | 2.20  | 37.5   | 2.12  |
|                 | 55.0              | 51.0  | 55.4                   | 2.28  | 53.5   | 2.26  | 50.6   | 2.22  | 48.2   | 2.20  | 45.9   | 2.17  | 43.2   | 2.12  | 40.8   | 2.06  | 37.5   | 1.99  |
|                 | 60.0              | 56.0  | 55.4                   | 2.12  | 53.5   | 2.10  | 50.6   | 2.07  | 48.2   | 2.04  | 45.9   | 2.02  | 43.2   | 1.97  | 40.8   | 1.92  | 37.5   | 1.85  |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.

0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

# HEATING CAPACITY

ZRUM036GSS0



Table 52: ZRUM036GSS0 Heating Capacities, continued.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|-------------------|-------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | °F DB             | °F WB | 59                     |      | 61   |      | 64   |      | 67   |      | 70   |      | 73   |      | 76   |      | 80   |      |
|                 |                   |       | TC                     | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   |
| 100             | -21.6             | -22.0 | 21.6                   | 1.33 | 21.5 | 1.52 | 21.4 | 1.81 | 21.3 | 2.01 | 21.1 | 2.20 | 21.0 | 2.48 | 20.9 | 2.64 | 20.7 | 2.87 |
|                 | -17.1             | -17.5 | 25.3                   | 1.63 | 25.2 | 1.85 | 25.0 | 2.16 | 24.9 | 2.53 | 24.7 | 2.73 | 24.1 | 2.98 | 23.6 | 3.12 | 23.0 | 3.30 |
|                 | -12.6             | -13.0 | 29.0                   | 1.93 | 28.9 | 2.17 | 28.7 | 2.51 | 28.4 | 3.05 | 28.2 | 3.27 | 27.2 | 3.49 | 26.4 | 3.60 | 25.3 | 3.74 |
|                 | -7.0              | -7.6  | 33.6                   | 2.31 | 33.4 | 2.58 | 33.2 | 2.95 | 32.9 | 3.70 | 32.6 | 3.93 | 31.2 | 4.13 | 29.8 | 4.19 | 28.1 | 4.28 |
|                 | -4.0              | -4.4  | 36.0                   | 2.51 | 35.9 | 2.80 | 35.7 | 3.18 | 35.3 | 4.04 | 34.9 | 4.29 | 33.3 | 4.47 | 31.7 | 4.51 | 29.6 | 4.57 |
|                 | 0.0               | -0.4  | 39.3                   | 2.77 | 39.1 | 3.08 | 38.9 | 3.49 | 38.5 | 4.51 | 38.1 | 4.76 | 36.0 | 4.92 | 34.1 | 4.94 | 31.6 | 4.96 |
|                 | 5.0               | 4.5   | 43.4                   | 3.11 | 43.2 | 3.45 | 42.9 | 3.88 | 42.5 | 5.09 | 42.0 | 5.35 | 39.5 | 5.49 | 37.2 | 5.47 | 34.1 | 5.44 |
|                 | 10.0              | 9.0   | 46.1                   | 3.44 | 45.5 | 3.81 | 44.6 | 4.27 | 43.3 | 4.84 | 42.0 | 4.98 | 39.5 | 4.89 | 37.2 | 4.78 | 34.1 | 4.62 |
|                 | 15.0              | 14.0  | 48.8                   | 3.77 | 47.7 | 4.17 | 46.2 | 4.66 | 44.1 | 4.63 | 42.0 | 4.60 | 39.5 | 4.36 | 37.2 | 4.23 | 34.1 | 4.05 |
|                 | 20.0              | 19.0  | 50.8                   | 4.11 | 48.9 | 4.53 | 46.2 | 4.46 | 44.1 | 4.34 | 42.0 | 4.23 | 39.5 | 4.00 | 37.2 | 3.88 | 34.1 | 3.72 |
|                 | 25.0              | 23.0  | 50.8                   | 4.44 | 48.9 | 4.26 | 46.2 | 3.98 | 44.1 | 3.92 | 42.0 | 3.85 | 39.5 | 3.64 | 37.2 | 3.53 | 34.1 | 3.38 |
|                 | 30.0              | 28.0  | 50.8                   | 3.98 | 48.9 | 3.84 | 46.2 | 3.62 | 44.1 | 3.55 | 42.0 | 3.48 | 39.5 | 3.29 | 37.2 | 3.18 | 34.1 | 3.05 |
|                 | 35.0              | 32.0  | 50.8                   | 3.53 | 48.9 | 3.42 | 46.2 | 3.25 | 44.1 | 3.17 | 42.0 | 3.10 | 39.5 | 2.93 | 37.2 | 2.84 | 34.1 | 2.71 |
|                 | 40.0              | 36.0  | 50.8                   | 3.08 | 48.9 | 3.00 | 46.2 | 2.88 | 44.1 | 2.80 | 42.0 | 2.73 | 39.5 | 2.57 | 37.2 | 2.49 | 34.1 | 2.38 |
|                 | 45.0              | 41.0  | 50.8                   | 2.63 | 48.9 | 2.58 | 46.2 | 2.50 | 44.1 | 2.42 | 42.0 | 2.35 | 39.5 | 2.22 | 37.2 | 2.14 | 34.1 | 2.05 |
|                 | 47.0              | 43.0  | 50.8                   | 2.47 | 48.9 | 2.42 | 46.2 | 2.34 | 44.1 | 2.27 | 42.0 | 2.20 | 39.5 | 2.07 | 37.2 | 2.01 | 34.1 | 1.92 |
|                 | 50.0              | 46.0  | 50.8                   | 2.38 | 48.9 | 2.33 | 46.2 | 2.25 | 44.1 | 2.19 | 42.0 | 2.12 | 39.5 | 2.00 | 37.2 | 1.93 | 34.1 | 1.85 |
|                 | 55.0              | 51.0  | 50.8                   | 2.23 | 48.9 | 2.18 | 46.2 | 2.12 | 44.1 | 2.05 | 42.0 | 1.99 | 39.5 | 1.87 | 37.2 | 1.81 | 34.1 | 1.73 |
|                 | 60.0              | 56.0  | 50.8                   | 2.07 | 48.9 | 2.03 | 46.2 | 1.97 | 44.1 | 1.91 | 42.0 | 1.85 | 39.5 | 1.74 | 37.2 | 1.69 | 34.1 | 1.61 |
| 90              | -21.6             | -22.0 | 21.5                   | 1.72 | 21.4 | 1.82 | 21.3 | 1.97 | 21.2 | 2.18 | 21.1 | 2.39 | 20.9 | 2.53 | 20.8 | 2.67 | 20.6 | 2.84 |
|                 | -17.1             | -17.5 | 25.0                   | 2.00 | 24.9 | 2.14 | 24.6 | 2.37 | 24.3 | 2.54 | 24.0 | 2.92 | 23.5 | 3.03 | 23.0 | 3.23 | 22.4 | 3.43 |
|                 | -12.6             | -13.0 | 28.5                   | 2.28 | 28.3 | 2.46 | 27.9 | 2.76 | 27.4 | 2.90 | 26.9 | 3.46 | 26.1 | 3.54 | 25.2 | 3.80 | 24.2 | 4.02 |
|                 | -7.0              | -7.6  | 32.8                   | 2.64 | 32.5 | 2.85 | 32.0 | 3.24 | 31.3 | 3.35 | 30.6 | 4.13 | 29.3 | 4.16 | 28.0 | 4.51 | 26.4 | 4.75 |
|                 | -4.0              | -4.4  | 35.2                   | 2.82 | 34.8 | 3.07 | 34.2 | 3.50 | 33.4 | 3.59 | 32.6 | 4.48 | 31.0 | 4.50 | 29.5 | 4.54 | 27.5 | 4.68 |
|                 | 0.0               | -0.4  | 38.3                   | 3.07 | 37.8 | 3.35 | 37.2 | 3.85 | 36.2 | 3.91 | 35.2 | 4.96 | 33.3 | 4.94 | 31.5 | 4.58 | 29.1 | 4.58 |
|                 | 5.0               | 4.5   | 42.1                   | 3.39 | 41.6 | 3.70 | 40.8 | 4.29 | 39.7 | 4.31 | 38.5 | 4.83 | 36.2 | 4.76 | 34.0 | 4.63 | 31.1 | 4.46 |
|                 | 10.0              | 9.0   | 46.0                   | 3.70 | 44.5 | 4.06 | 42.2 | 4.72 | 40.3 | 4.71 | 38.5 | 4.69 | 36.2 | 4.47 | 34.0 | 4.27 | 31.1 | 4.00 |
|                 | 15.0              | 14.0  | 46.6                   | 4.02 | 44.8 | 4.41 | 42.2 | 4.40 | 40.3 | 4.29 | 38.5 | 4.19 | 36.2 | 3.97 | 34.0 | 3.79 | 31.1 | 3.55 |
|                 | 20.0              | 19.0  | 46.6                   | 4.33 | 44.8 | 4.24 | 42.2 | 4.11 | 40.3 | 3.98 | 38.5 | 3.85 | 36.2 | 3.65 | 34.0 | 3.48 | 31.1 | 3.26 |
|                 | 25.0              | 23.0  | 46.6                   | 3.95 | 44.8 | 3.87 | 42.2 | 3.75 | 40.3 | 3.63 | 38.5 | 3.51 | 36.2 | 3.33 | 34.0 | 3.17 | 31.1 | 2.97 |
|                 | 30.0              | 28.0  | 46.6                   | 3.56 | 44.8 | 3.49 | 42.2 | 3.38 | 40.3 | 3.28 | 38.5 | 3.17 | 36.2 | 3.00 | 34.0 | 2.86 | 31.1 | 2.68 |
|                 | 35.0              | 32.0  | 46.6                   | 3.18 | 44.8 | 3.11 | 42.2 | 3.02 | 40.3 | 2.92 | 38.5 | 2.83 | 36.2 | 2.68 | 34.0 | 2.56 | 31.1 | 2.39 |
|                 | 40.0              | 36.0  | 46.6                   | 2.79 | 44.8 | 2.74 | 42.2 | 2.65 | 40.3 | 2.57 | 38.5 | 2.49 | 36.2 | 2.36 | 34.0 | 2.25 | 31.1 | 2.10 |
|                 | 45.0              | 41.0  | 46.6                   | 2.41 | 44.8 | 2.36 | 42.2 | 2.29 | 40.3 | 2.22 | 38.5 | 2.15 | 36.2 | 2.04 | 34.0 | 1.94 | 31.1 | 1.81 |
|                 | 47.0              | 43.0  | 46.6                   | 2.25 | 44.8 | 2.21 | 42.2 | 2.14 | 40.3 | 2.08 | 38.5 | 2.01 | 36.2 | 1.91 | 34.0 | 1.82 | 31.1 | 1.69 |
|                 | 50.0              | 46.0  | 46.6                   | 2.17 | 44.8 | 2.13 | 42.2 | 2.06 | 40.3 | 2.00 | 38.5 | 1.94 | 36.2 | 1.84 | 34.0 | 1.75 | 31.1 | 1.63 |
|                 | 55.0              | 51.0  | 46.6                   | 2.04 | 44.8 | 2.00 | 42.2 | 1.93 | 40.3 | 1.88 | 38.5 | 1.82 | 36.2 | 1.73 | 34.0 | 1.64 | 31.1 | 1.53 |
|                 | 60.0              | 56.0  | 46.6                   | 1.89 | 44.8 | 1.86 | 42.2 | 1.80 | 40.3 | 1.75 | 38.5 | 1.69 | 36.2 | 1.60 | 34.0 | 1.53 | 31.1 | 1.42 |
| 80              | -21.6             | -22.0 | 21.4                   | 1.73 | 21.4 | 1.85 | 21.2 | 2.02 | 21.1 | 2.14 | 21.0 | 2.26 | 20.8 | 2.58 | 20.7 | 2.75 | 20.5 | 2.97 |
|                 | -17.1             | -17.5 | 24.3                   | 2.00 | 24.0 | 2.32 | 24.0 | 2.51 | 23.6 | 2.61 | 23.8 | 2.70 | 23.2 | 2.95 | 22.7 | 3.24 | 22.1 | 3.48 |
|                 | -12.6             | -13.0 | 27.2                   | 2.27 | 26.7 | 2.79 | 26.8 | 3.01 | 26.2 | 3.08 | 26.6 | 3.14 | 25.6 | 3.31 | 24.7 | 3.45 | 23.6 | 3.67 |
|                 | -7.0              | -7.6  | 30.8                   | 2.60 | 30.0 | 3.37 | 30.3 | 3.63 | 29.3 | 3.66 | 30.1 | 3.70 | 28.6 | 3.77 | 27.2 | 3.70 | 25.5 | 3.90 |
|                 | -4.0              | -4.4  | 32.7                   | 2.78 | 31.8 | 3.68 | 32.2 | 3.96 | 31.0 | 3.97 | 32.0 | 3.99 | 30.2 | 4.01 | 28.6 | 3.84 | 26.5 | 4.02 |
|                 | 0.0               | -0.4  | 35.3                   | 3.02 | 34.2 | 4.10 | 34.7 | 4.40 | 33.3 | 4.39 | 34.4 | 4.38 | 32.3 | 4.34 | 30.4 | 4.03 | 27.8 | 4.18 |
|                 | 5.0               | 4.5   | 38.5                   | 3.32 | 37.2 | 4.62 | 37.8 | 4.61 | 36.1 | 4.61 | 34.4 | 4.60 | 32.3 | 4.39 | 30.4 | 4.26 | 27.8 | 4.08 |
|                 | 10.0              | 9.0   | 41.7                   | 3.62 | 40.1 | 4.18 | 37.8 | 4.17 | 36.1 | 4.11 | 34.4 | 4.04 | 32.3 | 3.78 | 30.4 | 3.66 | 27.8 | 3.51 |
|                 | 15.0              | 14.0  | 41.7                   | 3.91 | 40.1 | 3.89 | 37.8 | 3.87 | 36.1 | 3.72 | 34.4 | 3.58 | 32.3 | 3.36 | 30.4 | 3.25 | 27.8 | 3.11 |
|                 | 20.0              | 19.0  | 41.7                   | 3.71 | 40.1 | 3.64 | 37.8 | 3.55 | 36.1 | 3.42 | 34.4 | 3.29 | 32.3 | 3.08 | 30.4 | 2.98 | 27.8 | 2.85 |
|                 | 25.0              | 23.0  | 41.7                   | 3.38 | 40.1 | 3.32 | 37.8 | 3.23 | 36.1 | 3.11 | 34.4 | 2.99 | 32.3 | 2.81 | 30.4 | 2.72 | 27.8 | 2.59 |
|                 | 30.0              | 28.0  | 41.7                   | 3.04 | 40.1 | 2.99 | 37.8 | 2.91 | 36.1 | 2.80 | 34.4 | 2.70 | 32.3 | 2.54 | 30.4 | 2.45 | 27.8 | 2.34 |
|                 | 35.0              | 32.0  | 41.7                   | 2.71 | 40.1 | 2.66 | 37.8 | 2.59 | 36.1 | 2.49 | 34.4 | 2.40 | 32.3 | 2.27 | 30.4 | 2.19 | 27.8 | 2.08 |
|                 | 40.0              | 36.0  | 41.7                   | 2.38 | 40.1 | 2.33 | 37.8 | 2.27 | 36.1 | 2.19 | 34.4 | 2.11 | 32.3 | 2.00 | 30.4 | 1.92 | 27.8 | 1.82 |
|                 | 45.0              | 41.0  | 41.7                   | 2.05 | 40.1 | 2.01 | 37.8 | 1.95 | 36.1 | 1.88 | 34.4 | 1.81 | 32.3 | 1.72 | 30.4 | 1.66 | 27.8 | 1.57 |
|                 | 47.0              | 43.0  | 41.7                   | 1.92 | 40.1 | 1.88 | 37.8 | 1.83 | 36.1 | 1.76 | 34.4 | 1.70 | 32.3 | 1.61 | 30.4 | 1.55 | 27.8 | 1.47 |
|                 | 50.0              | 46.0  | 41.7                   | 1.85 | 40.1 | 1.81 | 37.8 | 1.76 | 36.1 | 1.70 | 34.4 | 1.64 | 32.3 | 1.55 | 30.4 | 1.49 | 27.8 | 1.42 |
|                 | 55.0              | 51.0  | 41.7                   | 1.73 | 40.1 | 1.70 | 37.8 | 1.65 | 36.1 | 1.59 | 34.4 | 1.54 | 32.3 | 1.46 | 30.4 | 1.40 | 27.8 | 1.33 |
|                 | 60.0              | 56.0  | 41.7                   | 1.61 | 40.1 | 1.58 | 37.8 | 1.54 | 36.1 | 1.48 | 34.4 | 1.43 | 32.3 | 1.36 | 30.4 | 1.30 | 27.8 | 1.24 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.



Table 53: ZRUM036GSS0 Heating Capacities, continued.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|-------------------|-------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | °F DB             | °F WB | 59                     |      | 61   |      | 64   |      | 67   |      | 70   |      | 73   |      | 76   |      | 80   |      |
|                 |                   |       | TC                     | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   |
| 70              | -21.6             | -22.0 | 21.3                   | 1.86 | 21.2 | 1.91 | 21.1 | 1.99 | 21.0 | 2.19 | 20.8 | 2.40 | 20.7 | 2.68 | 20.6 | 2.84 | 20.4 | 3.07 |
|                 | -17.1             | -17.5 | 24.7                   | 2.35 | 24.6 | 2.40 | 24.5 | 2.46 | 24.0 | 2.66 | 23.4 | 2.85 | 22.8 | 2.99 | 22.2 | 3.09 | 21.5 | 3.31 |
|                 | -12.6             | -13.0 | 28.0                   | 2.85 | 28.0 | 2.88 | 27.9 | 2.92 | 26.9 | 3.13 | 26.0 | 3.31 | 24.9 | 3.30 | 23.9 | 3.34 | 22.6 | 3.55 |
|                 | -7.0              | -7.6  | 32.2                   | 3.47 | 32.2 | 3.48 | 32.1 | 3.50 | 30.7 | 3.71 | 29.2 | 3.88 | 27.6 | 3.87 | 26.0 | 3.64 | 23.9 | 3.84 |
|                 | -4.0              | -4.4  | 33.5                   | 3.80 | 33.0 | 3.81 | 32.1 | 3.81 | 30.7 | 4.02 | 29.2 | 4.02 | 27.6 | 4.01 | 26.0 | 3.81 | 23.9 | 4.00 |
|                 | 0.0               | -0.4  | 35.3                   | 4.24 | 34.0 | 4.24 | 32.1 | 4.22 | 30.7 | 4.22 | 29.2 | 4.21 | 27.6 | 4.09 | 26.0 | 4.03 | 23.9 | 3.94 |
|                 | 5.0               | 4.5   | 35.3                   | 4.44 | 34.0 | 4.43 | 32.1 | 4.41 | 30.7 | 4.34 | 29.2 | 4.28 | 27.6 | 4.08 | 26.0 | 4.00 | 23.9 | 3.90 |
|                 | 10.0              | 9.0   | 35.3                   | 4.00 | 34.0 | 3.99 | 32.1 | 3.97 | 30.7 | 3.81 | 29.2 | 3.66 | 27.6 | 3.49 | 26.0 | 3.41 | 23.9 | 3.31 |
|                 | 15.0              | 14.0  | 35.3                   | 3.79 | 34.0 | 3.68 | 32.1 | 3.52 | 30.7 | 3.37 | 29.2 | 3.23 | 27.6 | 3.07 | 26.0 | 3.00 | 23.9 | 2.90 |
|                 | 20.0              | 19.0  | 35.3                   | 3.45 | 34.0 | 3.35 | 32.1 | 3.21 | 30.7 | 3.08 | 29.2 | 2.94 | 27.6 | 2.80 | 26.0 | 2.72 | 23.9 | 2.62 |
|                 | 25.0              | 23.0  | 35.3                   | 3.11 | 34.0 | 3.03 | 32.1 | 2.90 | 30.7 | 2.78 | 29.2 | 2.66 | 27.6 | 2.53 | 26.0 | 2.45 | 23.9 | 2.35 |
|                 | 30.0              | 28.0  | 35.3                   | 2.78 | 34.0 | 2.70 | 32.1 | 2.59 | 30.7 | 2.48 | 29.2 | 2.38 | 27.6 | 2.26 | 26.0 | 2.18 | 23.9 | 2.08 |
|                 | 35.0              | 32.0  | 35.3                   | 2.45 | 34.0 | 2.38 | 32.1 | 2.28 | 30.7 | 2.19 | 29.2 | 2.10 | 27.6 | 1.99 | 26.0 | 1.91 | 23.9 | 1.81 |
|                 | 40.0              | 36.0  | 35.3                   | 2.12 | 34.0 | 2.06 | 32.1 | 1.98 | 30.7 | 1.90 | 29.2 | 1.82 | 27.6 | 1.73 | 26.0 | 1.65 | 23.9 | 1.55 |
|                 | 45.0              | 41.0  | 35.3                   | 1.80 | 34.0 | 1.75 | 32.1 | 1.68 | 30.7 | 1.61 | 29.2 | 1.55 | 27.6 | 1.47 | 26.0 | 1.39 | 23.9 | 1.29 |
|                 | 47.0              | 43.0  | 35.3                   | 1.68 | 34.0 | 1.64 | 32.1 | 1.57 | 30.7 | 1.51 | 29.2 | 1.45 | 27.6 | 1.37 | 26.0 | 1.30 | 23.9 | 1.21 |
|                 | 50.0              | 46.0  | 35.3                   | 1.62 | 34.0 | 1.58 | 32.1 | 1.51 | 30.7 | 1.46 | 29.2 | 1.40 | 27.6 | 1.32 | 26.0 | 1.26 | 23.9 | 1.17 |
|                 | 55.0              | 51.0  | 35.3                   | 1.52 | 34.0 | 1.48 | 32.1 | 1.42 | 30.7 | 1.37 | 29.2 | 1.31 | 27.6 | 1.24 | 26.0 | 1.18 | 23.9 | 1.09 |
|                 | 60.0              | 56.0  | 35.3                   | 1.41 | 34.0 | 1.38 | 32.1 | 1.32 | 30.7 | 1.27 | 29.2 | 1.22 | 27.6 | 1.15 | 26.0 | 1.10 | 23.9 | 1.02 |
| 60              | -21.6             | -22.0 | 19.7                   | 1.71 | 19.7 | 1.77 | 19.5 | 1.85 | 19.4 | 2.05 | 19.3 | 2.25 | 19.1 | 2.53 | 19.0 | 2.70 | 18.9 | 2.92 |
|                 | -17.1             | -17.5 | 23.0                   | 2.02 | 22.6 | 2.23 | 22.0 | 2.30 | 21.5 | 2.50 | 21.1 | 2.80 | 20.3 | 3.02 | 19.7 | 3.02 | 19.4 | 3.15 |
|                 | -12.6             | -13.0 | 26.2                   | 2.33 | 25.5 | 2.70 | 24.5 | 2.75 | 23.7 | 2.95 | 22.8 | 3.35 | 21.5 | 3.33 | 20.3 | 3.32 | 19.9 | 3.37 |
|                 | -7.0              | -7.6  | 30.2                   | 2.72 | 29.2 | 3.29 | 27.6 | 3.31 | 26.3 | 3.51 | 25.0 | 3.67 | 23.6 | 3.66 | 22.3 | 3.66 | 20.6 | 3.65 |
|                 | -4.0              | -4.4  | 30.2                   | 2.92 | 29.2 | 3.60 | 27.6 | 3.61 | 26.3 | 3.81 | 25.0 | 3.81 | 23.6 | 3.75 | 22.3 | 3.64 | 20.6 | 3.49 |
|                 | 0.0               | -0.4  | 30.2                   | 3.20 | 29.2 | 4.02 | 27.6 | 4.01 | 26.3 | 3.96 | 25.0 | 3.91 | 23.6 | 3.77 | 22.3 | 3.64 | 20.6 | 3.47 |
|                 | 5.0               | 4.5   | 30.2                   | 3.54 | 29.2 | 4.21 | 27.6 | 4.20 | 26.3 | 4.04 | 25.0 | 3.88 | 23.6 | 3.73 | 22.3 | 3.60 | 20.6 | 3.42 |
|                 | 10.0              | 9.0   | 30.2                   | 3.89 | 29.2 | 3.80 | 27.6 | 3.67 | 26.3 | 3.49 | 25.0 | 3.30 | 23.6 | 3.17 | 22.3 | 3.06 | 20.6 | 2.90 |
|                 | 15.0              | 14.0  | 30.2                   | 3.47 | 29.2 | 3.37 | 27.6 | 3.22 | 26.3 | 3.06 | 25.0 | 2.90 | 23.6 | 2.78 | 22.3 | 2.67 | 20.6 | 2.53 |
|                 | 20.0              | 19.0  | 30.2                   | 3.15 | 29.2 | 3.06 | 27.6 | 2.91 | 26.3 | 2.77 | 25.0 | 2.63 | 23.6 | 2.51 | 22.3 | 2.41 | 20.6 | 2.27 |
|                 | 25.0              | 23.0  | 30.2                   | 2.84 | 29.2 | 2.75 | 27.6 | 2.61 | 26.3 | 2.49 | 25.0 | 2.36 | 23.6 | 2.25 | 22.3 | 2.15 | 20.6 | 2.02 |
|                 | 30.0              | 28.0  | 30.2                   | 2.53 | 29.2 | 2.44 | 27.6 | 2.32 | 26.3 | 2.21 | 25.0 | 2.10 | 23.6 | 1.99 | 22.3 | 1.90 | 20.6 | 1.77 |
|                 | 35.0              | 32.0  | 30.2                   | 2.22 | 29.2 | 2.14 | 27.6 | 2.02 | 26.3 | 1.93 | 25.0 | 1.84 | 23.6 | 1.74 | 22.3 | 1.65 | 20.6 | 1.53 |
|                 | 40.0              | 36.0  | 30.2                   | 1.91 | 29.2 | 1.84 | 27.6 | 1.73 | 26.3 | 1.66 | 25.0 | 1.58 | 23.6 | 1.49 | 22.3 | 1.40 | 20.6 | 1.29 |
|                 | 45.0              | 41.0  | 30.2                   | 1.62 | 29.2 | 1.55 | 27.6 | 1.45 | 26.3 | 1.39 | 25.0 | 1.33 | 23.6 | 1.24 | 22.3 | 1.17 | 20.6 | 1.07 |
|                 | 47.0              | 43.0  | 30.2                   | 1.51 | 29.2 | 1.45 | 27.6 | 1.36 | 26.3 | 1.30 | 25.0 | 1.25 | 23.6 | 1.16 | 22.3 | 1.09 | 20.6 | 1.00 |
|                 | 50.0              | 46.0  | 30.2                   | 1.46 | 29.2 | 1.40 | 27.6 | 1.31 | 26.3 | 1.26 | 25.0 | 1.20 | 23.6 | 1.12 | 22.3 | 1.05 | 20.6 | 0.96 |
|                 | 55.0              | 51.0  | 30.2                   | 1.37 | 29.2 | 1.31 | 27.6 | 1.23 | 26.3 | 1.18 | 25.0 | 1.13 | 23.6 | 1.05 | 22.3 | 0.99 | 20.6 | 0.90 |
|                 | 60.0              | 56.0  | 30.2                   | 1.27 | 29.2 | 1.22 | 27.6 | 1.14 | 26.3 | 1.10 | 25.0 | 1.05 | 23.6 | 0.98 | 22.3 | 0.92 | 20.6 | 0.84 |
| 50              | -21.6             | -22.0 | 18.3                   | 1.47 | 18.2 | 1.52 | 18.1 | 1.60 | 18.0 | 1.81 | 17.9 | 2.01 | 17.6 | 2.29 | 17.3 | 2.46 | 16.9 | 2.68 |
|                 | -17.1             | -17.5 | 21.8                   | 1.88 | 21.3 | 1.97 | 20.5 | 2.03 | 20.0 | 2.23 | 19.4 | 2.42 | 18.6 | 2.63 | 17.9 | 2.62 | 17.0 | 2.61 |
|                 | -12.6             | -13.0 | 25.3                   | 2.30 | 24.4 | 2.41 | 23.0 | 2.45 | 21.9 | 2.65 | 20.9 | 2.83 | 19.7 | 2.81 | 18.5 | 2.80 | 17.0 | 2.78 |
|                 | -7.0              | -7.6  | 25.3                   | 2.81 | 24.4 | 2.96 | 23.0 | 2.98 | 21.9 | 3.18 | 20.9 | 3.34 | 19.7 | 3.25 | 18.5 | 3.09 | 17.0 | 2.88 |
|                 | -4.0              | -4.4  | 25.3                   | 3.09 | 24.4 | 3.26 | 23.0 | 3.26 | 21.9 | 3.46 | 20.9 | 3.45 | 19.7 | 3.25 | 18.5 | 3.09 | 17.0 | 2.88 |
|                 | 0.0               | -0.4  | 25.3                   | 3.46 | 24.4 | 3.65 | 23.0 | 3.63 | 21.9 | 3.55 | 20.9 | 3.47 | 19.7 | 3.25 | 18.5 | 3.09 | 17.0 | 2.88 |
|                 | 5.0               | 4.5   | 25.3                   | 3.92 | 24.4 | 3.82 | 23.0 | 3.67 | 21.9 | 3.54 | 20.9 | 3.42 | 19.7 | 3.21 | 18.5 | 3.05 | 17.0 | 2.84 |
|                 | 10.0              | 9.0   | 25.3                   | 3.48 | 24.4 | 3.33 | 23.0 | 3.11 | 21.9 | 3.00 | 20.9 | 2.90 | 19.7 | 2.72 | 18.5 | 2.59 | 17.0 | 2.40 |
|                 | 15.0              | 14.0  | 25.3                   | 3.03 | 24.4 | 2.91 | 23.0 | 2.71 | 21.9 | 2.62 | 20.9 | 2.53 | 19.7 | 2.37 | 18.5 | 2.25 | 17.0 | 2.09 |
|                 | 20.0              | 19.0  | 25.3                   | 2.73 | 24.4 | 2.62 | 23.0 | 2.45 | 21.9 | 2.36 | 20.9 | 2.27 | 19.7 | 2.14 | 18.5 | 2.03 | 17.0 | 1.88 |
|                 | 25.0              | 23.0  | 25.3                   | 2.44 | 24.4 | 2.33 | 23.0 | 2.18 | 21.9 | 2.10 | 20.9 | 2.02 | 19.7 | 1.90 | 18.5 | 1.80 | 17.0 | 1.67 |
|                 | 30.0              | 28.0  | 25.3                   | 2.14 | 24.4 | 2.05 | 23.0 | 1.92 | 21.9 | 1.85 | 20.9 | 1.78 | 19.7 | 1.67 | 18.5 | 1.58 | 17.0 | 1.46 |
|                 | 35.0              | 32.0  | 25.3                   | 1.86 | 24.4 | 1.78 | 23.0 | 1.66 | 21.9 | 1.60 | 20.9 | 1.53 | 19.7 | 1.45 | 18.5 | 1.37 | 17.0 | 1.26 |
|                 | 40.0              | 36.0  | 25.3                   | 1.57 | 24.4 | 1.51 | 23.0 | 1.41 | 21.9 | 1.36 | 20.9 | 1.30 | 19.7 | 1.22 | 18.5 | 1.16 | 17.0 | 1.06 |
|                 | 45.0              | 41.0  | 25.3                   | 1.30 | 24.4 | 1.25 | 23.0 | 1.17 | 21.9 | 1.12 | 20.9 | 1.07 | 19.7 | 1.01 | 18.5 | 0.95 | 17.0 | 0.88 |
|                 | 47.0              | 43.0  | 25.3                   | 1.22 | 24.4 | 1.17 | 23.0 | 1.10 | 21.9 | 1.05 | 20.9 | 1.00 | 19.7 | 0.95 | 18.5 | 0.89 | 17.0 | 0.82 |
|                 | 50.0              | 46.0  | 25.3                   | 1.18 | 24.4 | 1.13 | 23.0 | 1.06 | 21.9 | 1.01 | 20.9 | 0.97 | 19.7 | 0.91 | 18.5 | 0.86 | 17.0 | 0.79 |
|                 | 55.0              | 51.0  | 25.3                   | 1.10 | 24.4 | 1.06 | 23.0 | 0.99 | 21.9 | 0.95 | 20.9 | 0.91 | 19.7 | 0.86 | 18.5 | 0.81 | 17.0 | 0.74 |
|                 | 60.0              | 56.0  | 25.3                   | 1.03 | 24.4 | 0.99 | 23.0 | 0.92 | 21.9 | 0.88 | 20.9 | 0.84 | 19.7 | 0.80 | 18.5 | 0.75 | 17.0 | 0.69 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

# HEATING CAPACITY

ZRUM048GSS0



Table 54: ZRUM048GSS0 Heating Capacities.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |
|-----------------|-------------------|-------|------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 |                   |       | 59                     |       | 61     |       | 64     |       | 67     |       | 70     |       | 73     |       | 76     |       | 80     |       |
|                 | °F DB             | °F WB | TC MBh                 | PI KW | TC MBh | PI KW | TC MBh | PI KW | TC MBh | PI KW | TC MBh | PI KW | TC MBh | PI KW | TC MBh | PI KW | TC MBh | PI KW |
| 130             | -21.6             | -22.0 | 28.3                   | 1.47  | 28.1   | 1.68  | 28.0   | 1.98  | 27.8   | 2.27  | 27.6   | 2.56  | 27.4   | 2.93  | 27.3   | 3.14  | 27.1   | 3.41  |
|                 | -17.1             | -17.5 | 33.3                   | 1.82  | 33.1   | 1.99  | 32.8   | 2.33  | 32.6   | 2.64  | 32.3   | 2.97  | 32.1   | 3.37  | 31.9   | 3.80  | 31.7   | 4.06  |
|                 | -12.6             | -13.0 | 38.4                   | 2.17  | 38.1   | 2.31  | 37.7   | 2.67  | 37.4   | 3.01  | 37.1   | 3.38  | 36.8   | 3.82  | 36.6   | 4.46  | 36.3   | 4.70  |
|                 | -7.0              | -7.6  | 44.8                   | 2.60  | 44.4   | 2.71  | 43.8   | 3.10  | 43.3   | 3.47  | 42.9   | 3.90  | 42.6   | 4.38  | 42.3   | 5.29  | 42.1   | 5.50  |
|                 | -4.0              | -4.4  | 48.1                   | 2.83  | 47.7   | 2.92  | 47.0   | 3.33  | 46.5   | 3.72  | 46.1   | 4.17  | 45.7   | 4.68  | 45.4   | 5.73  | 45.1   | 5.93  |
|                 | 0.0               | -0.4  | 52.7                   | 3.14  | 52.1   | 3.20  | 51.3   | 3.64  | 50.8   | 4.05  | 50.2   | 4.54  | 49.8   | 5.08  | 49.6   | 6.32  | 49.2   | 6.50  |
|                 | 5.0               | 4.5   | 58.3                   | 3.52  | 57.7   | 3.56  | 56.7   | 4.02  | 56.1   | 4.46  | 55.5   | 5.00  | 55.0   | 5.58  | 54.7   | 7.06  | 54.4   | 7.21  |
|                 | 10.0              | 9.0   | 62.9                   | 3.91  | 62.5   | 3.91  | 61.8   | 4.41  | 61.1   | 4.88  | 60.3   | 5.46  | 58.6   | 6.08  | 57.1   | 6.74  | 55.2   | 6.83  |
|                 | 15.0              | 14.0  | 67.4                   | 4.30  | 67.3   | 4.27  | 66.8   | 4.79  | 66.0   | 5.29  | 65.2   | 5.92  | 62.2   | 6.58  | 59.5   | 6.57  | 56.0   | 6.55  |
|                 | 20.0              | 19.0  | 72.0                   | 4.68  | 72.1   | 4.62  | 71.8   | 5.17  | 70.9   | 5.70  | 70.1   | 6.38  | 65.8   | 6.26  | 61.9   | 6.12  | 56.7   | 5.95  |
|                 | 25.0              | 23.0  | 72.0                   | 5.07  | 72.1   | 4.97  | 72.2   | 5.56  | 71.2   | 6.12  | 70.1   | 6.03  | 65.8   | 5.77  | 61.9   | 5.65  | 56.7   | 5.48  |
|                 | 30.0              | 28.0  | 72.1                   | 5.45  | 72.1   | 5.33  | 72.1   | 5.94  | 71.1   | 5.73  | 70.1   | 5.52  | 65.8   | 5.29  | 61.9   | 5.17  | 56.7   | 5.01  |
|                 | 35.0              | 32.0  | 72.1                   | 5.84  | 72.1   | 5.68  | 72.1   | 5.45  | 71.1   | 5.23  | 70.1   | 5.00  | 65.8   | 4.79  | 61.9   | 4.68  | 56.7   | 4.53  |
|                 | 40.0              | 36.0  | 72.1                   | 5.30  | 72.1   | 5.11  | 72.1   | 4.81  | 71.1   | 4.64  | 70.1   | 4.48  | 65.8   | 4.29  | 61.9   | 4.19  | 56.7   | 4.05  |
|                 | 45.0              | 41.0  | 72.1                   | 4.40  | 72.1   | 4.31  | 72.1   | 4.17  | 71.1   | 4.05  | 70.1   | 3.93  | 65.8   | 3.77  | 61.9   | 3.68  | 56.7   | 3.55  |
|                 | 47.0              | 43.0  | 72.1                   | 4.12  | 72.1   | 4.03  | 72.1   | 3.90  | 71.1   | 3.79  | 70.1   | 3.68  | 65.8   | 3.53  | 61.9   | 3.44  | 56.7   | 3.32  |
|                 | 50.0              | 46.0  | 72.1                   | 3.97  | 72.1   | 3.89  | 72.1   | 3.76  | 71.1   | 3.65  | 70.1   | 3.55  | 65.8   | 3.40  | 61.9   | 3.31  | 56.7   | 3.20  |
|                 | 55.0              | 51.0  | 72.1                   | 3.73  | 72.1   | 3.65  | 72.1   | 3.53  | 71.1   | 3.43  | 70.1   | 3.33  | 65.8   | 3.19  | 61.9   | 3.11  | 56.7   | 3.00  |
|                 | 60.0              | 56.0  | 72.1                   | 3.46  | 72.1   | 3.39  | 72.1   | 3.28  | 71.1   | 3.19  | 70.1   | 3.09  | 65.8   | 2.97  | 61.9   | 2.89  | 56.7   | 2.79  |
| 120             | -21.6             | -22.0 | 28.1                   | 1.81  | 27.9   | 1.97  | 27.8   | 2.19  | 27.6   | 2.39  | 27.4   | 2.59  | 27.2   | 2.72  | 27.1   | 2.75  | 26.9   | 2.79  |
|                 | -17.1             | -17.5 | 33.1                   | 2.19  | 32.9   | 2.38  | 32.6   | 2.59  | 32.3   | 2.83  | 32.1   | 3.09  | 31.9   | 3.22  | 31.7   | 3.24  | 31.3   | 3.27  |
|                 | -12.6             | -13.0 | 38.0                   | 2.56  | 37.8   | 2.80  | 37.4   | 2.98  | 37.1   | 3.26  | 36.8   | 3.59  | 36.5   | 3.72  | 36.3   | 3.73  | 35.8   | 3.75  |
|                 | -7.0              | -7.6  | 44.3                   | 3.02  | 43.9   | 3.32  | 43.4   | 3.47  | 43.0   | 3.79  | 42.6   | 4.21  | 42.3   | 4.34  | 42.0   | 4.34  | 41.3   | 4.35  |
|                 | -4.0              | -4.4  | 47.6                   | 3.26  | 47.2   | 3.59  | 46.6   | 3.73  | 46.2   | 4.08  | 45.7   | 4.54  | 45.4   | 4.67  | 45.1   | 4.67  | 44.2   | 4.67  |
|                 | 0.0               | -0.4  | 52.0                   | 3.59  | 51.6   | 3.96  | 50.9   | 4.08  | 50.4   | 4.46  | 49.9   | 4.98  | 49.5   | 5.11  | 49.2   | 5.11  | 48.2   | 5.10  |
|                 | 5.0               | 4.5   | 57.6                   | 4.01  | 57.0   | 4.43  | 56.2   | 4.52  | 55.6   | 4.94  | 55.1   | 5.53  | 54.6   | 5.67  | 54.4   | 5.65  | 53.1   | 5.64  |
|                 | 10.0              | 9.0   | 61.8                   | 4.42  | 61.2   | 4.89  | 60.4   | 4.95  | 59.5   | 5.42  | 58.6   | 6.08  | 57.1   | 6.22  | 55.6   | 6.20  | 53.1   | 6.17  |
|                 | 15.0              | 14.0  | 66.0                   | 4.83  | 65.4   | 5.35  | 64.5   | 5.39  | 63.3   | 5.90  | 62.2   | 6.63  | 59.5   | 6.77  | 56.9   | 6.75  | 53.1   | 6.71  |
|                 | 20.0              | 19.0  | 70.3                   | 5.24  | 69.6   | 5.81  | 68.7   | 5.83  | 67.2   | 6.38  | 65.7   | 6.40  | 61.9   | 6.28  | 58.1   | 6.25  | 53.1   | 6.20  |
|                 | 25.0              | 23.0  | 72.0                   | 5.65  | 71.5   | 6.28  | 70.8   | 6.26  | 68.2   | 6.08  | 65.7   | 5.89  | 61.9   | 5.79  | 58.1   | 5.75  | 53.1   | 5.69  |
|                 | 30.0              | 28.0  | 72.0                   | 6.07  | 71.5   | 5.92  | 70.8   | 5.69  | 68.2   | 5.54  | 65.7   | 5.38  | 61.9   | 5.29  | 58.1   | 5.24  | 53.1   | 5.18  |
|                 | 35.0              | 32.0  | 72.0                   | 5.43  | 71.5   | 5.30  | 70.8   | 5.12  | 68.2   | 4.99  | 65.7   | 4.87  | 61.9   | 4.78  | 58.1   | 4.73  | 53.1   | 4.66  |
|                 | 40.0              | 36.0  | 72.0                   | 4.78  | 71.5   | 4.69  | 70.8   | 4.54  | 68.2   | 4.44  | 65.7   | 4.34  | 61.9   | 4.27  | 58.1   | 4.21  | 53.1   | 4.14  |
|                 | 45.0              | 41.0  | 72.0                   | 4.14  | 71.5   | 4.06  | 70.8   | 3.95  | 68.2   | 3.88  | 65.7   | 3.80  | 61.9   | 3.74  | 58.1   | 3.68  | 53.1   | 3.61  |
|                 | 47.0              | 43.0  | 72.0                   | 3.87  | 71.5   | 3.81  | 70.8   | 3.70  | 68.2   | 3.63  | 65.7   | 3.56  | 61.9   | 3.50  | 58.1   | 3.45  | 53.1   | 3.38  |
|                 | 50.0              | 46.0  | 72.0                   | 3.73  | 71.5   | 3.66  | 70.8   | 3.57  | 68.2   | 3.50  | 65.7   | 3.43  | 61.9   | 3.37  | 58.1   | 3.32  | 53.1   | 3.25  |
|                 | 55.0              | 51.0  | 72.0                   | 3.50  | 71.5   | 3.44  | 70.8   | 3.35  | 68.2   | 3.28  | 65.7   | 3.22  | 61.9   | 3.17  | 58.1   | 3.12  | 53.1   | 3.05  |
|                 | 60.0              | 56.0  | 72.0                   | 3.26  | 71.5   | 3.20  | 70.8   | 3.11  | 68.2   | 3.05  | 65.7   | 2.99  | 61.9   | 2.94  | 58.1   | 2.90  | 53.1   | 2.84  |
| 110             | -21.6             | -22.0 | 27.9                   | 2.31  | 27.8   | 2.42  | 27.6   | 2.59  | 27.5   | 2.78  | 27.3   | 2.97  | 27.1   | 3.32  | 26.9   | 3.60  | 26.7   | 3.98  |
|                 | -17.1             | -17.5 | 32.8                   | 2.78  | 32.6   | 2.87  | 32.3   | 3.01  | 32.1   | 3.52  | 31.9   | 3.72  | 31.6   | 4.08  | 31.2   | 4.33  | 30.4   | 4.85  |
|                 | -12.6             | -13.0 | 37.7                   | 3.25  | 37.4   | 3.32  | 37.1   | 3.43  | 36.8   | 4.25  | 36.6   | 4.48  | 36.2   | 4.84  | 35.5   | 5.07  | 34.0   | 5.71  |
|                 | -7.0              | -7.6  | 43.8                   | 3.84  | 43.4   | 3.89  | 43.0   | 3.96  | 42.7   | 5.17  | 42.4   | 5.42  | 41.9   | 5.79  | 40.9   | 5.98  | 38.5   | 6.78  |
|                 | -4.0              | -4.4  | 47.0                   | 4.15  | 46.7   | 4.19  | 46.1   | 4.24  | 45.8   | 5.66  | 45.5   | 5.92  | 44.9   | 6.30  | 43.8   | 6.46  | 40.9   | 7.36  |
|                 | 0.0               | -0.4  | 51.4                   | 4.57  | 50.9   | 4.59  | 50.3   | 4.61  | 50.0   | 6.31  | 49.6   | 6.59  | 49.0   | 6.97  | 47.6   | 7.11  | 44.2   | 8.13  |
|                 | 5.0               | 4.5   | 56.8                   | 5.10  | 56.3   | 5.09  | 55.6   | 5.08  | 55.2   | 7.13  | 54.8   | 7.43  | 54.0   | 7.82  | 52.4   | 7.93  | 48.2   | 8.07  |
|                 | 10.0              | 9.0   | 59.2                   | 5.62  | 58.6   | 5.59  | 57.7   | 5.54  | 57.3   | 6.91  | 56.9   | 7.18  | 54.5   | 7.09  | 52.4   | 6.96  | 48.2   | 6.78  |
|                 | 15.0              | 14.0  | 65.0                   | 6.14  | 64.3   | 6.09  | 63.3   | 6.01  | 61.1   | 6.62  | 59.0   | 6.60  | 55.5   | 6.43  | 52.4   | 6.22  | 48.2   | 5.95  |
|                 | 20.0              | 19.0  | 71.3                   | 6.67  | 68.8   | 6.59  | 65.0   | 6.48  | 62.0   | 6.31  | 59.0   | 6.15  | 55.5   | 5.96  | 52.4   | 5.77  | 48.2   | 5.52  |
|                 | 25.0              | 23.0  | 71.3                   | 6.34  | 68.8   | 6.21  | 65.0   | 6.01  | 62.0   | 5.83  | 59.0   | 5.65  | 55.5   | 5.48  | 52.4   | 5.31  | 48.2   | 5.09  |
|                 | 30.0              | 28.0  | 71.3                   | 5.80  | 68.8   | 5.65  | 65.0   | 5.43  | 62.0   | 5.29  | 59.0   | 5.15  | 55.5   | 5.00  | 52.4   | 4.85  | 48.2   | 4.66  |
|                 | 35.0              | 32.0  | 71.3                   | 5.12  | 68.8   | 5.02  | 65.0   | 4.86  | 62.0   | 4.75  | 59.0   | 4.64  | 55.5   | 4.52  | 52.4   | 4.39  | 48.2   | 4.22  |
|                 | 40.0              | 36.0  | 71.3                   | 4.45  | 68.8   | 4.38  | 65.0   | 4.28  | 62.0   | 4.21  | 59.0   | 4.14  | 55.5   | 4.03  | 52.4   | 3.92  | 48.2   | 3.77  |
|                 | 45.0              | 41.0  | 71.3                   | 3.79  | 68.8   | 3.76  | 65.0   | 3.70  | 62.0   | 3.66  | 59.0   | 3.61  | 55.5   | 3.52  | 52.4   | 3.43  | 48.2   | 3.31  |
|                 | 47.0              | 43.0  | 71.3                   | 3.55  | 68.8   | 3.52  | 65.0   | 3.46  | 62.0   | 3.42  | 59.0   | 3.38  | 55.5   | 3.30  | 52.4   | 3.21  | 48.2   | 3.10  |
|                 | 50.0              | 46.0  | 71.3                   | 3.42  | 68.8   | 3.39  | 65.0   | 3.34  | 62.0   | 3.30  | 59.0   | 3.26  | 55.5   | 3.18  | 52.4   | 3.10  | 48.2   | 2.98  |
|                 | 55.0              | 51.0  | 71.3                   | 3.21  | 68.8   | 3.18  | 65.0   | 3.13  | 62.0   | 3.09  | 59.0   | 3.06  | 55.5   | 2.98  | 52.4   | 2.91  | 48.2   | 2.80  |
|                 | 60.0              | 56.0  | 71.3                   | 2.99  | 68.8   | 2.96  | 65.0   | 2.91  | 62.0   | 2.88  | 59.0   | 2.84  | 55.5   | 2.77  | 52.4   | 2.70  | 48.2   | 2.61  |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

Table 55: ZRUM048GSS0 Heating Capacities, continued.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |
|-----------------|-------------------|-------|------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 |                   |       | 59                     |       | 61     |       | 64     |       | 67     |       | 70     |       | 73     |       | 76     |       | 80     |       |
|                 | °F DB             | °F WB | TC MBh                 | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW |
| 100             | -21.6             | -22.0 | 27.8                   | 1.88  | 27.7   | 2.15  | 27.5   | 2.55  | 27.3   | 2.83  | 27.2   | 3.10  | 27.0   | 3.49  | 26.8   | 3.73  | 26.6   | 4.04  |
|                 | -17.1             | -17.5 | 32.5                   | 2.30  | 32.4   | 2.61  | 32.2   | 3.05  | 32.0   | 3.56  | 31.7   | 3.85  | 31.0   | 4.21  | 30.4   | 4.40  | 29.6   | 4.66  |
|                 | -12.6             | -13.0 | 37.3                   | 2.72  | 37.1   | 3.06  | 36.9   | 3.54  | 36.6   | 4.30  | 36.3   | 4.60  | 35.0   | 4.92  | 33.9   | 5.07  | 32.5   | 5.27  |
|                 | -7.0              | -7.6  | 43.2                   | 3.25  | 43.0   | 3.63  | 42.7   | 4.16  | 42.3   | 5.21  | 41.9   | 5.54  | 40.1   | 5.82  | 38.4   | 5.91  | 36.1   | 6.03  |
|                 | -4.0              | -4.4  | 46.3                   | 3.53  | 46.1   | 3.94  | 45.8   | 4.48  | 45.4   | 5.70  | 44.9   | 6.04  | 42.8   | 6.30  | 40.7   | 6.36  | 38.0   | 6.44  |
|                 | 0.0               | -0.4  | 50.5                   | 3.91  | 50.3   | 4.35  | 50.0   | 4.92  | 49.5   | 6.35  | 49.0   | 6.71  | 46.3   | 6.93  | 43.9   | 6.96  | 40.6   | 6.99  |
|                 | 5.0               | 4.5   | 55.8                   | 4.38  | 55.6   | 4.86  | 55.2   | 5.47  | 54.6   | 7.17  | 54.0   | 7.54  | 50.8   | 7.73  | 47.9   | 7.71  | 43.9   | 7.67  |
|                 | 10.0              | 9.0   | 59.3                   | 4.85  | 58.5   | 5.37  | 57.3   | 6.02  | 55.6   | 6.82  | 54.0   | 7.01  | 50.8   | 6.90  | 47.9   | 6.73  | 43.9   | 6.51  |
|                 | 15.0              | 14.0  | 62.7                   | 5.32  | 61.4   | 5.87  | 59.4   | 6.57  | 56.7   | 6.53  | 54.0   | 6.48  | 50.8   | 6.14  | 47.9   | 5.96  | 43.9   | 5.71  |
|                 | 20.0              | 19.0  | 65.3                   | 5.79  | 62.9   | 6.38  | 59.4   | 6.28  | 56.7   | 6.12  | 54.0   | 5.95  | 50.8   | 5.64  | 47.9   | 5.47  | 43.9   | 5.24  |
|                 | 25.0              | 23.0  | 65.3                   | 6.25  | 62.9   | 6.00  | 59.4   | 5.62  | 56.7   | 5.52  | 54.0   | 5.43  | 50.8   | 5.13  | 47.9   | 4.98  | 43.9   | 4.76  |
|                 | 30.0              | 28.0  | 65.3                   | 6.51  | 62.9   | 5.41  | 59.4   | 5.10  | 56.7   | 5.00  | 54.0   | 4.90  | 50.8   | 4.63  | 47.9   | 4.49  | 43.9   | 4.29  |
|                 | 35.0              | 32.0  | 65.3                   | 4.98  | 62.9   | 4.82  | 59.4   | 4.58  | 56.7   | 4.47  | 54.0   | 4.37  | 50.8   | 4.13  | 47.9   | 4.00  | 43.9   | 3.82  |
|                 | 40.0              | 36.0  | 65.3                   | 4.34  | 62.9   | 4.23  | 59.4   | 4.05  | 56.7   | 3.95  | 54.0   | 3.84  | 50.8   | 3.62  | 47.9   | 3.51  | 43.9   | 3.35  |
|                 | 45.0              | 41.0  | 65.3                   | 3.71  | 62.9   | 3.64  | 59.4   | 3.52  | 56.7   | 3.42  | 54.0   | 3.31  | 50.8   | 3.12  | 47.9   | 3.02  | 43.9   | 2.89  |
|                 | 47.0              | 43.0  | 65.3                   | 3.48  | 62.9   | 3.40  | 59.4   | 3.30  | 56.7   | 3.20  | 54.0   | 3.10  | 50.8   | 2.92  | 47.9   | 2.83  | 43.9   | 2.70  |
|                 | 50.0              | 46.0  | 65.3                   | 3.35  | 62.9   | 3.28  | 59.4   | 3.18  | 56.7   | 3.08  | 54.0   | 2.99  | 50.8   | 2.81  | 47.9   | 2.72  | 43.9   | 2.60  |
|                 | 55.0              | 51.0  | 65.3                   | 3.14  | 62.9   | 3.08  | 59.4   | 2.98  | 56.7   | 2.89  | 54.0   | 2.80  | 50.8   | 2.64  | 47.9   | 2.56  | 43.9   | 2.44  |
|                 | 60.0              | 56.0  | 65.3                   | 2.92  | 62.9   | 2.86  | 59.4   | 2.77  | 56.7   | 2.69  | 54.0   | 2.61  | 50.8   | 2.46  | 47.9   | 2.38  | 43.9   | 2.27  |
| 90              | -21.6             | -22.0 | 27.7                   | 2.42  | 27.6   | 2.57  | 27.4   | 2.78  | 27.2   | 3.07  | 27.1   | 3.36  | 26.8   | 3.57  | 26.7   | 3.76  | 26.5   | 4.01  |
|                 | -17.1             | -17.5 | 32.2                   | 2.82  | 32.0   | 3.01  | 31.6   | 3.33  | 31.2   | 3.58  | 30.9   | 4.12  | 30.2   | 4.27  | 29.6   | 4.55  | 28.8   | 4.84  |
|                 | -12.6             | -13.0 | 36.6                   | 3.22  | 36.3   | 3.46  | 35.9   | 3.88  | 35.3   | 4.09  | 34.6   | 4.87  | 33.5   | 4.98  | 32.5   | 5.35  | 31.1   | 5.66  |
|                 | -7.0              | -7.6  | 42.2                   | 3.71  | 41.8   | 4.02  | 41.2   | 4.57  | 40.3   | 4.72  | 39.4   | 5.82  | 37.7   | 5.86  | 36.0   | 6.35  | 33.9   | 6.69  |
|                 | -4.0              | -4.4  | 45.2                   | 3.98  | 44.7   | 4.32  | 44.0   | 4.94  | 42.9   | 5.06  | 41.9   | 6.32  | 39.9   | 6.34  | 38.0   | 6.39  | 35.4   | 6.59  |
|                 | 0.0               | -0.4  | 49.2                   | 4.33  | 48.6   | 4.72  | 47.8   | 5.43  | 46.5   | 5.51  | 45.2   | 6.99  | 42.8   | 6.97  | 40.5   | 6.45  | 37.4   | 6.45  |
|                 | 5.0               | 4.5   | 54.2                   | 4.78  | 53.5   | 5.22  | 52.5   | 6.04  | 51.0   | 6.07  | 49.5   | 6.80  | 46.5   | 6.70  | 43.7   | 6.52  | 39.9   | 6.28  |
|                 | 10.0              | 9.0   | 59.2                   | 5.22  | 57.2   | 5.72  | 54.2   | 6.65  | 51.8   | 6.63  | 49.5   | 6.61  | 46.5   | 6.30  | 43.7   | 6.02  | 39.9   | 5.64  |
|                 | 15.0              | 14.0  | 59.9                   | 5.66  | 57.6   | 6.21  | 54.2   | 6.19  | 51.8   | 6.05  | 49.5   | 5.91  | 46.5   | 5.59  | 43.7   | 5.34  | 39.9   | 5.00  |
|                 | 20.0              | 19.0  | 59.9                   | 6.10  | 57.6   | 5.98  | 54.2   | 5.80  | 51.8   | 5.61  | 49.5   | 5.43  | 46.5   | 5.14  | 43.7   | 4.90  | 39.9   | 4.59  |
|                 | 25.0              | 23.0  | 59.9                   | 5.56  | 57.6   | 5.45  | 54.2   | 5.28  | 51.8   | 5.12  | 49.5   | 4.95  | 46.5   | 4.69  | 43.7   | 4.47  | 39.9   | 4.18  |
|                 | 30.0              | 28.0  | 59.9                   | 5.02  | 57.6   | 4.92  | 54.2   | 4.77  | 51.8   | 4.62  | 49.5   | 4.47  | 46.5   | 4.23  | 43.7   | 4.04  | 39.9   | 3.77  |
|                 | 35.0              | 32.0  | 59.9                   | 4.48  | 57.6   | 4.39  | 54.2   | 4.25  | 51.8   | 4.12  | 49.5   | 3.99  | 46.5   | 3.78  | 43.7   | 3.60  | 39.9   | 3.36  |
|                 | 40.0              | 36.0  | 59.9                   | 3.93  | 57.6   | 3.85  | 54.2   | 3.74  | 51.8   | 3.62  | 49.5   | 3.51  | 46.5   | 3.33  | 43.7   | 3.17  | 39.9   | 2.96  |
|                 | 45.0              | 41.0  | 59.9                   | 3.39  | 57.6   | 3.32  | 54.2   | 3.22  | 51.8   | 3.12  | 49.5   | 3.03  | 46.5   | 2.87  | 43.7   | 2.73  | 39.9   | 2.55  |
|                 | 47.0              | 43.0  | 59.9                   | 3.18  | 57.6   | 3.11  | 54.2   | 3.02  | 51.8   | 2.93  | 49.5   | 2.83  | 46.5   | 2.69  | 43.7   | 2.56  | 39.9   | 2.38  |
|                 | 50.0              | 46.0  | 59.9                   | 3.06  | 57.6   | 3.00  | 54.2   | 2.90  | 51.8   | 2.82  | 49.5   | 2.73  | 46.5   | 2.59  | 43.7   | 2.46  | 39.9   | 2.30  |
|                 | 55.0              | 51.0  | 59.9                   | 2.87  | 57.6   | 2.81  | 54.2   | 2.73  | 51.8   | 2.64  | 49.5   | 2.56  | 46.5   | 2.43  | 43.7   | 2.31  | 39.9   | 2.16  |
|                 | 60.0              | 56.0  | 59.9                   | 2.67  | 57.6   | 2.62  | 54.2   | 2.54  | 51.8   | 2.46  | 49.5   | 2.38  | 46.5   | 2.26  | 43.7   | 2.15  | 39.9   | 2.00  |
| 80              | -21.6             | -22.0 | 27.6                   | 2.44  | 27.5   | 2.60  | 27.3   | 2.84  | 27.1   | 3.01  | 27.0   | 3.18  | 26.7   | 3.63  | 26.6   | 3.87  | 26.4   | 4.19  |
|                 | -17.1             | -17.5 | 31.3                   | 2.82  | 30.9   | 3.26  | 30.9   | 3.54  | 30.4   | 3.67  | 30.6   | 3.81  | 29.8   | 4.15  | 29.2   | 4.56  | 28.4   | 4.91  |
|                 | -12.6             | -13.0 | 35.0                   | 3.20  | 34.3   | 3.93  | 34.5   | 4.24  | 33.7   | 4.34  | 34.2   | 4.43  | 32.9   | 4.67  | 31.8   | 4.86  | 30.3   | 5.17  |
|                 | -7.0              | -7.6  | 39.6                   | 3.67  | 38.6   | 4.75  | 39.0   | 5.11  | 37.7   | 5.16  | 38.7   | 5.21  | 36.7   | 5.31  | 35.0   | 5.22  | 32.7   | 5.49  |
|                 | -4.0              | -4.4  | 42.1                   | 3.92  | 40.9   | 5.19  | 41.4   | 5.58  | 39.9   | 5.60  | 41.1   | 5.62  | 38.8   | 5.65  | 36.8   | 5.42  | 34.0   | 5.66  |
|                 | 0.0               | -0.4  | 45.3                   | 4.26  | 44.0   | 5.78  | 44.6   | 6.20  | 42.8   | 6.19  | 44.3   | 6.18  | 41.5   | 6.11  | 39.1   | 5.68  | 35.8   | 5.89  |
|                 | 5.0               | 4.5   | 49.5                   | 4.68  | 47.8   | 6.52  | 48.6   | 6.50  | 46.5   | 6.49  | 44.3   | 6.48  | 41.5   | 6.19  | 39.1   | 6.00  | 35.8   | 5.75  |
|                 | 10.0              | 9.0   | 53.6                   | 5.10  | 51.6   | 5.88  | 48.6   | 5.87  | 46.5   | 5.79  | 44.3   | 5.70  | 41.5   | 5.33  | 39.1   | 5.16  | 35.8   | 4.94  |
|                 | 15.0              | 14.0  | 53.6                   | 5.52  | 51.6   | 5.49  | 48.6   | 5.45  | 46.5   | 5.25  | 44.3   | 5.05  | 41.5   | 4.73  | 39.1   | 4.58  | 35.8   | 4.38  |
|                 | 20.0              | 19.0  | 53.6                   | 5.23  | 51.6   | 5.14  | 48.6   | 5.00  | 46.5   | 4.81  | 44.3   | 4.63  | 41.5   | 4.35  | 39.1   | 4.21  | 35.8   | 4.02  |
|                 | 25.0              | 23.0  | 53.6                   | 4.76  | 51.6   | 4.67  | 48.6   | 4.55  | 46.5   | 4.38  | 44.3   | 4.22  | 41.5   | 3.96  | 39.1   | 3.83  | 35.8   | 3.65  |
|                 | 30.0              | 28.0  | 53.6                   | 4.29  | 51.6   | 4.21  | 48.6   | 4.10  | 46.5   | 3.95  | 44.3   | 3.80  | 41.5   | 3.58  | 39.1   | 3.46  | 35.8   | 3.29  |
|                 | 35.0              | 32.0  | 53.6                   | 3.82  | 51.6   | 3.75  | 48.6   | 3.65  | 46.5   | 3.52  | 44.3   | 3.38  | 41.5   | 3.20  | 39.1   | 3.08  | 35.8   | 2.93  |
|                 | 40.0              | 36.0  | 53.6                   | 3.35  | 51.6   | 3.29  | 48.6   | 3.20  | 46.5   | 3.08  | 44.3   | 2.97  | 41.5   | 2.81  | 39.1   | 2.71  | 35.8   | 2.57  |
|                 | 45.0              | 41.0  | 53.6                   | 2.89  | 51.6   | 2.83  | 48.6   | 2.75  | 46.5   | 2.65  | 44.3   | 2.56  | 41.5   | 2.43  | 39.1   | 2.34  | 35.8   | 2.21  |
|                 | 47.0              | 43.0  | 53.6                   | 2.70  | 51.6   | 2.65  | 48.6   | 2.57  | 46.5   | 2.48  | 44.3   | 2.39  | 41.5   | 2.27  | 39.1   | 2.19  | 35.8   | 2.07  |
|                 | 50.0              | 46.0  | 53.6                   | 2.60  | 51.6   | 2.55  | 48.6   | 2.48  | 46.5   | 2.39  | 44.3   | 2.30  | 41.5   | 2.19  | 39.1   | 2.11  | 35.8   | 1.99  |
|                 | 55.0              | 51.0  | 53.6                   | 2.44  | 51.6   | 2.40  | 48.6   | 2.33  | 46.5   | 2.24  | 44.3   | 2.16  | 41.5   | 2.06  | 39.1   | 1.98  | 35.8   | 1.87  |
|                 | 60.0              | 56.0  | 53.6                   | 2.27  | 51.6   | 2.23  | 48.6   | 2.16  | 46.5   | 2.09  | 44.3   | 2.01  | 41.5   | 1.91  | 39.1   | 1.84  | 35.8   | 1.74  |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.



# HEATING CAPACITY

ZRUM048GSS0



Table 56: ZRUM048GSS0 Heating Capacities, continued.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |
|-----------------|-------------------|-------|------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 |                   |       | 59                     |       | 61     |       | 64     |       | 67     |       | 70     |       | 73     |       | 76     |       | 80     |       |
|                 | °F DB             | °F WB | TC MBh                 | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW |
| 70              | -21.6             | -22.0 | 27.4                   | 2.62  | 27.3   | 2.69  | 27.1   | 2.81  | 27.0   | 3.09  | 26.8   | 3.38  | 26.6   | 3.77  | 26.4   | 4.01  | 26.3   | 4.33  |
|                 | -17.1             | -17.5 | 31.7                   | 3.32  | 31.6   | 3.38  | 31.5   | 3.46  | 30.8   | 3.75  | 30.1   | 4.02  | 29.3   | 4.21  | 28.6   | 4.36  | 27.6   | 4.66  |
|                 | -12.6             | -13.0 | 36.0                   | 4.02  | 36.0   | 4.06  | 35.9   | 4.12  | 34.6   | 4.41  | 33.4   | 4.67  | 32.1   | 4.65  | 30.8   | 4.70  | 29.0   | 5.00  |
|                 | -7.0              | -7.6  | 41.4                   | 4.89  | 41.3   | 4.91  | 41.3   | 4.93  | 39.4   | 5.23  | 37.5   | 5.47  | 35.5   | 5.45  | 33.4   | 5.13  | 30.7   | 5.42  |
|                 | -4.0              | -4.4  | 43.1                   | 5.36  | 42.4   | 5.36  | 41.3   | 5.37  | 39.4   | 5.67  | 37.5   | 5.67  | 35.5   | 5.65  | 33.4   | 5.37  | 30.7   | 5.64  |
|                 | 0.0               | -0.4  | 45.4                   | 5.98  | 43.8   | 5.97  | 41.3   | 5.95  | 39.4   | 5.94  | 37.5   | 5.93  | 35.5   | 5.77  | 33.4   | 5.67  | 30.7   | 5.55  |
|                 | 5.0               | 4.5   | 45.4                   | 6.26  | 43.8   | 6.24  | 41.3   | 6.22  | 39.4   | 6.12  | 37.5   | 6.03  | 35.5   | 5.75  | 33.4   | 5.64  | 30.7   | 5.50  |
|                 | 10.0              | 9.0   | 45.4                   | 5.63  | 43.8   | 5.62  | 41.3   | 5.59  | 39.4   | 5.37  | 37.5   | 5.16  | 35.5   | 4.91  | 33.4   | 4.81  | 30.7   | 4.67  |
|                 | 15.0              | 14.0  | 45.4                   | 5.34  | 43.8   | 5.19  | 41.3   | 4.97  | 39.4   | 4.76  | 37.5   | 4.55  | 35.5   | 4.33  | 33.4   | 4.23  | 30.7   | 4.09  |
|                 | 20.0              | 19.0  | 45.4                   | 4.86  | 43.8   | 4.73  | 41.3   | 4.52  | 39.4   | 4.33  | 37.5   | 4.15  | 35.5   | 3.95  | 33.4   | 3.84  | 30.7   | 3.70  |
|                 | 25.0              | 23.0  | 45.4                   | 4.39  | 43.8   | 4.27  | 41.3   | 4.08  | 39.4   | 3.92  | 37.5   | 3.75  | 35.5   | 3.56  | 33.4   | 3.45  | 30.7   | 3.31  |
|                 | 30.0              | 28.0  | 45.4                   | 3.92  | 43.8   | 3.81  | 41.3   | 3.65  | 39.4   | 3.50  | 37.5   | 3.35  | 35.5   | 3.18  | 33.4   | 3.07  | 30.7   | 2.93  |
|                 | 35.0              | 32.0  | 45.4                   | 3.45  | 43.8   | 3.35  | 41.3   | 3.22  | 39.4   | 3.09  | 37.5   | 2.96  | 35.5   | 2.81  | 33.4   | 2.70  | 30.7   | 2.55  |
|                 | 40.0              | 36.0  | 45.4                   | 2.98  | 43.8   | 2.91  | 41.3   | 2.79  | 39.4   | 2.68  | 37.5   | 2.57  | 35.5   | 2.43  | 33.4   | 2.32  | 30.7   | 2.18  |
|                 | 45.0              | 41.0  | 45.4                   | 2.53  | 43.8   | 2.46  | 41.3   | 2.37  | 39.4   | 2.27  | 37.5   | 2.18  | 35.5   | 2.07  | 33.4   | 1.96  | 30.7   | 1.82  |
|                 | 47.0              | 43.0  | 45.4                   | 2.37  | 43.8   | 2.31  | 41.3   | 2.21  | 39.4   | 2.13  | 37.5   | 2.04  | 35.5   | 1.94  | 33.4   | 1.84  | 30.7   | 1.71  |
|                 | 50.0              | 46.0  | 45.4                   | 2.28  | 43.8   | 2.22  | 41.3   | 2.13  | 39.4   | 2.05  | 37.5   | 1.97  | 35.5   | 1.86  | 33.4   | 1.77  | 30.7   | 1.64  |
|                 | 55.0              | 51.0  | 45.4                   | 2.14  | 43.8   | 2.09  | 41.3   | 2.00  | 39.4   | 1.92  | 37.5   | 1.85  | 35.5   | 1.75  | 33.4   | 1.66  | 30.7   | 1.54  |
|                 | 60.0              | 56.0  | 45.4                   | 1.99  | 43.8   | 1.94  | 41.3   | 1.86  | 39.4   | 1.79  | 37.5   | 1.72  | 35.5   | 1.63  | 33.4   | 1.54  | 30.7   | 1.43  |
| 60              | -21.6             | -22.0 | 25.4                   | 2.41  | 25.3   | 2.49  | 25.1   | 2.60  | 25.0   | 2.89  | 24.8   | 3.17  | 24.6   | 3.57  | 24.5   | 3.80  | 24.3   | 4.12  |
|                 | -17.1             | -17.5 | 29.5                   | 2.85  | 29.0   | 3.15  | 28.3   | 3.24  | 27.7   | 3.52  | 27.1   | 3.94  | 26.1   | 4.26  | 25.3   | 4.25  | 25.0   | 4.43  |
|                 | -12.6             | -13.0 | 33.7                   | 3.28  | 32.8   | 3.81  | 31.5   | 3.87  | 30.5   | 4.16  | 29.4   | 4.72  | 27.6   | 4.70  | 26.1   | 4.69  | 25.6   | 4.75  |
|                 | -7.0              | -7.6  | 38.9                   | 3.83  | 37.5   | 4.63  | 35.5   | 4.66  | 33.9   | 4.95  | 32.2   | 5.18  | 30.3   | 5.16  | 28.7   | 5.15  | 26.4   | 5.14  |
|                 | -4.0              | -4.4  | 38.9                   | 4.12  | 37.5   | 5.08  | 35.5   | 5.09  | 33.9   | 5.37  | 32.2   | 5.36  | 30.3   | 5.28  | 28.7   | 5.12  | 26.4   | 4.91  |
|                 | 0.0               | -0.4  | 38.9                   | 4.51  | 37.5   | 5.66  | 35.5   | 5.65  | 33.9   | 5.58  | 32.2   | 5.50  | 30.3   | 5.31  | 28.7   | 5.13  | 26.4   | 4.89  |
|                 | 5.0               | 4.5   | 38.9                   | 4.99  | 37.5   | 5.94  | 35.5   | 5.92  | 33.9   | 5.69  | 32.2   | 5.47  | 30.3   | 5.26  | 28.7   | 5.07  | 26.4   | 4.82  |
|                 | 10.0              | 9.0   | 38.9                   | 5.48  | 37.5   | 5.36  | 35.5   | 5.18  | 33.9   | 4.92  | 32.2   | 4.66  | 30.3   | 4.47  | 28.7   | 4.31  | 26.4   | 4.08  |
|                 | 15.0              | 14.0  | 38.9                   | 4.89  | 37.5   | 4.75  | 35.5   | 4.54  | 33.9   | 4.31  | 32.2   | 4.09  | 30.3   | 3.92  | 28.7   | 3.76  | 26.4   | 3.56  |
|                 | 20.0              | 19.0  | 38.9                   | 4.44  | 37.5   | 4.31  | 35.5   | 4.11  | 33.9   | 3.91  | 32.2   | 3.71  | 30.3   | 3.54  | 28.7   | 3.40  | 26.4   | 3.20  |
|                 | 25.0              | 23.0  | 38.9                   | 4.00  | 37.5   | 3.87  | 35.5   | 3.68  | 33.9   | 3.51  | 32.2   | 3.33  | 30.3   | 3.17  | 28.7   | 3.03  | 26.4   | 2.85  |
|                 | 30.0              | 28.0  | 38.9                   | 3.56  | 37.5   | 3.44  | 35.5   | 3.26  | 33.9   | 3.11  | 32.2   | 2.96  | 30.3   | 2.81  | 28.7   | 2.68  | 26.4   | 2.50  |
|                 | 35.0              | 32.0  | 38.9                   | 3.13  | 37.5   | 3.02  | 35.5   | 2.85  | 33.9   | 2.72  | 32.2   | 2.59  | 30.3   | 2.45  | 28.7   | 2.32  | 26.4   | 2.16  |
|                 | 40.0              | 36.0  | 38.9                   | 2.70  | 37.5   | 2.60  | 35.5   | 2.44  | 33.9   | 2.34  | 32.2   | 2.23  | 30.3   | 2.09  | 28.7   | 1.98  | 26.4   | 1.82  |
|                 | 45.0              | 41.0  | 38.9                   | 2.28  | 37.5   | 2.19  | 35.5   | 2.05  | 33.9   | 1.96  | 32.2   | 1.88  | 30.3   | 1.75  | 28.7   | 1.65  | 26.4   | 1.51  |
|                 | 47.0              | 43.0  | 38.9                   | 2.13  | 37.5   | 2.05  | 35.5   | 1.92  | 33.9   | 1.84  | 32.2   | 1.76  | 30.3   | 1.64  | 28.7   | 1.54  | 26.4   | 1.41  |
|                 | 50.0              | 46.0  | 38.9                   | 2.05  | 37.5   | 1.97  | 35.5   | 1.85  | 33.9   | 1.77  | 32.2   | 1.69  | 30.3   | 1.58  | 28.7   | 1.48  | 26.4   | 1.36  |
|                 | 55.0              | 51.0  | 38.9                   | 1.93  | 37.5   | 1.85  | 35.5   | 1.73  | 33.9   | 1.66  | 32.2   | 1.59  | 30.3   | 1.48  | 28.7   | 1.39  | 26.4   | 1.27  |
|                 | 60.0              | 56.0  | 38.9                   | 1.79  | 37.5   | 1.72  | 35.5   | 1.61  | 33.9   | 1.54  | 32.2   | 1.48  | 30.3   | 1.38  | 28.7   | 1.30  | 26.4   | 1.18  |
| 50              | -21.6             | -22.0 | 23.5                   | 2.07  | 23.4   | 2.14  | 23.2   | 2.26  | 23.1   | 2.54  | 23.0   | 2.83  | 22.7   | 3.22  | 22.3   | 3.46  | 21.8   | 3.78  |
|                 | -17.1             | -17.5 | 28.0                   | 2.65  | 27.4   | 2.77  | 26.4   | 2.86  | 25.7   | 3.14  | 24.9   | 3.41  | 24.0   | 3.71  | 23.0   | 3.70  | 21.8   | 3.68  |
|                 | -12.6             | -13.0 | 32.5                   | 3.24  | 31.3   | 3.39  | 29.5   | 3.45  | 28.2   | 3.73  | 26.9   | 3.98  | 25.3   | 3.96  | 23.8   | 3.94  | 21.8   | 3.92  |
|                 | -7.0              | -7.6  | 32.5                   | 3.97  | 31.3   | 4.17  | 29.5   | 4.19  | 28.2   | 4.48  | 26.9   | 4.70  | 25.3   | 4.58  | 23.8   | 4.35  | 21.8   | 4.06  |
|                 | -4.0              | -4.4  | 32.5                   | 4.36  | 31.3   | 4.59  | 29.5   | 4.59  | 28.2   | 4.87  | 26.9   | 4.87  | 25.3   | 4.58  | 23.8   | 4.36  | 21.8   | 4.06  |
|                 | 0.0               | -0.4  | 32.5                   | 4.88  | 31.3   | 5.14  | 29.5   | 5.12  | 28.2   | 5.00  | 26.9   | 4.89  | 25.3   | 4.59  | 23.8   | 4.36  | 21.8   | 4.06  |
|                 | 5.0               | 4.5   | 32.5                   | 5.53  | 31.3   | 5.38  | 29.5   | 5.17  | 28.2   | 5.00  | 26.9   | 4.83  | 25.3   | 4.53  | 23.8   | 4.30  | 21.8   | 4.00  |
|                 | 10.0              | 9.0   | 32.5                   | 4.90  | 31.3   | 4.69  | 29.5   | 4.38  | 28.2   | 4.23  | 26.9   | 4.09  | 25.3   | 3.84  | 23.8   | 3.64  | 21.8   | 3.39  |
|                 | 15.0              | 14.0  | 32.5                   | 4.28  | 31.3   | 4.10  | 29.5   | 3.82  | 28.2   | 3.69  | 26.9   | 3.56  | 25.3   | 3.35  | 23.8   | 3.18  | 21.8   | 2.95  |
|                 | 20.0              | 19.0  | 32.5                   | 3.85  | 31.3   | 3.69  | 29.5   | 3.45  | 28.2   | 3.33  | 26.9   | 3.20  | 25.3   | 3.01  | 23.8   | 2.86  | 21.8   | 2.65  |
|                 | 25.0              | 23.0  | 32.5                   | 3.43  | 31.3   | 3.29  | 29.5   | 3.07  | 28.2   | 2.96  | 26.9   | 2.85  | 25.3   | 2.68  | 23.8   | 2.54  | 21.8   | 2.35  |
|                 | 30.0              | 28.0  | 32.5                   | 3.02  | 31.3   | 2.90  | 29.5   | 2.71  | 28.2   | 2.61  | 26.9   | 2.50  | 25.3   | 2.36  | 23.8   | 2.23  | 21.8   | 2.06  |
|                 | 35.0              | 32.0  | 32.5                   | 2.62  | 31.3   | 2.51  | 29.5   | 2.34  | 28.2   | 2.25  | 26.9   | 2.16  | 25.3   | 2.04  | 23.8   | 1.93  | 21.8   | 1.78  |
|                 | 40.0              | 36.0  | 32.5                   | 2.22  | 31.3   | 2.13  | 29.5   | 1.99  | 28.2   | 1.91  | 26.9   | 1.83  | 25.3   | 1.72  | 23.8   | 1.63  | 21.8   | 1.50  |
|                 | 45.0              | 41.0  | 32.5                   | 1.84  | 31.3   | 1.76  | 29.5   | 1.65  | 28.2   | 1.58  | 26.9   | 1.51  | 25.3   | 1.43  | 23.8   | 1.34  | 21.8   | 1.24  |
|                 | 47.0              | 43.0  | 32.5                   | 1.72  | 31.3   | 1.65  | 29.5   | 1.55  | 28.2   | 1.48  | 26.9   | 1.41  | 25.3   | 1.34  | 23.8   | 1.26  | 21.8   | 1.16  |
|                 | 50.0              | 46.0  | 32.5                   | 1.66  | 31.3   | 1.59  | 29.5   | 1.49  | 28.2   | 1.43  | 26.9   | 1.36  | 25.3   | 1.29  | 23.8   | 1.21  | 21.8   | 1.11  |
|                 | 55.0              | 51.0  | 32.5                   | 1.56  | 31.3   | 1.49  | 29.5   | 1.40  | 28.2   | 1.34  | 26.9   | 1.28  | 25.3   | 1.21  | 23.8   | 1.14  | 21.8   | 1.05  |
|                 | 60.0              | 56.0  | 32.5                   | 1.45  | 31.3   | 1.39  | 29.5   | 1.30  | 28.2   | 1.24  | 26.9   | 1.19  | 25.3   | 1.12  | 23.8   | 1.06  | 21.8   | 0.97  |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

Table 57: ZRUM060GSS0 Heating Capacities.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |
|-----------------|-------------------|-------|------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 |                   |       | 59                     |       | 61     |       | 64     |       | 67     |       | 70     |       | 73     |       | 76     |       | 80     |       |
|                 | °F DB             | °F WB | TC MBh                 | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW |
| 130             | -21.6             | -22.0 | 35.1                   | 2.19  | 34.9   | 2.49  | 34.7   | 2.94  | 34.5   | 3.37  | 34.3   | 3.79  | 34.0   | 4.34  | 33.8   | 4.65  | 33.6   | 5.07  |
|                 | -17.1             | -17.5 | 39.0                   | 2.59  | 38.8   | 2.85  | 38.4   | 3.30  | 38.1   | 3.71  | 37.9   | 4.14  | 37.6   | 4.66  | 37.4   | 5.06  | 37.1   | 5.43  |
|                 | -12.6             | -13.0 | 42.9                   | 2.99  | 42.6   | 3.22  | 42.2   | 3.65  | 41.8   | 4.05  | 41.5   | 4.48  | 41.1   | 4.98  | 40.9   | 5.47  | 40.6   | 5.79  |
|                 | -7.0              | -7.6  | 47.8                   | 3.50  | 47.4   | 3.67  | 46.8   | 4.09  | 46.4   | 4.48  | 45.9   | 4.90  | 45.5   | 5.38  | 45.3   | 5.97  | 45.0   | 6.24  |
|                 | -4.0              | -4.4  | 50.5                   | 3.77  | 50.0   | 3.91  | 49.3   | 4.33  | 48.8   | 4.71  | 48.3   | 5.13  | 47.9   | 5.59  | 47.7   | 6.24  | 47.3   | 6.49  |
|                 | 0.0               | -0.4  | 53.9                   | 4.13  | 53.4   | 4.24  | 52.6   | 4.65  | 52.0   | 5.01  | 51.5   | 5.44  | 51.1   | 5.88  | 50.8   | 6.60  | 50.5   | 6.81  |
|                 | 5.0               | 4.5   | 58.3                   | 4.57  | 57.7   | 4.64  | 56.7   | 5.04  | 56.1   | 5.40  | 55.5   | 5.82  | 55.0   | 6.23  | 54.7   | 7.06  | 54.4   | 7.21  |
|                 | 10.0              | 9.0   | 68.7                   | 5.02  | 68.3   | 5.05  | 67.5   | 5.44  | 66.7   | 5.78  | 66.0   | 6.20  | 63.9   | 6.59  | 62.1   | 6.91  | 59.7   | 7.01  |
|                 | 15.0              | 14.0  | 79.0                   | 5.47  | 78.9   | 5.45  | 78.3   | 5.84  | 77.4   | 6.16  | 76.5   | 6.58  | 72.8   | 6.94  | 69.5   | 6.93  | 65.1   | 6.91  |
|                 | 20.0              | 19.0  | 89.4                   | 5.92  | 89.5   | 5.86  | 89.1   | 6.23  | 88.0   | 6.54  | 87.0   | 6.96  | 81.7   | 6.82  | 76.8   | 6.67  | 70.4   | 6.48  |
|                 | 25.0              | 23.0  | 89.4                   | 6.37  | 89.5   | 6.26  | 89.6   | 6.63  | 88.3   | 6.92  | 87.0   | 7.38  | 81.7   | 6.53  | 76.9   | 6.39  | 70.4   | 6.20  |
|                 | 30.0              | 28.0  | 89.5                   | 6.82  | 89.5   | 6.67  | 89.5   | 7.02  | 88.2   | 7.28  | 87.0   | 7.74  | 81.7   | 6.25  | 76.9   | 6.11  | 70.4   | 5.92  |
|                 | 35.0              | 32.0  | 89.5                   | 7.27  | 89.5   | 7.07  | 89.5   | 7.28  | 88.2   | 7.54  | 87.0   | 8.00  | 81.7   | 5.97  | 76.9   | 5.83  | 70.4   | 5.64  |
|                 | 40.0              | 36.0  | 89.5                   | 7.73  | 89.5   | 7.53  | 89.5   | 7.74  | 88.2   | 8.00  | 87.0   | 8.46  | 81.7   | 5.69  | 76.9   | 5.55  | 70.4   | 5.36  |
|                 | 45.0              | 41.0  | 89.5                   | 8.19  | 89.5   | 8.00  | 89.5   | 8.20  | 88.2   | 8.46  | 87.0   | 8.88  | 81.7   | 5.40  | 76.9   | 5.26  | 70.4   | 5.08  |
|                 | 47.0              | 43.0  | 89.5                   | 8.65  | 89.5   | 8.46  | 89.5   | 8.66  | 88.2   | 8.92  | 87.0   | 9.34  | 81.7   | 5.24  | 76.9   | 5.11  | 70.4   | 4.93  |
|                 | 50.0              | 46.0  | 89.5                   | 9.11  | 89.5   | 8.92  | 89.5   | 9.12  | 88.2   | 9.38  | 87.0   | 9.80  | 81.7   | 5.04  | 76.9   | 4.92  | 70.4   | 4.75  |
| 120             | 55.0              | 51.0  | 89.5                   | 9.57  | 89.5   | 9.38  | 89.5   | 9.58  | 88.2   | 9.84  | 87.0   | 10.32 | 81.7   | 4.73  | 76.9   | 4.61  | 70.4   | 4.46  |
|                 | 60.0              | 56.0  | 89.5                   | 10.03 | 89.5   | 9.84  | 89.5   | 10.04 | 88.2   | 10.30 | 87.0   | 10.78 | 81.7   | 4.40  | 76.9   | 4.29  | 70.4   | 4.14  |
|                 | -21.6             | -22.0 | 34.8                   | 2.69  | 34.7   | 2.92  | 34.5   | 3.26  | 34.2   | 3.55  | 34.0   | 3.85  | 33.8   | 4.04  | 33.6   | 4.08  | 33.4   | 4.14  |
|                 | -17.1             | -17.5 | 38.7                   | 3.08  | 38.5   | 3.32  | 38.1   | 3.63  | 37.9   | 3.92  | 37.6   | 4.24  | 37.3   | 4.42  | 37.1   | 4.45  | 36.9   | 4.50  |
|                 | -12.6             | -13.0 | 42.5                   | 3.47  | 42.2   | 3.73  | 41.8   | 4.00  | 41.5   | 4.29  | 41.2   | 4.62  | 40.8   | 4.80  | 40.6   | 4.83  | 40.3   | 4.86  |
|                 | -7.0              | -7.6  | 47.3                   | 3.96  | 46.9   | 4.23  | 46.4   | 4.46  | 46.0   | 4.75  | 45.6   | 5.11  | 45.2   | 5.28  | 45.0   | 5.29  | 44.7   | 5.31  |
|                 | -4.0              | -4.4  | 49.9                   | 4.22  | 49.5   | 4.50  | 48.8   | 4.70  | 48.4   | 4.99  | 48.0   | 5.36  | 47.6   | 5.53  | 47.3   | 5.54  | 47.0   | 5.55  |
|                 | 0.0               | -0.4  | 53.3                   | 4.57  | 52.8   | 4.86  | 52.1   | 5.03  | 51.6   | 5.32  | 51.1   | 5.71  | 50.7   | 5.87  | 50.5   | 5.87  | 50.1   | 5.87  |
|                 | 5.0               | 4.5   | 57.6                   | 5.00  | 57.0   | 5.31  | 56.2   | 5.44  | 55.6   | 5.73  | 55.1   | 6.14  | 54.6   | 6.30  | 54.4   | 6.29  | 54.0   | 6.27  |
|                 | 10.0              | 9.0   | 67.4                   | 5.44  | 66.8   | 5.76  | 65.9   | 5.85  | 64.9   | 6.14  | 64.0   | 6.57  | 62.0   | 6.72  | 60.3   | 6.70  | 58.0   | 6.67  |
|                 | 15.0              | 14.0  | 77.3                   | 5.87  | 76.6   | 6.20  | 75.5   | 6.27  | 74.1   | 6.55  | 73.2   | 7.00  | 69.4   | 7.15  | 66.2   | 7.12  | 61.9   | 7.08  |
|                 | 20.0              | 19.0  | 87.2                   | 6.30  | 86.4   | 6.65  | 85.2   | 6.68  | 83.4   | 6.96  | 81.5   | 7.38  | 76.8   | 6.85  | 72.1   | 6.81  | 65.9   | 6.76  |
|                 | 25.0              | 23.0  | 89.4                   | 6.74  | 88.7   | 7.10  | 87.8   | 7.09  | 84.7   | 7.38  | 81.5   | 7.80  | 76.8   | 6.55  | 72.1   | 6.50  | 65.9   | 6.44  |
|                 | 30.0              | 28.0  | 89.4                   | 7.17  | 88.7   | 7.50  | 87.8   | 7.43  | 84.7   | 7.72  | 81.5   | 8.14  | 76.8   | 6.25  | 72.1   | 6.20  | 65.9   | 6.12  |
|                 | 35.0              | 32.0  | 89.4                   | 7.61  | 88.7   | 7.90  | 87.8   | 7.83  | 84.7   | 8.12  | 81.5   | 8.54  | 76.8   | 5.95  | 72.1   | 5.89  | 65.9   | 5.80  |
|                 | 40.0              | 36.0  | 89.4                   | 8.05  | 88.7   | 8.30  | 87.8   | 8.23  | 84.7   | 8.52  | 81.5   | 8.94  | 76.8   | 5.66  | 72.1   | 5.58  | 65.9   | 5.49  |
|                 | 45.0              | 41.0  | 89.4                   | 8.49  | 88.7   | 8.70  | 87.8   | 8.63  | 84.7   | 8.92  | 81.5   | 9.34  | 76.8   | 5.35  | 72.1   | 5.27  | 65.9   | 5.17  |
|                 | 47.0              | 43.0  | 89.4                   | 8.93  | 88.7   | 9.10  | 87.8   | 9.03  | 84.7   | 9.32  | 81.5   | 9.74  | 76.8   | 5.20  | 72.1   | 5.12  | 65.9   | 5.01  |
|                 | 50.0              | 46.0  | 89.4                   | 9.37  | 88.7   | 9.50  | 87.8   | 9.43  | 84.7   | 9.72  | 81.5   | 10.14 | 76.8   | 5.00  | 72.1   | 4.93  | 65.9   | 4.83  |
|                 | 55.0              | 51.0  | 89.4                   | 9.81  | 88.7   | 10.00 | 87.8   | 9.93  | 84.7   | 10.22 | 81.5   | 10.64 | 76.8   | 4.70  | 72.1   | 4.63  | 65.9   | 4.53  |
| 110             | 60.0              | 56.0  | 89.4                   | 10.25 | 88.7   | 10.40 | 87.8   | 10.33 | 84.7   | 10.62 | 81.5   | 11.04 | 76.8   | 4.37  | 72.1   | 4.30  | 65.9   | 4.22  |
|                 | -21.6             | -22.0 | 34.6                   | 3.43  | 34.5   | 3.59  | 34.3   | 3.85  | 34.1   | 4.13  | 33.9   | 4.41  | 33.6   | 4.92  | 33.4   | 5.35  | 33.2   | 5.91  |
|                 | -17.1             | -17.5 | 38.4                   | 3.84  | 38.2   | 3.98  | 37.9   | 4.20  | 37.6   | 4.63  | 37.4   | 4.92  | 37.0   | 5.41  | 36.8   | 5.78  | 36.4   | 6.44  |
|                 | -12.6             | -13.0 | 42.1                   | 4.26  | 41.9   | 4.37  | 41.5   | 4.54  | 41.2   | 5.14  | 40.9   | 5.43  | 40.5   | 5.90  | 40.1   | 6.22  | 39.5   | 6.97  |
|                 | -7.0              | -7.6  | 46.8                   | 4.77  | 46.5   | 4.85  | 46.0   | 4.97  | 45.6   | 5.77  | 45.3   | 6.06  | 44.8   | 6.51  | 44.2   | 6.76  | 43.5   | 7.63  |
|                 | -4.0              | -4.4  | 49.3                   | 5.05  | 48.9   | 5.11  | 48.4   | 5.21  | 48.0   | 6.11  | 47.7   | 6.40  | 47.1   | 6.84  | 46.5   | 7.05  | 45.6   | 7.99  |
|                 | 0.0               | -0.4  | 52.6                   | 5.42  | 52.2   | 5.46  | 51.6   | 5.52  | 51.2   | 6.56  | 50.8   | 6.86  | 50.2   | 7.28  | 49.4   | 7.44  | 48.4   | 8.46  |
|                 | 5.0               | 4.5   | 56.8                   | 5.88  | 56.3   | 5.89  | 55.6   | 5.90  | 55.2   | 7.13  | 54.8   | 7.43  | 54.0   | 7.82  | 53.1   | 7.93  | 51.9   | 8.07  |
|                 | 10.0              | 9.0   | 66.6                   | 6.34  | 65.9   | 6.32  | 65.0   | 6.29  | 64.5   | 7.09  | 64.0   | 7.37  | 61.3   | 7.27  | 59.1   | 7.14  | 55.9   | 6.95  |
|                 | 15.0              | 14.0  | 80.6                   | 6.80  | 79.8   | 6.75  | 78.5   | 6.67  | 75.8   | 6.98  | 73.2   | 6.97  | 68.9   | 6.78  | 65.0   | 6.57  | 59.8   | 6.28  |
|                 | 20.0              | 19.0  | 88.4                   | 7.27  | 85.3   | 7.18  | 80.6   | 7.06  | 76.9   | 6.88  | 73.2   | 6.70  | 68.9   | 6.49  | 65.0   | 6.29  | 59.8   | 6.02  |
|                 | 25.0              | 23.0  | 88.4                   | 7.18  | 85.3   | 7.03  | 80.6   | 6.80  | 76.9   | 6.60  | 73.2   | 6.39  | 68.9   | 6.20  | 65.0   | 6.01  | 59.8   | 5.76  |
|                 | 30.0              | 28.0  | 88.4                   | 6.85  | 85.3   | 6.68  | 80.6   | 6.42  | 76.9   | 6.26  | 73.2   | 6.09  | 68.9   | 5.91  | 65.0   | 5.74  | 59.8   | 5.51  |
|                 | 35.0              | 32.0  | 88.4                   | 6.38  | 85.3   | 6.25  | 80.6   | 6.05  | 76.9   | 5.92  | 73.2   | 5.78  | 68.9   | 5.62  | 65.0   | 5.47  | 59.8   | 5.25  |
|                 | 40.0              | 36.0  | 88.4                   | 5.90  | 85.3   | 5.81  | 80.6   | 5.67  | 76.9   | 5.58  | 73.2   | 5.48  | 68.9   | 5.34  | 65.0   | 5.19  | 59.8   | 5.00  |
|                 | 45.0              | 41.0  | 88.4                   | 5.43  | 85.3   | 5.38  | 80.6   | 5.30  | 76.9   | 5.23  | 73.2   | 5.17  | 68.9   | 5.05  | 65.0   | 4.91  | 59.8   | 4.74  |
|                 | 47.0              | 43.0  | 88.4                   | 5.27  | 85.3   | 5.22  | 80.6   | 5.14  | 76.9   | 5.08  | 73.2   | 5.02  | 68.9   | 4.90  | 65.0   | 4.77  | 59.8   | 4.60  |
|                 | 50.0              | 46.0  | 88.4                   | 5.08  | 85.3   | 5.03  | 80.6   | 4.95  | 76.9   | 4.89  | 73.2   | 4.84  | 68.9   | 4.72  | 65.0   | 4.59  | 59.8   | 4.43  |
|                 | 55.0              | 51.0  | 88.4                   | 4.76  | 85.3   | 4.72  | 80.6   | 4.65  | 76.9   | 4.59  | 73.2   | 4.54  | 68.9   | 4.43  | 65.0   | 4.31  | 59.8   | 4.16  |
|                 | 60.0              | 56.0  | 88.4                   | 4.43  | 85.3   | 4.39  | 80.6   | 4.32  | 76.9   | 4.27  | 73.2   | 4.22  | 68.9   | 4.12  | 65.0   | 4.01  | 59.8   | 3.87  |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

# HEATING CAPACITY

ZRUM060GSS0



Table 58: ZRUM060GSS0 Heating Capacities, continued.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|-------------------|-------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | °F DB             | °F WB | 59                     |      | 61   |      | 64   |      | 67   |      | 70   |      | 73   |      | 76   |      | 80   |      |
|                 |                   |       | TC                     | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   |
| 100             | -21.6             | -22.0 | 34.5                   | 2.79 | 34.3 | 3.19 | 34.1 | 3.79 | 33.9 | 4.20 | 33.7 | 4.60 | 33.4 | 5.18 | 33.3 | 5.53 | 33.0 | 6.00 |
|                 | -17.1             | -17.5 | 38.1                   | 3.20 | 37.9 | 3.60 | 37.7 | 4.18 | 37.4 | 4.70 | 37.2 | 5.10 | 36.6 | 5.61 | 36.1 | 5.90 | 35.4 | 6.28 |
|                 | -12.6             | -13.0 | 41.7                   | 3.62 | 41.5 | 4.00 | 41.3 | 4.56 | 40.9 | 5.20 | 40.6 | 5.60 | 39.7 | 6.04 | 38.8 | 6.26 | 37.7 | 6.56 |
|                 | -7.0              | -7.6  | 46.2                   | 4.13 | 46.0 | 4.51 | 45.7 | 5.04 | 45.3 | 5.83 | 44.9 | 6.22 | 43.5 | 6.58 | 42.3 | 6.72 | 40.7 | 6.92 |
|                 | -4.0              | -4.4  | 48.6                   | 4.41 | 48.4 | 4.78 | 48.1 | 5.30 | 47.6 | 6.16 | 47.1 | 6.55 | 45.6 | 6.87 | 44.2 | 6.97 | 42.2 | 7.11 |
|                 | 0.0               | -0.4  | 51.8                   | 4.78 | 51.6 | 5.15 | 51.3 | 5.64 | 50.7 | 6.61 | 50.2 | 6.99 | 48.4 | 7.25 | 46.6 | 7.30 | 44.3 | 7.36 |
|                 | 5.0               | 4.5   | 55.8                   | 5.24 | 55.6 | 5.60 | 55.2 | 6.07 | 54.6 | 7.17 | 54.0 | 7.54 | 51.8 | 7.73 | 49.7 | 7.71 | 46.9 | 7.67 |
|                 | 10.0              | 9.0   | 66.8                   | 5.70 | 65.9 | 6.05 | 64.4 | 6.50 | 62.5 | 6.99 | 60.5 | 7.19 | 57.5 | 7.07 | 53.6 | 6.90 | 49.2 | 6.68 |
|                 | 15.0              | 14.0  | 77.8                   | 6.16 | 76.2 | 6.50 | 73.6 | 6.93 | 70.3 | 6.89 | 67.0 | 6.84 | 63.1 | 6.48 | 59.4 | 6.29 | 54.4 | 6.02 |
|                 | 20.0              | 19.0  | 81.0                   | 6.62 | 78.1 | 6.96 | 73.6 | 6.85 | 70.3 | 6.67 | 67.0 | 6.49 | 63.1 | 6.15 | 59.4 | 5.96 | 54.4 | 5.71 |
|                 | 25.0              | 23.0  | 81.0                   | 7.08 | 78.1 | 6.79 | 73.6 | 6.35 | 70.3 | 6.25 | 67.0 | 6.14 | 63.1 | 5.81 | 59.4 | 5.63 | 54.4 | 5.39 |
|                 | 30.0              | 28.0  | 81.0                   | 6.64 | 78.1 | 6.39 | 73.6 | 6.03 | 70.3 | 5.91 | 67.0 | 5.79 | 63.1 | 5.48 | 59.4 | 5.30 | 54.4 | 5.08 |
|                 | 35.0              | 32.0  | 81.0                   | 6.20 | 78.1 | 6.00 | 73.6 | 5.70 | 70.3 | 5.57 | 67.0 | 5.44 | 63.1 | 5.14 | 59.4 | 4.98 | 54.4 | 4.76 |
|                 | 40.0              | 36.0  | 81.0                   | 5.75 | 78.1 | 5.60 | 73.6 | 5.37 | 70.3 | 5.23 | 67.0 | 5.09 | 63.1 | 4.80 | 59.4 | 4.65 | 54.4 | 4.45 |
|                 | 45.0              | 41.0  | 81.0                   | 5.31 | 78.1 | 5.21 | 73.6 | 5.04 | 70.3 | 4.89 | 67.0 | 4.74 | 63.1 | 4.47 | 59.4 | 4.32 | 54.4 | 4.13 |
|                 | 47.0              | 43.0  | 81.0                   | 5.16 | 78.1 | 5.05 | 73.6 | 4.89 | 70.3 | 4.75 | 67.0 | 4.60 | 63.1 | 4.34 | 59.4 | 4.20 | 54.4 | 4.01 |
|                 | 50.0              | 46.0  | 81.0                   | 4.97 | 78.1 | 4.87 | 73.6 | 4.71 | 70.3 | 4.57 | 67.0 | 4.43 | 63.1 | 4.18 | 59.4 | 4.04 | 54.4 | 3.86 |
|                 | 55.0              | 51.0  | 81.0                   | 4.66 | 78.1 | 4.57 | 73.6 | 4.42 | 70.3 | 4.29 | 67.0 | 4.16 | 63.1 | 3.92 | 59.4 | 3.79 | 54.4 | 3.62 |
|                 | 60.0              | 56.0  | 81.0                   | 4.34 | 78.1 | 4.25 | 73.6 | 4.11 | 70.3 | 3.99 | 67.0 | 3.87 | 63.1 | 3.64 | 59.4 | 3.53 | 54.4 | 3.37 |
| 90              | -21.6             | -22.0 | 34.3                   | 3.59 | 34.2 | 3.81 | 34.0 | 4.13 | 33.8 | 4.56 | 33.6 | 4.99 | 33.3 | 5.29 | 33.1 | 5.57 | 32.9 | 5.95 |
|                 | -17.1             | -17.5 | 38.0                   | 3.92 | 37.8 | 4.15 | 37.4 | 4.51 | 37.0 | 4.88 | 36.6 | 5.47 | 35.8 | 5.70 | 35.2 | 6.06 | 34.3 | 6.44 |
|                 | -12.6             | -13.0 | 41.7                   | 4.25 | 41.4 | 4.48 | 40.9 | 4.90 | 40.2 | 5.20 | 39.5 | 5.95 | 38.3 | 6.11 | 37.2 | 6.54 | 35.7 | 6.92 |
|                 | -7.0              | -7.6  | 46.2                   | 4.67 | 45.8 | 4.90 | 45.1 | 5.37 | 44.2 | 5.60 | 43.2 | 6.54 | 41.4 | 6.62 | 39.8 | 7.14 | 37.5 | 7.53 |
|                 | -4.0              | -4.4  | 48.7                   | 4.89 | 48.2 | 5.13 | 47.4 | 5.63 | 46.3 | 5.81 | 45.2 | 6.86 | 43.1 | 6.90 | 41.1 | 7.04 | 38.5 | 7.27 |
|                 | 0.0               | -0.4  | 51.9                   | 5.18 | 51.4 | 5.43 | 50.5 | 5.97 | 49.2 | 6.09 | 47.8 | 7.29 | 45.3 | 7.26 | 42.9 | 6.91 | 39.7 | 6.93 |
|                 | 5.0               | 4.5   | 56.0                   | 5.55 | 55.3 | 5.81 | 54.3 | 6.40 | 52.7 | 6.45 | 51.1 | 7.03 | 48.1 | 6.93 | 45.2 | 6.74 | 41.3 | 6.50 |
|                 | 10.0              | 9.0   | 66.3                   | 5.92 | 64.1 | 6.18 | 60.7 | 6.82 | 58.1 | 6.80 | 55.4 | 6.78 | 52.1 | 6.46 | 49.0 | 6.17 | 44.7 | 5.78 |
|                 | 15.0              | 14.0  | 74.3                   | 6.28 | 71.5 | 6.56 | 67.3 | 6.54 | 64.3 | 6.39 | 61.4 | 6.24 | 57.7 | 5.90 | 54.2 | 5.63 | 49.5 | 5.28 |
|                 | 20.0              | 19.0  | 74.3                   | 6.65 | 71.5 | 6.52 | 67.3 | 6.32 | 64.3 | 6.12 | 61.4 | 5.92 | 57.7 | 5.60 | 54.2 | 5.35 | 49.5 | 5.01 |
|                 | 25.0              | 23.0  | 74.3                   | 6.29 | 71.5 | 6.17 | 67.3 | 5.98 | 64.3 | 5.79 | 61.4 | 5.60 | 57.7 | 5.30 | 54.2 | 5.06 | 49.5 | 4.73 |
|                 | 30.0              | 28.0  | 74.3                   | 5.93 | 71.5 | 5.81 | 67.3 | 5.63 | 64.3 | 5.46 | 61.4 | 5.29 | 57.7 | 5.01 | 54.2 | 4.77 | 49.5 | 4.46 |
|                 | 35.0              | 32.0  | 74.3                   | 5.57 | 71.5 | 5.46 | 67.3 | 5.29 | 64.3 | 5.13 | 61.4 | 4.97 | 57.7 | 4.71 | 54.2 | 4.49 | 49.5 | 4.19 |
|                 | 40.0              | 36.0  | 74.3                   | 5.21 | 71.5 | 5.11 | 67.3 | 4.95 | 64.3 | 4.80 | 61.4 | 4.65 | 57.7 | 4.41 | 54.2 | 4.20 | 49.5 | 3.92 |
|                 | 45.0              | 41.0  | 74.3                   | 4.86 | 71.5 | 4.76 | 67.3 | 4.61 | 64.3 | 4.47 | 61.4 | 4.33 | 57.7 | 4.11 | 54.2 | 3.91 | 49.5 | 3.65 |
|                 | 47.0              | 43.0  | 74.3                   | 4.71 | 71.5 | 4.62 | 67.3 | 4.47 | 64.3 | 4.34 | 61.4 | 4.21 | 57.7 | 3.99 | 54.2 | 3.80 | 49.5 | 3.54 |
|                 | 50.0              | 46.0  | 74.3                   | 4.54 | 71.5 | 4.45 | 67.3 | 4.31 | 64.3 | 4.18 | 61.4 | 4.05 | 57.7 | 3.84 | 54.2 | 3.66 | 49.5 | 3.41 |
|                 | 55.0              | 51.0  | 74.3                   | 4.26 | 71.5 | 4.17 | 67.3 | 4.05 | 64.3 | 3.92 | 61.4 | 3.80 | 57.7 | 3.61 | 54.2 | 3.43 | 49.5 | 3.20 |
|                 | 60.0              | 56.0  | 74.3                   | 3.96 | 71.5 | 3.88 | 67.3 | 3.76 | 64.3 | 3.65 | 61.4 | 3.54 | 57.7 | 3.35 | 54.2 | 3.19 | 49.5 | 2.97 |
| 80              | -21.6             | -22.0 | 34.2                   | 3.62 | 34.1 | 3.86 | 33.8 | 4.21 | 33.6 | 4.47 | 33.4 | 4.72 | 33.2 | 5.39 | 33.0 | 5.75 | 32.8 | 6.21 |
|                 | -17.1             | -17.5 | 37.9                   | 3.89 | 37.4 | 4.31 | 36.6 | 4.68 | 36.1 | 4.88 | 36.0 | 5.08 | 35.2 | 5.60 | 34.5 | 6.09 | 33.7 | 6.55 |
|                 | -12.6             | -13.0 | 41.6                   | 4.16 | 40.8 | 4.76 | 39.4 | 5.15 | 38.5 | 5.29 | 38.6 | 5.44 | 37.2 | 5.80 | 36.1 | 6.07 | 34.5 | 6.44 |
|                 | -7.0              | -7.6  | 46.1                   | 4.50 | 45.0 | 5.32 | 42.9 | 5.73 | 41.5 | 5.81 | 41.8 | 5.88 | 39.8 | 6.05 | 38.0 | 6.05 | 35.6 | 6.31 |
|                 | -4.0              | -4.4  | 48.6                   | 4.68 | 47.3 | 5.62 | 44.7 | 6.05 | 43.2 | 6.08 | 43.5 | 6.12 | 41.1 | 6.19 | 39.0 | 6.04 | 36.2 | 6.24 |
|                 | 0.0               | -0.4  | 51.9                   | 4.92 | 50.3 | 6.02 | 47.2 | 6.46 | 45.3 | 6.45 | 45.8 | 6.44 | 43.0 | 6.37 | 40.4 | 6.02 | 37.0 | 6.14 |
|                 | 5.0               | 4.5   | 55.9                   | 5.22 | 54.0 | 6.52 | 50.3 | 6.50 | 48.0 | 6.49 | 45.8 | 6.48 | 43.0 | 6.19 | 40.4 | 6.00 | 37.0 | 5.75 |
|                 | 10.0              | 9.0   | 60.0                   | 5.52 | 57.8 | 6.03 | 54.5 | 6.02 | 52.1 | 5.93 | 49.6 | 5.84 | 46.5 | 5.46 | 43.8 | 5.29 | 40.1 | 5.07 |
|                 | 15.0              | 14.0  | 66.5                   | 5.82 | 64.0 | 5.79 | 60.3 | 5.75 | 57.6 | 5.54 | 55.0 | 5.33 | 51.5 | 4.99 | 48.5 | 4.83 | 44.4 | 4.62 |
|                 | 20.0              | 19.0  | 66.5                   | 5.70 | 64.0 | 5.60 | 60.3 | 5.45 | 57.6 | 5.25 | 55.0 | 5.05 | 51.5 | 4.74 | 48.5 | 4.58 | 44.4 | 4.38 |
|                 | 25.0              | 23.0  | 66.5                   | 5.38 | 64.0 | 5.29 | 60.3 | 5.14 | 57.6 | 4.96 | 55.0 | 4.77 | 51.5 | 4.49 | 48.5 | 4.34 | 44.4 | 4.14 |
|                 | 30.0              | 28.0  | 66.5                   | 5.07 | 64.0 | 4.98 | 60.3 | 4.84 | 57.6 | 4.67 | 55.0 | 4.49 | 51.5 | 4.23 | 48.5 | 4.09 | 44.4 | 3.89 |
|                 | 35.0              | 32.0  | 66.5                   | 4.76 | 64.0 | 4.67 | 60.3 | 4.54 | 57.6 | 4.38 | 55.0 | 4.22 | 51.5 | 3.98 | 48.5 | 3.84 | 44.4 | 3.65 |
|                 | 40.0              | 36.0  | 66.5                   | 4.44 | 64.0 | 4.36 | 60.3 | 4.24 | 57.6 | 4.09 | 55.0 | 3.94 | 51.5 | 3.73 | 48.5 | 3.59 | 44.4 | 3.41 |
|                 | 45.0              | 41.0  | 66.5                   | 4.13 | 64.0 | 4.05 | 60.3 | 3.93 | 57.6 | 3.80 | 55.0 | 3.66 | 51.5 | 3.48 | 48.5 | 3.34 | 44.4 | 3.17 |
|                 | 47.0              | 43.0  | 66.5                   | 4.01 | 64.0 | 3.93 | 60.3 | 3.82 | 57.6 | 3.68 | 55.0 | 3.55 | 51.5 | 3.37 | 48.5 | 3.24 | 44.4 | 3.07 |
|                 | 50.0              | 46.0  | 66.5                   | 3.86 | 64.0 | 3.79 | 60.3 | 3.68 | 57.6 | 3.55 | 55.0 | 3.42 | 51.5 | 3.25 | 48.5 | 3.13 | 44.4 | 2.96 |
|                 | 55.0              | 51.0  | 66.5                   | 3.62 | 64.0 | 3.55 | 60.3 | 3.45 | 57.6 | 3.33 | 55.0 | 3.21 | 51.5 | 3.05 | 48.5 | 2.93 | 44.4 | 2.78 |
|                 | 60.0              | 56.0  | 66.5                   | 3.37 | 64.0 | 3.31 | 60.3 | 3.21 | 57.6 | 3.10 | 55.0 | 2.99 | 51.5 | 2.84 | 48.5 | 2.73 | 44.4 | 2.58 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

Table 59: ZRUM060GSS0 Heating Capacities, continued.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|-------------------|-------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | °F DB             | °F WB | 59                     |      | 61   |      | 64   |      | 67   |      | 70   |      | 73   |      | 76   |      | 80   |      |
|                 |                   |       | TC                     | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   |
| 70              | -21.6             | -22.0 | 34.0                   | 3.88 | 33.9 | 4.00 | 33.7 | 4.16 | 33.4 | 4.59 | 33.2 | 5.01 | 33.0 | 5.60 | 32.8 | 5.95 | 32.6 | 6.42 |
|                 | -17.1             | -17.5 | 37.4                   | 4.37 | 37.3 | 4.46 | 37.1 | 4.59 | 36.3 | 4.99 | 35.6 | 5.36 | 34.7 | 5.64 | 33.9 | 5.94 | 32.8 | 6.34 |
|                 | -12.6             | -13.0 | 40.7                   | 4.86 | 40.7 | 4.92 | 40.6 | 5.01 | 39.2 | 5.38 | 37.9 | 5.71 | 36.4 | 5.69 | 35.0 | 5.93 | 33.1 | 6.26 |
|                 | -7.0              | -7.6  | 44.9                   | 5.47 | 44.9 | 5.50 | 44.9 | 5.54 | 42.8 | 5.88 | 40.8 | 6.14 | 38.5 | 6.12 | 36.3 | 5.92 | 33.4 | 6.17 |
|                 | -4.0              | -4.4  | 48.9                   | 5.80 | 48.1 | 5.81 | 46.9 | 5.83 | 44.8 | 6.15 | 42.6 | 6.15 | 40.3 | 6.13 | 38.0 | 5.92 | 34.9 | 6.12 |
|                 | 0.0               | -0.4  | 54.3                   | 6.23 | 52.3 | 6.22 | 49.4 | 6.20 | 47.1 | 6.19 | 44.9 | 6.18 | 42.4 | 6.01 | 40.0 | 5.91 | 36.7 | 5.78 |
|                 | 5.0               | 4.5   | 55.3                   | 6.26 | 52.3 | 6.24 | 49.4 | 6.22 | 47.1 | 6.12 | 44.9 | 6.03 | 42.4 | 5.75 | 40.0 | 5.64 | 36.7 | 5.50 |
|                 | 10.0              | 9.0   | 56.3                   | 5.78 | 54.3 | 5.76 | 51.3 | 5.73 | 48.9 | 5.51 | 46.6 | 5.29 | 44.0 | 5.04 | 41.5 | 4.93 | 38.1 | 4.79 |
|                 | 15.0              | 14.0  | 56.3                   | 5.64 | 54.3 | 5.48 | 51.3 | 5.24 | 48.9 | 5.02 | 46.6 | 4.80 | 44.0 | 4.57 | 41.5 | 4.46 | 38.1 | 4.31 |
|                 | 20.0              | 19.0  | 56.3                   | 5.30 | 54.3 | 5.15 | 51.3 | 4.93 | 48.9 | 4.72 | 46.6 | 4.52 | 44.0 | 4.30 | 41.5 | 4.18 | 38.1 | 4.03 |
|                 | 25.0              | 23.0  | 56.3                   | 4.97 | 54.3 | 4.83 | 51.3 | 4.62 | 48.9 | 4.43 | 46.6 | 4.24 | 44.0 | 4.03 | 41.5 | 3.91 | 38.1 | 3.75 |
|                 | 30.0              | 28.0  | 56.3                   | 4.63 | 54.3 | 4.50 | 51.3 | 4.31 | 48.9 | 4.14 | 46.6 | 3.96 | 44.0 | 3.76 | 41.5 | 3.63 | 38.1 | 3.46 |
|                 | 35.0              | 32.0  | 56.3                   | 4.29 | 54.3 | 4.18 | 51.3 | 4.00 | 48.9 | 3.84 | 46.6 | 3.68 | 44.0 | 3.50 | 41.5 | 3.36 | 38.1 | 3.18 |
|                 | 40.0              | 36.0  | 56.3                   | 3.96 | 54.3 | 3.85 | 51.3 | 3.69 | 48.9 | 3.55 | 46.6 | 3.40 | 44.0 | 3.23 | 41.5 | 3.08 | 38.1 | 2.89 |
|                 | 45.0              | 41.0  | 56.3                   | 3.62 | 54.3 | 3.53 | 51.3 | 3.39 | 48.9 | 3.26 | 46.6 | 3.13 | 44.0 | 2.96 | 41.5 | 2.81 | 38.1 | 2.61 |
|                 | 47.0              | 43.0  | 56.3                   | 3.52 | 54.3 | 3.42 | 51.3 | 3.29 | 48.9 | 3.16 | 46.6 | 3.03 | 44.0 | 2.87 | 41.5 | 2.73 | 38.1 | 2.53 |
|                 | 50.0              | 46.0  | 56.3                   | 3.39 | 54.3 | 3.30 | 51.3 | 3.17 | 48.9 | 3.04 | 46.6 | 2.92 | 44.0 | 2.77 | 41.5 | 2.63 | 38.1 | 2.44 |
|                 | 55.0              | 51.0  | 56.3                   | 3.18 | 54.3 | 3.10 | 51.3 | 2.97 | 48.9 | 2.86 | 46.6 | 2.74 | 44.0 | 2.60 | 41.5 | 2.46 | 38.1 | 2.29 |
|                 | 60.0              | 56.0  | 56.3                   | 2.96 | 54.3 | 2.88 | 51.3 | 2.76 | 48.9 | 2.66 | 46.6 | 2.55 | 44.0 | 2.41 | 41.5 | 2.29 | 38.1 | 2.13 |
| 60              | -21.6             | -22.0 | 31.5                   | 3.58 | 31.3 | 3.69 | 31.2 | 3.86 | 31.0 | 4.28 | 30.8 | 4.70 | 30.5 | 5.29 | 30.4 | 5.64 | 30.2 | 6.11 |
|                 | -17.1             | -17.5 | 36.6                   | 3.87 | 36.0 | 4.15 | 35.1 | 4.28 | 34.4 | 4.68 | 33.6 | 5.22 | 32.4 | 5.64 | 31.4 | 5.63 | 31.0 | 6.01 |
|                 | -12.6             | -13.0 | 41.8                   | 4.16 | 40.7 | 4.61 | 39.1 | 4.71 | 37.8 | 5.07 | 36.4 | 5.73 | 34.3 | 5.71 | 32.4 | 5.70 | 31.8 | 5.90 |
|                 | -7.0              | -7.6  | 48.2                   | 4.52 | 46.6 | 5.19 | 44.1 | 5.23 | 42.0 | 5.56 | 40.0 | 5.81 | 37.6 | 5.79 | 35.5 | 5.78 | 32.8 | 5.77 |
|                 | -4.0              | -4.4  | 48.2                   | 4.71 | 46.6 | 5.49 | 44.1 | 5.52 | 42.0 | 5.82 | 40.0 | 5.82 | 37.6 | 5.73 | 35.5 | 5.55 | 32.8 | 5.33 |
|                 | 0.0               | -0.4  | 48.2                   | 4.97 | 46.6 | 5.90 | 44.1 | 5.89 | 42.0 | 5.81 | 40.0 | 5.74 | 37.6 | 5.53 | 35.5 | 5.34 | 32.8 | 5.09 |
|                 | 5.0               | 4.5   | 48.2                   | 5.29 | 46.6 | 5.94 | 44.1 | 5.92 | 42.0 | 5.69 | 40.0 | 5.47 | 37.6 | 5.26 | 35.5 | 5.07 | 32.8 | 4.82 |
|                 | 10.0              | 9.0   | 48.2                   | 5.62 | 46.6 | 5.49 | 44.1 | 5.31 | 42.0 | 5.04 | 40.0 | 4.78 | 37.6 | 4.59 | 35.5 | 4.42 | 32.8 | 4.19 |
|                 | 15.0              | 14.0  | 48.2                   | 5.16 | 46.6 | 5.01 | 44.1 | 4.79 | 42.0 | 4.55 | 40.0 | 4.31 | 37.6 | 4.13 | 35.5 | 3.97 | 32.8 | 3.76 |
|                 | 20.0              | 19.0  | 48.2                   | 4.84 | 46.6 | 4.70 | 44.1 | 4.48 | 42.0 | 4.26 | 40.0 | 4.04 | 37.6 | 3.86 | 35.5 | 3.70 | 32.8 | 3.49 |
|                 | 25.0              | 23.0  | 48.2                   | 4.53 | 46.6 | 4.38 | 44.1 | 4.17 | 42.0 | 3.97 | 40.0 | 3.77 | 37.6 | 3.59 | 35.5 | 3.43 | 32.8 | 3.22 |
|                 | 30.0              | 28.0  | 48.2                   | 4.21 | 46.6 | 4.07 | 44.1 | 3.86 | 42.0 | 3.68 | 40.0 | 3.50 | 37.6 | 3.32 | 35.5 | 3.16 | 32.8 | 2.96 |
|                 | 35.0              | 32.0  | 48.2                   | 3.89 | 46.6 | 3.76 | 44.1 | 3.55 | 42.0 | 3.39 | 40.0 | 3.23 | 37.6 | 3.05 | 35.5 | 2.89 | 32.8 | 2.69 |
|                 | 40.0              | 36.0  | 48.2                   | 3.57 | 46.6 | 3.44 | 44.1 | 3.24 | 42.0 | 3.10 | 40.0 | 2.95 | 37.6 | 2.77 | 35.5 | 2.62 | 32.8 | 2.42 |
|                 | 45.0              | 41.0  | 48.2                   | 3.26 | 46.6 | 3.13 | 44.1 | 2.93 | 42.0 | 2.81 | 40.0 | 2.69 | 37.6 | 2.51 | 35.5 | 2.36 | 32.8 | 2.16 |
|                 | 47.0              | 43.0  | 48.2                   | 3.17 | 46.6 | 3.04 | 44.1 | 2.85 | 42.0 | 2.73 | 40.0 | 2.61 | 37.6 | 2.43 | 35.5 | 2.29 | 32.8 | 2.09 |
|                 | 50.0              | 46.0  | 48.2                   | 3.05 | 46.6 | 2.93 | 44.1 | 2.74 | 42.0 | 2.63 | 40.0 | 2.51 | 37.6 | 2.34 | 35.5 | 2.20 | 32.8 | 2.01 |
|                 | 55.0              | 51.0  | 48.2                   | 2.86 | 46.6 | 2.75 | 44.1 | 2.57 | 42.0 | 2.46 | 40.0 | 2.36 | 37.6 | 2.20 | 35.5 | 2.07 | 32.8 | 1.89 |
|                 | 60.0              | 56.0  | 48.2                   | 2.66 | 46.6 | 2.55 | 44.1 | 2.39 | 42.0 | 2.29 | 40.0 | 2.19 | 37.6 | 2.04 | 35.5 | 1.92 | 32.8 | 1.76 |
| 50              | -21.6             | -22.0 | 29.1                   | 3.07 | 29.0 | 3.18 | 28.8 | 3.35 | 28.7 | 3.77 | 28.5 | 4.20 | 28.1 | 4.78 | 27.6 | 5.14 | 27.0 | 5.61 |
|                 | -17.1             | -17.5 | 34.7                   | 3.49 | 33.9 | 3.64 | 32.7 | 3.77 | 31.8 | 4.16 | 30.9 | 4.53 | 29.7 | 4.93 | 28.6 | 4.92 | 27.1 | 4.89 |
|                 | -12.6             | -13.0 | 40.3                   | 3.90 | 38.9 | 4.09 | 36.7 | 4.18 | 35.0 | 4.55 | 33.3 | 4.86 | 31.4 | 4.83 | 29.5 | 4.81 | 27.1 | 4.78 |
|                 | -7.0              | -7.6  | 40.3                   | 4.42 | 38.9 | 4.65 | 36.7 | 4.69 | 35.0 | 5.03 | 33.3 | 5.28 | 31.4 | 5.14 | 29.5 | 4.89 | 27.1 | 4.55 |
|                 | -4.0              | -4.4  | 40.3                   | 4.70 | 38.9 | 4.96 | 36.7 | 4.97 | 35.0 | 5.28 | 33.3 | 5.28 | 31.4 | 4.97 | 29.5 | 4.73 | 27.1 | 4.40 |
|                 | 0.0               | -0.4  | 40.3                   | 5.06 | 38.9 | 5.36 | 36.7 | 5.34 | 35.0 | 5.21 | 33.3 | 5.09 | 31.4 | 4.78 | 29.5 | 4.54 | 27.1 | 4.23 |
|                 | 5.0               | 4.5   | 40.3                   | 5.53 | 38.9 | 5.38 | 36.7 | 5.17 | 35.0 | 5.00 | 33.3 | 4.83 | 31.4 | 4.53 | 29.5 | 4.30 | 27.1 | 4.00 |
|                 | 10.0              | 9.0   | 40.3                   | 5.03 | 38.9 | 4.81 | 36.7 | 4.49 | 35.0 | 4.34 | 33.3 | 4.19 | 31.4 | 3.93 | 29.5 | 3.74 | 27.1 | 3.47 |
|                 | 15.0              | 14.0  | 40.3                   | 4.51 | 38.9 | 4.32 | 36.7 | 4.04 | 35.0 | 3.90 | 33.3 | 3.76 | 31.4 | 3.53 | 29.5 | 3.35 | 27.1 | 3.11 |
|                 | 20.0              | 19.0  | 40.3                   | 4.20 | 38.9 | 4.02 | 36.7 | 3.76 | 35.0 | 3.62 | 33.3 | 3.49 | 31.4 | 3.28 | 29.5 | 3.11 | 27.1 | 2.89 |
|                 | 25.0              | 23.0  | 40.3                   | 3.89 | 38.9 | 3.72 | 36.7 | 3.48 | 35.0 | 3.35 | 33.3 | 3.23 | 31.4 | 3.03 | 29.5 | 2.88 | 27.1 | 2.66 |
|                 | 30.0              | 28.0  | 40.3                   | 3.57 | 38.9 | 3.42 | 36.7 | 3.20 | 35.0 | 3.08 | 33.3 | 2.96 | 31.4 | 2.79 | 29.5 | 2.64 | 27.1 | 2.44 |
|                 | 35.0              | 32.0  | 40.3                   | 3.26 | 38.9 | 3.12 | 36.7 | 2.92 | 35.0 | 2.81 | 33.3 | 2.69 | 31.4 | 2.54 | 29.5 | 2.40 | 27.1 | 2.21 |
|                 | 40.0              | 36.0  | 40.3                   | 2.94 | 38.9 | 2.82 | 36.7 | 2.64 | 35.0 | 2.53 | 33.3 | 2.42 | 31.4 | 2.29 | 29.5 | 2.16 | 27.1 | 1.99 |
|                 | 45.0              | 41.0  | 40.3                   | 2.63 | 38.9 | 2.52 | 36.7 | 2.36 | 35.0 | 2.26 | 33.3 | 2.16 | 31.4 | 2.04 | 29.5 | 1.92 | 27.1 | 1.77 |
|                 | 47.0              | 43.0  | 40.3                   | 2.55 | 38.9 | 2.45 | 36.7 | 2.29 | 35.0 | 2.20 | 33.3 | 2.10 | 31.4 | 1.98 | 29.5 | 1.87 | 27.1 | 1.72 |
|                 | 50.0              | 46.0  | 40.3                   | 2.46 | 38.9 | 2.36 | 36.7 | 2.21 | 35.0 | 2.12 | 33.3 | 2.02 | 31.4 | 1.91 | 29.5 | 1.80 | 27.1 | 1.65 |
|                 | 55.0              | 51.0  | 40.3                   | 2.31 | 38.9 | 2.21 | 36.7 | 2.07 | 35.0 | 1.99 | 33.3 | 1.90 | 31.4 | 1.79 | 29.5 | 1.69 | 27.1 | 1.55 |
|                 | 60.0              | 56.0  | 40.3                   | 2.15 | 38.9 | 2.06 | 36.7 | 1.93 | 35.0 | 1.85 | 33.3 | 1.76 | 31.4 | 1.67 | 29.5 | 1.57 | 27.1 | 1.44 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

# MAXIMUM HEATING CAPACITY

## ZRUN024GSS0 and ZRUM036GSS0



Table 60: ZRUN024GSS0 Maximum Heating Capacities.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |
|-----------------|-------------------|-------|------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 |                   |       | 59                     |       | 61     |       | 64     |       | 67     |       | 70     |       | 73     |       | 76     |       | 80     |       |
|                 | °F DB             | °F WB | TC MBh                 | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW |
| 100             | -21.6             | -22.0 | 16.1                   | 1.27  | 16.0   | 1.45  | 15.9   | 1.72  | 15.8   | 1.91  | 15.7   | 2.09  | 15.6   | 2.35  | 15.5   | 2.51  | 15.4   | 2.72  |
|                 | -17.1             | -17.5 | 18.1                   | 1.47  | 18.0   | 1.65  | 17.9   | 1.91  | 17.7   | 2.17  | 17.6   | 2.36  | 17.3   | 2.59  | 17.1   | 2.72  | 16.8   | 2.90  |
|                 | -12.6             | -13.0 | 20.1                   | 1.67  | 20.0   | 1.86  | 19.9   | 2.09  | 19.7   | 2.44  | 19.5   | 2.63  | 19.1   | 2.83  | 18.7   | 2.93  | 18.1   | 3.07  |
|                 | -7.0              | -7.6  | 22.6                   | 1.92  | 22.5   | 2.11  | 22.3   | 2.33  | 22.1   | 2.78  | 21.9   | 2.96  | 21.3   | 3.13  | 20.6   | 3.19  | 19.8   | 3.28  |
|                 | -4.0              | -4.4  | 23.9                   | 2.06  | 23.8   | 2.24  | 23.6   | 2.45  | 23.4   | 2.95  | 23.2   | 3.14  | 22.4   | 3.29  | 21.7   | 3.33  | 20.7   | 3.39  |
|                 | 0.0               | -0.4  | 25.7                   | 2.24  | 25.6   | 2.43  | 25.4   | 2.62  | 25.1   | 3.19  | 24.9   | 3.37  | 24.0   | 3.50  | 23.1   | 3.52  | 22.0   | 3.55  |
|                 | 5.0               | 4.5   | 27.9                   | 2.46  | 27.8   | 2.65  | 27.6   | 2.82  | 27.3   | 3.49  | 27.0   | 3.67  | 25.9   | 3.76  | 24.9   | 3.75  | 23.5   | 3.73  |
|                 | 10.0              | 9.0   | 32.0                   | 2.69  | 31.4   | 2.88  | 30.4   | 3.03  | 29.6   | 3.39  | 28.8   | 3.48  | 27.4   | 3.43  | 25.5   | 3.34  | 23.4   | 3.23  |
|                 | 17.0              | 15.0  | 37.7                   | 3.00  | 36.4   | 3.19  | 34.3   | 3.32  | 32.7   | 3.27  | 31.2   | 3.22  | 29.4   | 3.05  | 27.6   | 2.96  | 25.4   | 2.83  |
|                 | 20.0              | 19.0  | 37.7                   | 3.14  | 36.4   | 3.33  | 34.3   | 3.28  | 32.7   | 3.19  | 31.2   | 3.11  | 29.4   | 2.94  | 27.6   | 2.85  | 25.4   | 2.73  |
|                 | 25.0              | 23.0  | 37.7                   | 3.36  | 36.4   | 3.23  | 34.3   | 3.02  | 32.7   | 2.97  | 31.2   | 2.92  | 29.4   | 2.76  | 27.6   | 2.68  | 25.4   | 2.56  |
|                 | 30.0              | 28.0  | 37.7                   | 3.13  | 36.4   | 3.01  | 34.3   | 2.84  | 32.7   | 2.79  | 31.2   | 2.73  | 29.4   | 2.58  | 27.6   | 2.50  | 25.4   | 2.39  |
|                 | 35.0              | 32.0  | 37.7                   | 2.89  | 36.4   | 2.80  | 34.3   | 2.66  | 32.7   | 2.60  | 31.2   | 2.54  | 29.4   | 2.40  | 27.6   | 2.33  | 25.4   | 2.22  |
|                 | 40.0              | 36.0  | 37.7                   | 2.66  | 36.4   | 2.59  | 34.3   | 2.48  | 32.7   | 2.42  | 31.2   | 2.35  | 29.4   | 2.22  | 27.6   | 2.15  | 25.4   | 2.06  |
|                 | 45.0              | 41.0  | 37.7                   | 2.43  | 36.4   | 2.38  | 34.3   | 2.30  | 32.7   | 2.23  | 31.2   | 2.17  | 29.4   | 2.04  | 27.6   | 1.97  | 25.4   | 1.89  |
|                 | 47.0              | 43.0  | 37.7                   | 2.34  | 36.4   | 2.30  | 34.3   | 2.22  | 32.7   | 2.16  | 31.2   | 2.09  | 29.4   | 1.97  | 27.6   | 1.91  | 25.4   | 1.82  |
|                 | 50.0              | 46.0  | 37.7                   | 2.26  | 36.4   | 2.21  | 34.3   | 2.14  | 32.7   | 2.08  | 31.2   | 2.01  | 29.4   | 1.90  | 27.6   | 1.84  | 25.4   | 1.75  |
|                 | 55.0              | 51.0  | 37.7                   | 2.12  | 36.4   | 2.07  | 34.3   | 2.01  | 32.7   | 1.95  | 31.2   | 1.89  | 29.4   | 1.78  | 27.6   | 1.72  | 25.4   | 1.65  |
|                 | 60.0              | 56.0  | 37.7                   | 1.97  | 36.4   | 1.93  | 34.3   | 1.87  | 32.7   | 1.81  | 31.2   | 1.76  | 29.4   | 1.66  | 27.6   | 1.60  | 25.4   | 1.53  |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

Table 61: ZRUM036GSS0 Maximum Heating Capacities.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |       |        |       |        |       |        |       |        |       |        |       |        |       |        |       |
|-----------------|-------------------|-------|------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
|                 |                   |       | 59                     |       | 61     |       | 64     |       | 67     |       | 70     |       | 73     |       | 76     |       | 80     |       |
|                 | °F DB             | °F WB | TC MBh                 | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW | TC MBh | PI kW |
| 100             | -21.6             | -22.0 | 27.3                   | 2.05  | 27.2   | 2.34  | 27.0   | 2.78  | 26.8   | 3.08  | 26.7   | 3.38  | 26.5   | 3.80  | 26.3   | 4.06  | 26.1   | 4.41  |
|                 | -17.1             | -17.5 | 30.0                   | 2.34  | 29.9   | 2.63  | 29.7   | 3.04  | 29.5   | 3.42  | 29.3   | 3.72  | 28.8   | 4.09  | 28.4   | 4.30  | 27.9   | 4.58  |
|                 | -12.6             | -13.0 | 32.7                   | 2.64  | 32.6   | 2.91  | 32.4   | 3.29  | 32.1   | 3.76  | 31.9   | 4.05  | 31.1   | 4.38  | 30.5   | 4.54  | 29.7   | 4.76  |
|                 | -7.0              | -7.6  | 36.1                   | 3.00  | 36.0   | 3.27  | 35.8   | 3.60  | 35.4   | 4.19  | 35.1   | 4.47  | 34.1   | 4.73  | 33.1   | 4.84  | 31.8   | 4.98  |
|                 | -4.0              | -4.4  | 37.9                   | 3.20  | 37.8   | 3.46  | 37.6   | 3.77  | 37.2   | 4.41  | 36.8   | 4.69  | 35.6   | 4.92  | 34.5   | 5.00  | 33.0   | 5.10  |
|                 | 0.0               | -0.4  | 40.4                   | 3.46  | 40.2   | 3.72  | 39.9   | 3.99  | 39.5   | 4.72  | 39.1   | 4.99  | 37.7   | 5.18  | 36.4   | 5.21  | 34.6   | 5.26  |
|                 | 5.0               | 4.5   | 43.4                   | 3.79  | 43.2   | 4.03  | 42.9   | 4.27  | 42.5   | 5.10  | 42.0   | 5.36  | 40.3   | 5.50  | 38.7   | 5.48  | 36.5   | 5.45  |
|                 | 10.0              | 9.0   | 52.0                   | 4.11  | 50.9   | 4.35  | 49.3   | 4.55  | 48.0   | 4.98  | 46.6   | 5.12  | 44.3   | 5.04  | 41.3   | 4.92  | 37.9   | 4.76  |
|                 | 17.0              | 15.0  | 64.1                   | 4.57  | 61.8   | 4.80  | 58.3   | 4.94  | 55.6   | 4.87  | 53.0   | 4.79  | 49.9   | 4.54  | 47.0   | 4.40  | 43.1   | 4.22  |
|                 | 20.0              | 19.0  | 64.1                   | 4.77  | 61.8   | 4.99  | 58.3   | 4.91  | 55.6   | 4.78  | 53.0   | 4.65  | 49.9   | 4.41  | 47.0   | 4.27  | 43.1   | 4.09  |
|                 | 25.0              | 23.0  | 64.1                   | 5.09  | 61.8   | 4.88  | 58.3   | 4.57  | 55.6   | 4.49  | 53.0   | 4.42  | 49.9   | 4.18  | 47.0   | 4.05  | 43.1   | 3.88  |
|                 | 30.0              | 28.0  | 64.1                   | 4.79  | 61.8   | 4.62  | 58.3   | 4.35  | 55.6   | 4.27  | 53.0   | 4.18  | 49.9   | 3.95  | 47.0   | 3.83  | 43.1   | 3.67  |
|                 | 35.0              | 32.0  | 64.1                   | 4.49  | 61.8   | 4.35  | 58.3   | 4.13  | 55.6   | 4.04  | 53.0   | 3.95  | 49.9   | 3.73  | 47.0   | 3.61  | 43.1   | 3.45  |
|                 | 40.0              | 36.0  | 64.1                   | 4.19  | 61.8   | 4.08  | 58.3   | 3.92  | 55.6   | 3.81  | 53.0   | 3.71  | 49.9   | 3.50  | 47.0   | 3.39  | 43.1   | 3.24  |
|                 | 45.0              | 41.0  | 64.1                   | 3.90  | 61.8   | 3.82  | 58.3   | 3.70  | 55.6   | 3.59  | 53.0   | 3.47  | 49.9   | 3.27  | 47.0   | 3.17  | 43.1   | 3.03  |
|                 | 47.0              | 43.0  | 64.1                   | 3.79  | 61.8   | 3.71  | 58.3   | 3.60  | 55.6   | 3.49  | 53.0   | 3.38  | 49.9   | 3.19  | 47.0   | 3.08  | 43.1   | 2.95  |
|                 | 50.0              | 46.0  | 64.1                   | 3.65  | 61.8   | 3.58  | 58.3   | 3.46  | 55.6   | 3.36  | 53.0   | 3.26  | 49.9   | 3.07  | 47.0   | 2.97  | 43.1   | 2.84  |
|                 | 55.0              | 51.0  | 64.1                   | 3.43  | 61.8   | 3.36  | 58.3   | 3.25  | 55.6   | 3.15  | 53.0   | 3.06  | 49.9   | 2.88  | 47.0   | 2.79  | 43.1   | 2.66  |
|                 | 60.0              | 56.0  | 64.1                   | 3.19  | 61.8   | 3.12  | 58.3   | 3.02  | 55.6   | 2.93  | 53.0   | 2.84  | 49.9   | 2.68  | 47.0   | 2.59  | 43.1   | 2.48  |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.  
0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.



Table 62: ZRUM048GSS0 Maximum Heating Capacities.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|-------------------|-------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | °F DB             | °F WB | 59                     |      | 61   |      | 64   |      | 67   |      | 70   |      | 73   |      | 76   |      | 80   |      |
|                 |                   |       | TC                     | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   |
| 100             | -21.6             | -22.0 | 31.4                   | 2.33 | 31.3 | 2.67 | 31.1 | 3.17 | 30.9 | 3.51 | 30.7 | 3.85 | 30.5 | 4.33 | 30.3 | 4.63 | 30.1 | 5.02 |
|                 | -17.1             | -17.5 | 35.5                   | 2.75 | 35.4 | 3.10 | 35.2 | 3.58 | 34.9 | 4.13 | 34.6 | 4.48 | 34.1 | 4.91 | 33.6 | 5.15 | 32.9 | 5.47 |
|                 | -12.6             | -13.0 | 39.7                   | 3.17 | 39.5 | 3.53 | 39.2 | 3.99 | 38.9 | 4.75 | 38.6 | 5.10 | 37.7 | 5.48 | 36.9 | 5.67 | 35.8 | 5.92 |
|                 | -7.0              | -7.6  | 44.8                   | 3.69 | 44.6 | 4.07 | 44.3 | 4.50 | 43.9 | 5.52 | 43.5 | 5.88 | 42.2 | 6.20 | 41.0 | 6.32 | 39.3 | 6.48 |
|                 | -4.0              | -4.4  | 47.5                   | 3.97 | 47.3 | 4.36 | 47.0 | 4.77 | 46.6 | 5.93 | 46.1 | 6.29 | 44.6 | 6.58 | 43.2 | 6.66 | 41.2 | 6.78 |
|                 | 0.0               | -0.4  | 51.2                   | 4.34 | 51.0 | 4.75 | 50.7 | 5.14 | 50.1 | 6.48 | 49.6 | 6.85 | 47.8 | 7.09 | 46.1 | 7.13 | 43.8 | 7.17 |
|                 | 5.0               | 4.5   | 55.8                   | 4.81 | 55.6 | 5.23 | 55.2 | 5.59 | 54.6 | 7.17 | 54.0 | 7.54 | 51.8 | 7.73 | 49.7 | 7.71 | 46.9 | 7.67 |
|                 | 10.0              | 9.0   | 63.3                   | 5.27 | 62.0 | 5.71 | 60.1 | 6.05 | 58.5 | 6.91 | 56.9 | 7.10 | 54.2 | 6.99 | 50.4 | 6.82 | 46.3 | 6.59 |
|                 | 17.0              | 15.0  | 73.8                   | 5.92 | 71.1 | 6.38 | 67.0 | 6.69 | 64.0 | 6.59 | 61.0 | 6.49 | 57.4 | 6.15 | 54.1 | 5.96 | 49.6 | 5.71 |
|                 | 20.0              | 19.0  | 73.8                   | 6.20 | 71.1 | 6.67 | 67.0 | 6.56 | 64.0 | 6.39 | 61.0 | 6.22 | 57.4 | 5.89 | 54.1 | 5.71 | 49.6 | 5.47 |
|                 | 25.0              | 23.0  | 73.8                   | 6.67 | 71.1 | 6.39 | 67.0 | 5.99 | 64.0 | 5.88 | 61.0 | 5.78 | 57.4 | 5.47 | 54.1 | 5.30 | 49.6 | 5.08 |
|                 | 30.0              | 28.0  | 73.8                   | 6.13 | 71.1 | 5.90 | 67.0 | 5.56 | 64.0 | 5.45 | 61.0 | 5.34 | 57.4 | 5.05 | 54.1 | 4.90 | 49.6 | 4.69 |
|                 | 35.0              | 32.0  | 73.8                   | 5.59 | 71.1 | 5.41 | 67.0 | 5.14 | 64.0 | 5.02 | 61.0 | 4.90 | 57.4 | 4.63 | 54.1 | 4.49 | 49.6 | 4.29 |
|                 | 40.0              | 36.0  | 73.8                   | 5.05 | 71.1 | 4.91 | 67.0 | 4.71 | 64.0 | 4.59 | 61.0 | 4.47 | 57.4 | 4.21 | 54.1 | 4.08 | 49.6 | 3.90 |
|                 | 45.0              | 41.0  | 73.8                   | 4.51 | 71.1 | 4.42 | 67.0 | 4.28 | 64.0 | 4.15 | 61.0 | 4.03 | 57.4 | 3.79 | 54.1 | 3.67 | 49.6 | 3.51 |
|                 | 47.0              | 43.0  | 73.8                   | 4.32 | 71.1 | 4.23 | 67.0 | 4.10 | 64.0 | 3.97 | 61.0 | 3.85 | 57.4 | 3.63 | 54.1 | 3.51 | 49.6 | 3.35 |
|                 | 50.0              | 46.0  | 73.8                   | 4.16 | 71.1 | 4.07 | 67.0 | 3.94 | 64.0 | 3.83 | 61.0 | 3.71 | 57.4 | 3.49 | 54.1 | 3.38 | 49.6 | 3.23 |
|                 | 55.0              | 51.0  | 73.8                   | 3.90 | 71.1 | 3.82 | 67.0 | 3.70 | 64.0 | 3.59 | 61.0 | 3.48 | 57.4 | 3.28 | 54.1 | 3.17 | 49.6 | 3.03 |
|                 | 60.0              | 56.0  | 73.8                   | 3.63 | 71.1 | 3.55 | 67.0 | 3.44 | 64.0 | 3.34 | 61.0 | 3.24 | 57.4 | 3.05 | 54.1 | 2.95 | 49.6 | 2.82 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.

0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

Table 63: ZRUM060GSS0 Maximum Heating Capacities.

| Combination (%) | Outdoor Air Temp. |       | Indoor Air Temp. °F DB |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|-------------------|-------|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                 | °F DB             | °F WB | 59                     |      | 61   |      | 64   |      | 67   |      | 70   |      | 73   |      | 76   |      | 80   |      |
|                 |                   |       | TC                     | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   | TC   | PI   |
| 100             | -21.6             | -22.0 | 36.5                   | 3.05 | 36.4 | 3.49 | 36.2 | 4.14 | 35.9 | 4.59 | 35.7 | 5.04 | 35.4 | 5.66 | 35.3 | 6.04 | 35.0 | 6.56 |
|                 | -17.1             | -17.5 | 39.8                   | 3.46 | 39.6 | 3.88 | 39.4 | 4.48 | 39.1 | 5.03 | 38.8 | 5.46 | 38.2 | 6.01 | 37.7 | 6.33 | 37.0 | 6.75 |
|                 | -12.6             | -13.0 | 43.1                   | 3.87 | 42.9 | 4.27 | 42.6 | 4.82 | 42.3 | 5.46 | 41.9 | 5.88 | 41.0 | 6.36 | 40.2 | 6.61 | 39.1 | 6.94 |
|                 | -7.0              | -7.6  | 47.1                   | 4.38 | 46.9 | 4.76 | 46.6 | 5.24 | 46.2 | 6.00 | 45.8 | 6.41 | 44.4 | 6.80 | 43.2 | 6.96 | 41.6 | 7.17 |
|                 | -4.0              | -4.4  | 49.3                   | 4.66 | 49.1 | 5.02 | 48.8 | 5.46 | 48.3 | 6.30 | 47.8 | 6.69 | 46.3 | 7.03 | 44.8 | 7.14 | 42.9 | 7.30 |
|                 | 0.0               | -0.4  | 52.2                   | 5.03 | 52.0 | 5.37 | 51.6 | 5.76 | 51.1 | 6.68 | 50.6 | 7.07 | 48.8 | 7.34 | 47.0 | 7.39 | 44.7 | 7.46 |
|                 | 5.0               | 4.5   | 55.8                   | 5.48 | 55.6 | 5.81 | 55.2 | 6.14 | 54.6 | 7.17 | 54.0 | 7.54 | 51.8 | 7.73 | 49.7 | 7.71 | 46.9 | 7.67 |
|                 | 10.0              | 9.0   | 68.3                   | 5.94 | 66.9 | 6.25 | 64.7 | 6.51 | 62.9 | 7.04 | 61.1 | 7.24 | 58.1 | 7.12 | 54.1 | 6.95 | 49.6 | 6.72 |
|                 | 17.0              | 15.0  | 85.9                   | 6.58 | 82.7 | 6.86 | 78.0 | 7.04 | 74.5 | 6.93 | 71.0 | 6.82 | 66.8 | 6.46 | 62.9 | 6.27 | 57.7 | 6.01 |
|                 | 20.0              | 19.0  | 85.9                   | 6.86 | 82.7 | 7.12 | 78.0 | 7.01 | 74.5 | 6.83 | 71.0 | 6.64 | 66.8 | 6.29 | 62.9 | 6.10 | 57.7 | 5.84 |
|                 | 25.0              | 23.0  | 85.9                   | 7.31 | 82.7 | 7.02 | 78.0 | 6.57 | 74.5 | 6.46 | 71.0 | 6.34 | 66.8 | 6.00 | 62.9 | 5.82 | 57.7 | 5.57 |
|                 | 30.0              | 28.0  | 85.9                   | 6.93 | 82.7 | 6.68 | 78.0 | 6.29 | 74.5 | 6.17 | 71.0 | 6.05 | 66.8 | 5.72 | 62.9 | 5.54 | 57.7 | 5.30 |
|                 | 35.0              | 32.0  | 85.9                   | 6.55 | 82.7 | 6.34 | 78.0 | 6.02 | 74.5 | 5.88 | 71.0 | 5.75 | 66.8 | 5.43 | 62.9 | 5.26 | 57.7 | 5.03 |
|                 | 40.0              | 36.0  | 85.9                   | 6.16 | 82.7 | 6.00 | 78.0 | 5.75 | 74.5 | 5.60 | 71.0 | 5.45 | 66.8 | 5.14 | 62.9 | 4.98 | 57.7 | 4.76 |
|                 | 45.0              | 41.0  | 85.9                   | 5.77 | 82.7 | 5.66 | 78.0 | 5.48 | 74.5 | 5.31 | 71.0 | 5.15 | 66.8 | 4.85 | 62.9 | 4.70 | 57.7 | 4.49 |
|                 | 47.0              | 43.0  | 85.9                   | 5.64 | 82.7 | 5.52 | 78.0 | 5.35 | 74.5 | 5.19 | 71.0 | 5.03 | 66.8 | 4.74 | 62.9 | 4.59 | 57.7 | 4.38 |
|                 | 50.0              | 46.0  | 85.9                   | 5.43 | 82.7 | 5.32 | 78.0 | 5.15 | 74.5 | 5.00 | 71.0 | 4.84 | 66.8 | 4.57 | 62.9 | 4.42 | 57.7 | 4.22 |
|                 | 55.0              | 51.0  | 85.9                   | 5.10 | 82.7 | 4.99 | 78.0 | 4.84 | 74.5 | 4.69 | 71.0 | 4.55 | 66.8 | 4.29 | 62.9 | 4.15 | 57.7 | 3.96 |
|                 | 60.0              | 56.0  | 85.9                   | 4.74 | 82.7 | 4.64 | 78.0 | 4.50 | 74.5 | 4.36 | 71.0 | 4.23 | 66.8 | 3.99 | 62.9 | 3.86 | 57.7 | 3.68 |

TC = Total Capacity (MBh). PI = Power Input (kW) (includes compressor and outdoor fan).

The System Combination Ratio must be between 50–130%.

Nominal capacity as rated: 0 ft. above sea level with 25 ft. of refrigerant piping.

0 ft. level difference between outdoor and indoor units.

Nominal heating capacity rating obtained with air entering the indoor unit at 70°F dry bulb (DB) and outdoor ambient conditions of 47°F dry bulb (DB) and 43°F wet bulb (WB).

Grey shading indicates reference data. When operating at this temperature, these values can be different if the system is not running consistently.

# CORRECTION FACTORS

## NOTICE

The correction factors shown below are calculated in the LATS software program.

## Defrost Correction Factor for Heating Operation

Capacity tables do not take into consideration capacity reduction when frost has accumulated on the condenser coil, nor during defrost operation. Integrated heating capacity values can be obtained as follows:

Formula:  $A = B \times C$

Where: A = Integrated heating capacity

B = Heating capacity value given in table of capacity characteristics

C = Integrated correction factor for frost accumulation

Table 64: Outdoor Unit Frost Accumulation Factor (Heating)<sup>1</sup>.

| Entering DB (°F) | 19.4 | 23.0 | 26.6 | 32.0 | 37.4 | 41.0 | 44.6 |
|------------------|------|------|------|------|------|------|------|
| Derate factor    | 0.98 | 0.95 | 0.93 | 0.86 | 0.93 | 0.96 | 1.0  |

<sup>1</sup>At 85% outdoor air relative humidity.

## NOTICE

There will be temporary reduction in capacity when snow piles up on the outside surface of the outdoor unit heat exchanger. The level of capacity reduction depends on a number of factors, for example, outdoor temperature (°F DB), relative humidity (RH), and the amount of frost present.

## Elevation Correction Factors

For each outdoor unit, calculate the equivalent length of the liquid line from the outdoor unit to the farthest indoor unit. Also, determine the elevation difference of farthest indoor unit above or below the outdoor unit. Find corresponding cooling capacity correction factor in the table below. Multiply the cooling correction factor by standard cooling capacity. The resultant is the NET cooling capacity.

## NOTICE

The correction factors shown below are calculated in the LATS software program.

Table 65: Cooling Correction Factors.

| Elevation Differences (ft.)                     | Equivalent Length (ELF) <sup>1</sup> |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------------------------------|--------------------------------------|------|------|------|------|------|------|------|------|------|------|------|
|                                                 | 25                                   | 33   | 66   | 98   | 131  | 164  | 197  | 230  | 263  | 295  | 328  | ≥361 |
| <b>HU—Indoor units above Outdoor Unit (ft.)</b> |                                      |      |      |      |      |      |      |      |      |      |      |      |
| 0                                               | 1.00                                 | 0.99 | 0.97 | 0.95 | 0.93 | 0.91 | 0.88 | 0.87 | 0.85 | 0.83 | 0.83 | 0.82 |
| 25                                              | 1.00                                 | 0.99 | 0.97 | 0.95 | 0.93 | 0.91 | 0.88 | 0.87 | 0.85 | 0.83 | 0.83 | 0.82 |
| 33                                              | -                                    | 0.99 | 0.97 | 0.95 | 0.93 | 0.91 | 0.88 | 0.86 | 0.85 | 0.83 | 0.82 | 0.82 |
| 66                                              | -                                    | -    | 0.96 | 0.95 | 0.93 | 0.90 | 0.88 | 0.86 | 0.85 | 0.83 | 0.82 | 0.82 |
| 98                                              | -                                    | -    | -    | 0.94 | 0.92 | 0.90 | 0.88 | 0.86 | 0.84 | 0.83 | 0.82 | 0.82 |
| 131                                             | -                                    | -    | -    | -    | 0.92 | 0.90 | 0.88 | 0.86 | 0.84 | 0.83 | 0.82 | 0.82 |
| 164                                             | -                                    | -    | -    | -    | -    | 0.90 | 0.88 | 0.86 | 0.84 | 0.83 | 0.82 | 0.82 |
| <b>HL—Outdoor Unit Above Indoor Units (ft.)</b> |                                      |      |      |      |      |      |      |      |      |      |      |      |
| 0                                               | 1.00                                 | 0.99 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.87 | 0.88 | 0.84 | 0.86 | 0.84 |
| 25                                              | 1.00                                 | 0.99 | 0.97 | 0.95 | 0.93 | 0.91 | 0.90 | 0.87 | 0.88 | 0.84 | 0.86 | 0.84 |
| 33                                              | -                                    | 0.99 | 0.98 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.88 | 0.84 | 0.86 | 0.84 |
| 66                                              | -                                    | -    | 0.98 | 0.95 | 0.93 | 0.91 | 0.90 | 0.88 | 0.88 | 0.84 | 0.86 | 0.84 |
| 98                                              | -                                    | -    | -    | 0.96 | 0.93 | 0.91 | 0.90 | 0.88 | 0.89 | 0.84 | 0.86 | 0.84 |
| 131                                             | -                                    | -    | -    | -    | 0.93 | 0.91 | 0.90 | 0.88 | 0.89 | 0.84 | 0.86 | 0.84 |

\* ELF = Equivalent Pipe Length—Sum of the actual pipe length plus allocations for pressure drop through elbows, valves, and other fittings in equivalent length.

# ELECTRICAL

**General Guidelines on page 124**

**Connections for Heat Pump Systems on page 125**

**Connections for Heat Recovery Systems on page 127**

**Heat Recovery Unit Wiring Connections on page 128**

**Shutoff Valve Unit Wiring Connections on page 129**



# GENERAL POWER WIRING / COMMUNICATION CABLE GUIDELINES

## General Power Wiring / Communications Cable Guidelines

- Follow manufacturer's circuit diagrams displayed on the inside of the control box covers.
- Have a separate power supply for the heat recovery units / indoor units.
- Provide a circuit breaker switch between the power source and the outdoor unit.
- Confirm power source specifications.
- Confirm that the electrical capacity is sufficient.
- Starting current must be maintained  $\pm 10$  percent of the rated current marked on the name plate.
- Confirm wiring / cable thickness specifications:
  1. Power wiring is field supplied. Wire size is selected based on the larger MCA value, and must comply with the applicable local and national codes.
  2. Communication cable between ODU to IDUs / HRUs to be 18 AWG, 2-conductor, twisted, stranded, shielded. Ensure the communication cable shield is properly grounded to the Main ODU chassis only.  Do not ground the ODU to IDUs / HRUs communication cable at any other point. Wiring must comply with all applicable local and national codes.
- It is recommended that a circuit breaker is installed, especially if conditions could become wet or moist.
- Include a disconnect in the power wiring system, add an air gap contact separation of at least 1/8 inch in each active (phase) conductor.
- Any openings where the field wiring enters the cabinet must be completely sealed.

### WARNING

- *Terminal screws may loosen during transport. Properly tighten the terminal connections during installation or risk electric shock, physical injury or death.*
- *Loose wiring may cause the wires to burnout or the terminal to overheat and catch fire. There is a risk of electric shock, physical injury or death.*

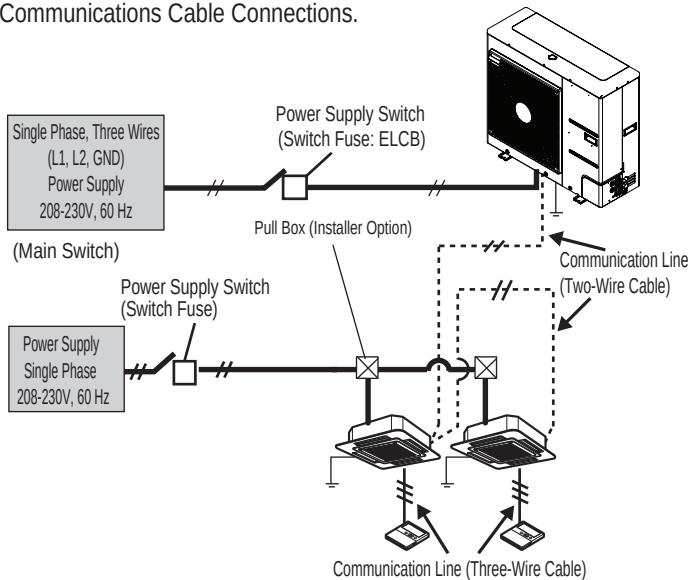
### NOTICE

- *Terminal screws may loosen during transport. Properly tighten the terminal connections during installation or risk equipment malfunction or property damage.*
- *Loose wiring may cause unit malfunction, the wires to burnout or the terminal to overheat and catch fire. There is a risk of equipment malfunction or property damage.*
- *Confirm that the electrical capacity is sufficient. A voltage drop may cause magnetic switch vibration, fuse breaks, or disturbance to the normal function of an overload protection device.*

## ⚠ DANGER

Refer to electrical data table for full load ampere ratings. Properly size all circuit breakers / fuses, wiring, and field-provided components per applicable local, state, and federal codes. There is a risk of fire, electric shock, explosion, physical injury or death.

Figure 57: ZRUN024GSS0 Heat Pump Only System Power Wiring / Communications Cable Connections.



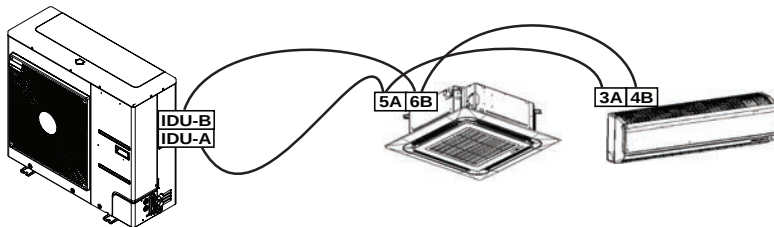
## NOTICE

Refer to the Product Data section for dimensional drawings, wiring, and refrigerant piping diagrams for the exact locations of the piping and electrical connection locations.

## ⚠ WARNING

- Ground wiring is required to prevent accidental electrical shock during current leakage, communication problems from electrical noise, and motor current leakage. Always ground indoor units to help prevent electrical shock accidents or communication signal disruption. ⓧ Do not connect the ground line to the pipes. There is risk of fire, electric shock, explosion, physical injury or death.
- Install a main shutoff switch that interrupts all power sources simultaneously. There is risk of fire, electric shock, explosion, physical injury or death.
- Operating the system in reversed phase can damage the compressor or other components. If there is a possibility of reversed phase, phase loss, momentary blackout, or the power goes on and off while the system is operating, install a field-supplied phase loss protection circuit.
- The GND terminal at the main PCB is a negative terminal for dry contact, not a ground. Inadequate connections may generate heat, cause a fire, and physical injury or death.

Figure 58: ZRUN024GSS0 Heat Pump Only System Daisy-Chain Power Wiring / Communications Cable Example.



## NOTICE

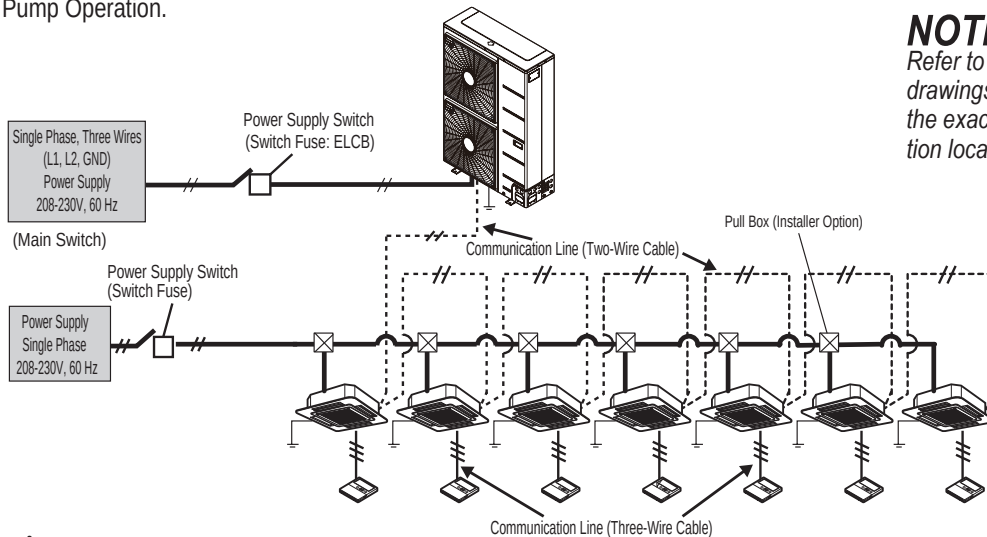
- Maintain polarity throughout the communication network. The system will malfunction if not properly wired.
- If the system operates in reversed phase, it may break the compressors and other components.
- If there is a possibility of reversed phase, phase loss, momentary blackout, or the power goes on and off while the system is operating, install a field-supplied phase loss protection circuit. Operating the system in reverse phase may break the compressor and other unit components.

# CONNECTIONS FOR HEAT PUMP OPERATION

## ⚠ DANGER

Refer to electrical data table for full load ampere ratings. Properly size all circuit breakers / fuses, wiring, and field-provided components per applicable local, state, and federal codes. There is a risk of fire, electric shock, explosion, physical injury or death.

Figure 59: Power Wiring / Communications Cable Connections--ZRUM038GSS0, ZRUM048GSS0, ZRUM060GSS0 Combination Units For Heat Pump Operation.



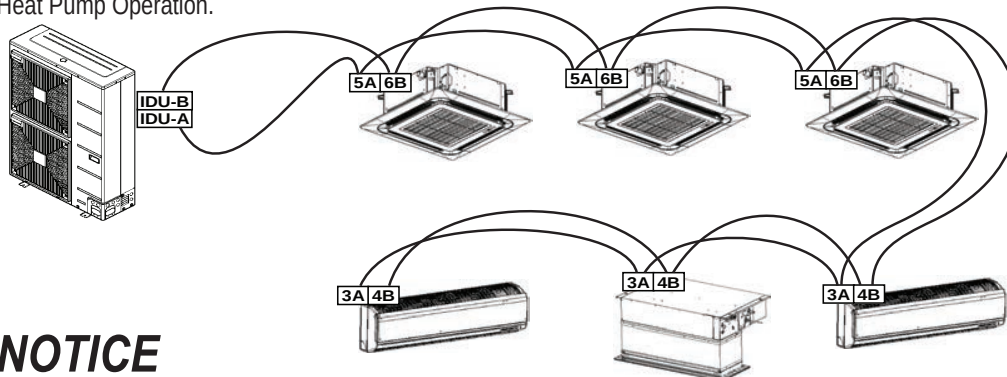
## NOTICE

Refer to the Product Data section for dimensional drawings, wiring, and refrigerant piping diagrams for the exact locations of the piping and electrical connection locations.

## ⚠ WARNING

- Ground wiring is required to prevent accidental electrical shock during current leakage, communication problems from electrical noise, and motor current leakage. Always ground indoor units to help prevent electrical shock accidents or communication signal disruption. ⚡ Do not connect the ground line to the pipes. There is risk of fire, electric shock, explosion, physical injury or death.
- Install a main shutoff switch that interrupts all power sources simultaneously. There is risk of fire, electric shock, explosion, physical injury or death.
- Operating the system in reversed phase can damage the compressor or other components. If there is a possibility of reversed phase, phase loss, momentary blackout, or the power goes on and off while the system is operating, install a field-supplied phase loss protection circuit.
- The GND terminal at the main PCB is a negative terminal for dry contact, not a ground. Inadequate connections may generate heat, cause a fire, and physical injury or death.

Figure 60: Daisy Chain Power Wiring / Communications Cable Example--ZRUM036GSS0, ZRUM048GSS0, ZRUM060GSS0 Combination Units for Heat Pump Operation.



## NOTICE

- Maintain polarity throughout the communication network. The system will malfunction if not properly wired.
- If the system operates in reversed phase, it may break the compressors and other components.
- If there is a possibility of reversed phase, phase loss, momentary blackout, or the power goes on and off while the system is operating, install a field-supplied phase loss protection circuit. Operating the system in reverse phase may break the compressor and other unit components.

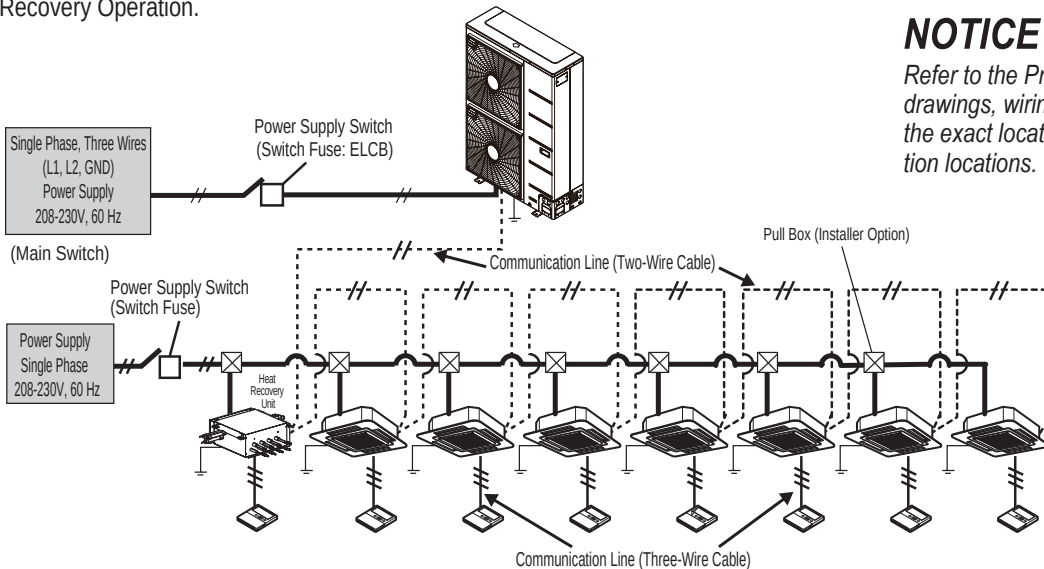
## ⚠ DANGER

Refer to electrical data table for full load ampere ratings. Properly size all circuit breakers / fuses, wiring, and field-provided components per applicable local, state, and federal codes. There is a risk of fire, electric shock, explosion, physical injury or death.

Figure 61: Power Wiring / Communications Cable Connections--ZRUN038GSS0, ZRUN048GSS0, ZRUN060GSS0 Combination Units For Heat Recovery Operation.

## NOTICE

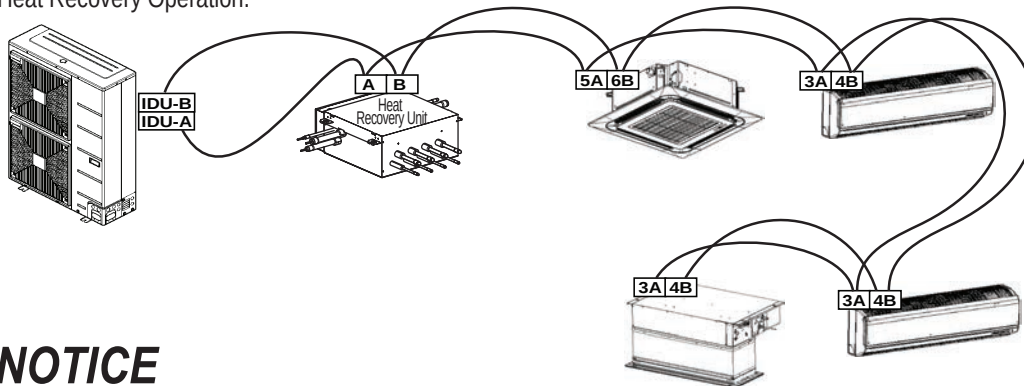
Refer to the Product Data section for dimensional drawings, wiring, and refrigerant piping diagrams for the exact locations of the piping and electrical connection locations.



## ⚠ WARNING

- Ground wiring is required to prevent accidental electrical shock during current leakage, communication problems from electrical noise, and motor current leakage. Always ground indoor units to help prevent electrical shock accidents or communication signal disruption. ⓧ Do not connect the ground line to the pipes. There is risk of fire, electric shock, explosion, physical injury or death.
- Install a main shutoff switch that interrupts all power sources simultaneously. There is risk of fire, electric shock, explosion, physical injury or death.
- Operating the system in reversed phase can damage the compressor or other components. If there is a possibility of reversed phase, phase loss, momentary blackout, or the power goes on and off while the system is operating, install a field-supplied phase loss protection circuit.
- The GND terminal at the main PCB is a negative terminal for dry contact, not a ground. Inadequate connections may generate heat, cause a fire, and physical injury or death.

Figure 62: Daisy Chain Power Wiring / Communications Cable Example--ZRUN036GSS0, ZRUN048GSS0, ZRUN060GSS0 Combination Units for Heat Recovery Operation.



## NOTICE

- Maintain polarity throughout the communication network. The system will malfunction if not properly wired.
- If the system operates in reversed phase, it may break the compressors and other components.
- If there is a possibility of reversed phase, phase loss, momentary blackout, or the power goes on and off while the system is operating, install a field-supplied phase loss protection circuit. Operating the system in reverse phase may break the compressor and other unit components.

# HEAT RECOVERY UNIT WIRING CONNECTIONS



## Heat Recovery Unit Power Wiring and Communications Cable Connections

1. Open the heat recovery unit control box cover (see image below).
2. Insert the power wiring / communications cable from the outdoor unit using the access holes.
3. Connect each wire to its appropriate terminal on the heat recovery unit control board. Verify that the color and terminal numbers from the outdoor unit wiring match the color and terminal numbers on the heat recovery unit.
4. Secure the power wiring / communications cable.

### NOTICE

All communication and power wiring must be connected to the terminals using connectors certified or recognized according to UL and CSA standards.

Figure 63: Accessing the Heat Recovery Control Unit Control Box.

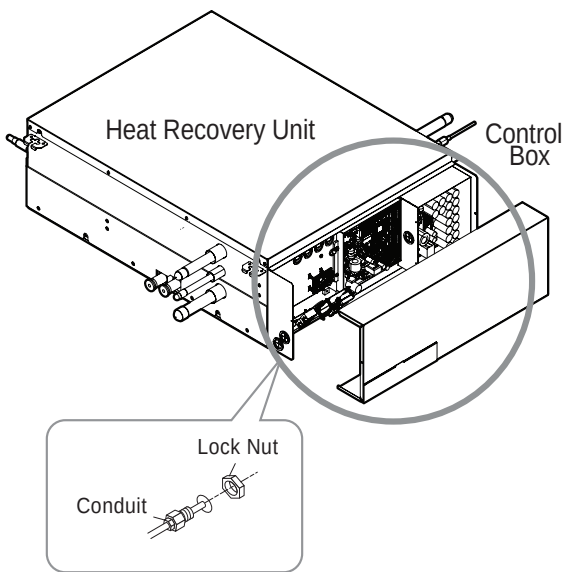


Figure 64: Control Box Connections.

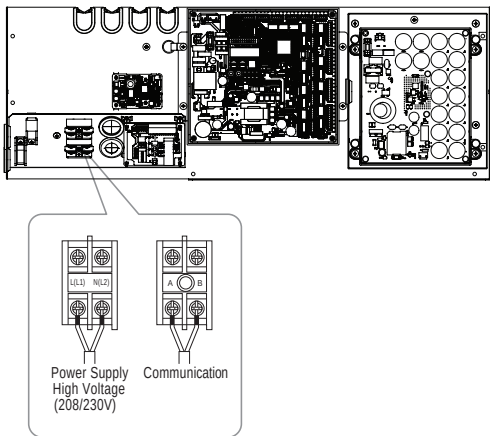
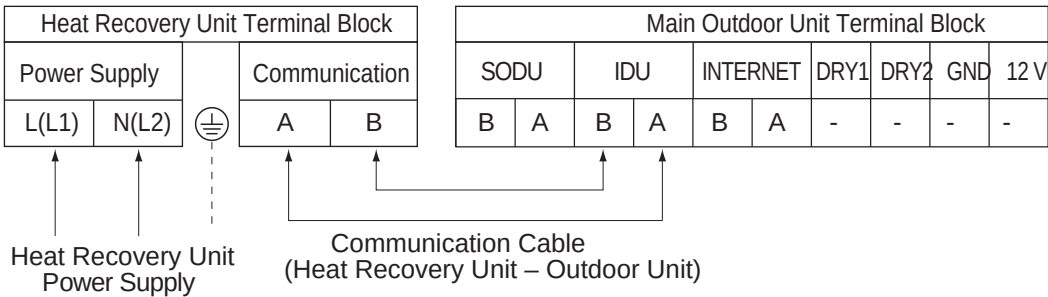


Figure 65: Close Up of Heat Recovery Unit to Outdoor Unit Terminal Block Connections.



### ⚠ WARNING

Ensure that all wiring is tightly connected and that the terminal screws are not loose. Loose wiring can cause the terminal to overheat, resulting in fire, physical injury, or death.

### NOTICE

Ensure that all wiring is tightly connected and that the terminal screws are not loose. Loose wiring can cause the terminal malfunction.

## Shutoff Valve Unit Power Wiring and Communications Cable Connections

1. Open the shutoff valve unit control box cover (see image below).
2. Insert the power wiring / communications cable from the outdoor unit using the access holes.
3. Connect each wire to its appropriate terminal on the shutoff valve unit control board. Verify that the color and terminal numbers from the outdoor unit wiring match the color and terminal numbers on the shutoff valve unit.
4. Secure the power wiring / communications cable.

## NOTICE

All communication and power wiring must be connected to the terminals using connectors certified or recognized according to UL and CSA standards.

Figure 66: Accessing the One-Port Shutoff Valve Unit Control Box.

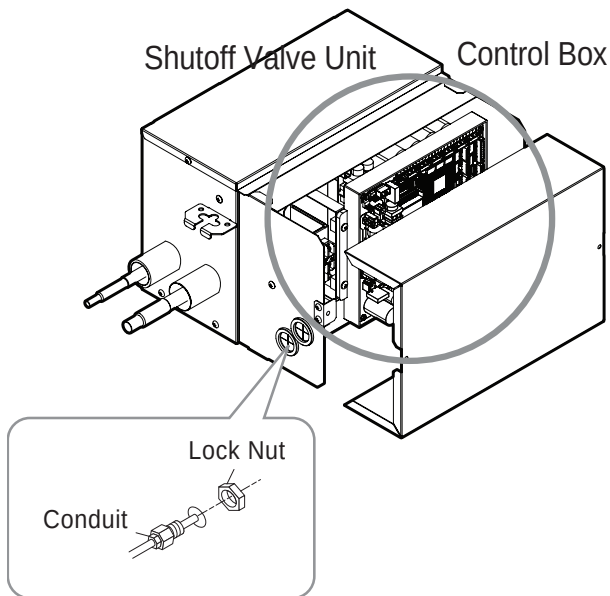


Figure 67: One-Port Shutoff Valve Control Box Connections.

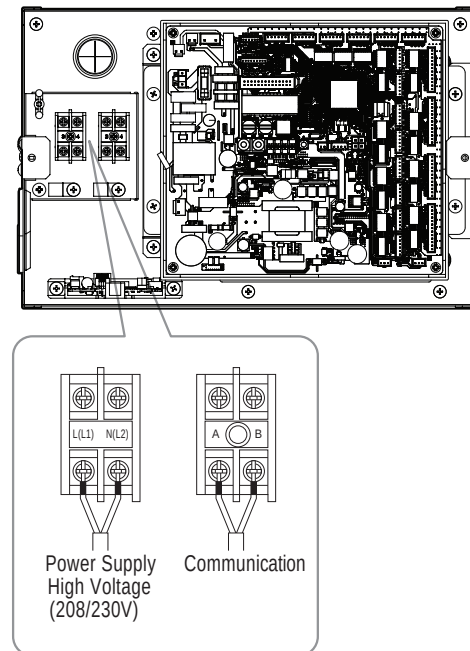
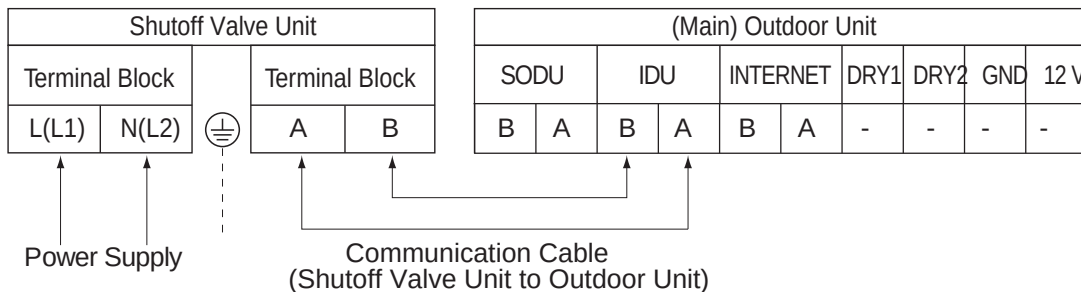


Figure 68: Close Up of the One-Port Shutoff Valve Unit to Outdoor Unit Terminal Block Connections.



## ⚠ WARNING

Ensure that all wiring is tightly connected and that the terminal screws are not loose. Loose wiring can cause the terminal to overheat, resulting in fire, physical injury, or death.

## NOTICE

Ensure that all wiring is tightly connected and that the terminal screws are not loose. Loose wiring can cause the terminal malfunction.



# SHUTOFF VALVE UNIT WIRING CONNECTIONS



Figure 69: Accessing the Two-, Three-, and Four-Port Shutoff Valve Unit Control Box.

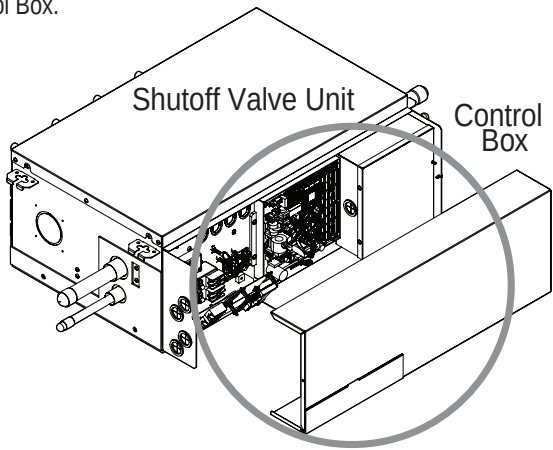
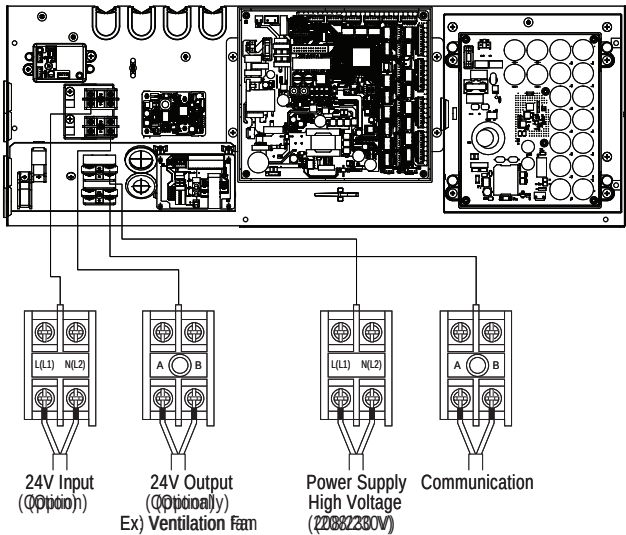


Figure 70: Two-, Three-, and Four-Port Shutoff Valve Control Box Connections.



## ⚠ WARNING

Ensure that all wiring is tightly connected and that the terminal screws are not loose. Loose wiring can cause the terminal to overheat, resulting in fire, physical injury, or death.

## NOTICE

Ensure that all wiring is tightly connected and that the terminal screws are not loose. Loose wiring can cause the terminal malfunction.





# PIPING LIMITATIONS AND PLACEMENT CONSIDERATIONS

**Piping Limitations on page 132**

**Selecting the Best Location for Outdoor Unit(s) on page 136**

**Outdoor Unit Clearance Requirements on page 139**

**Installing Outdoor Units Indoors on page 142**

**Selecting the Best Location for the Heat Recovery Unit(s) on page 144**

**Selecting the Best Location for the Shutoff Valve Unit(s) on page 146**

# PIPING LIMITATIONS

## For Systems Operating in Heat Pump Mode

The following pages present Multi V S piping limitations and are for illustrative purposes only. Designers **MUST** use LATS when designing LG systems.

### NOTICE

Various tools are available to assist in properly designing LG R32 split systems. Refer to the "R32 Application Guide"; the "Simple Calculator for Capacity, Refrigerant Charge and ESP"; the "LG Air Conditioner Technical Solutions" (LATS) software program; and the local LG Sales Representative.

Figure 71: Heat Pump System Building Layout Listing the Piping Limitations — When the Outdoor Unit is Above the Indoor Units (ODU Appearances Will Vary Depending On Model).

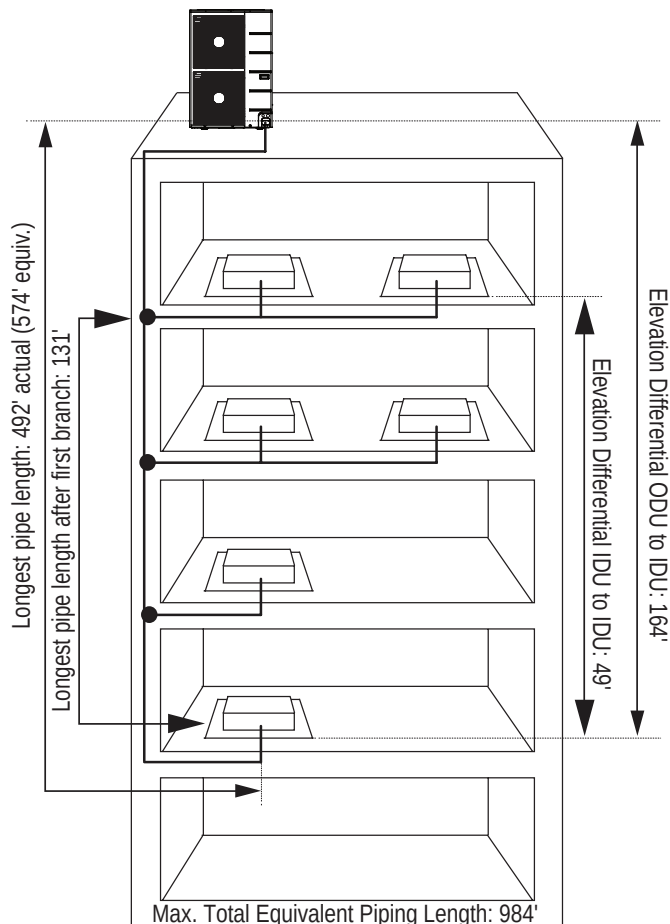


Figure 72: Heat Pump System Building Layout Listing the Piping Limitations — When the Outdoor Unit is Below the Indoor Units (ODU Appearances Will Vary Depending on Model).

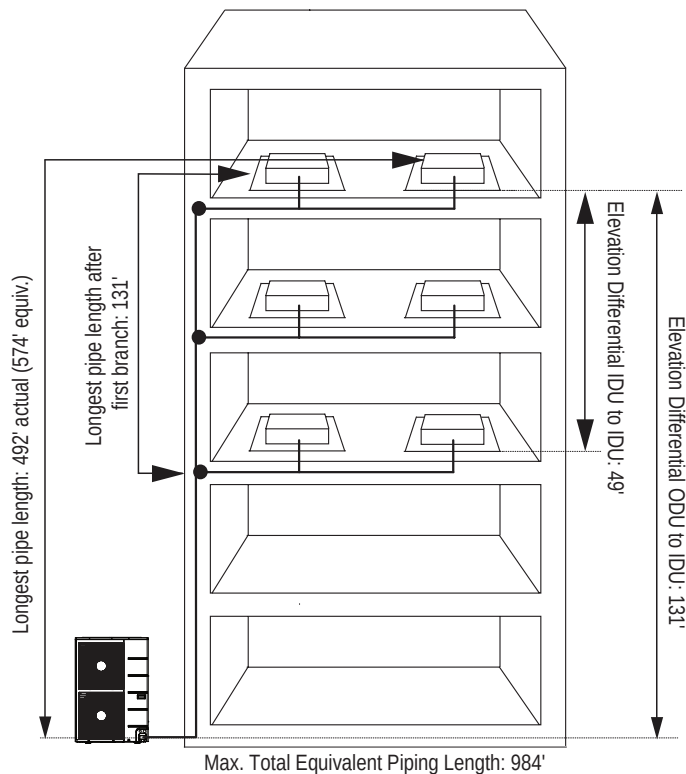


Table 66: Piping Limitations for Heat Pump Operation (See next page).

| Length                                             | Total pipe length                                                | Longest actual pipe length | Equivalent pipe length <sup>1</sup>                             |
|----------------------------------------------------|------------------------------------------------------------------|----------------------------|-----------------------------------------------------------------|
|                                                    | $A + \Sigma B + \Sigma C \leq 984$ feet                          | $\leq 492$ feet            | $\leq 574$ feet                                                 |
| $\ell$                                             | Longest pipe length after first branch                           |                            |                                                                 |
|                                                    | $\leq 131$ feet                                                  |                            |                                                                 |
| Elevation1                                         | Elevation differential (Outdoor unit ↔ Indoor unit)              |                            |                                                                 |
|                                                    | When the Outdoor unit is Positioned Higher than the Indoor Units |                            | When the Outdoor unit is Positioned Lower than the Indoor Units |
|                                                    | $\leq 164$ feet                                                  |                            | $\leq 131$ feet                                                 |
| Elevation2                                         | Elevation differential (Indoor unit ↔ Indoor unit)               |                            |                                                                 |
|                                                    | $\leq 49$ feet                                                   |                            |                                                                 |
| Distance between fittings and indoor units         |                                                                  | $\geq 20$ inches           |                                                                 |
| Distance between fittings and Y-Branches / Headers |                                                                  | $\geq 20$ inches           |                                                                 |
| Distance between two Y-Branches / Headers          |                                                                  | $\geq 20$ inches           |                                                                 |

<sup>1</sup>Assume equivalent pipe length of Y-branch is 1.6 feet, and equivalent pipe length of header is 3.3 feet.

The following pages present Multi V S piping limitations and are for illustrative purposes only. Designers MUST use LATS when designing LG systems.

### NOTICE

Various tools are available to assist in properly designing LG R32 split systems. Refer to the "R32 Application Guide"; the "Simple Calculator for Capacity, Refrigerant Charge and ESP"; the "LG Air Conditioner Technical Solutions" (LATS) software program; and the local LG Sales Representative.

### Example of Pipe Sizing When Installing For Heat Pump Mode

Example: Five (5) indoor units connected

Multi V S Outdoor Unit.

IDU: Indoor Units.

A: Main Pipe from Outdoor Unit to Y-branches.

B: Branch Piping.

C: Branch Piping to Indoor Unit (IDU).

### NOTICE

- Always reference the LATS software report.
- Connection piping from branch to branch cannot exceed the main pipe diameter (A) used by the outdoor unit.
- Install the Headers so that the pipe distances between the between the connected indoor units are minimized. Large differences in pipe distances can cause indoor unit performances to fluctuate.
- Indoor units must be installed at a lower position than the Header.
- Y-branches cannot be used after Headers.

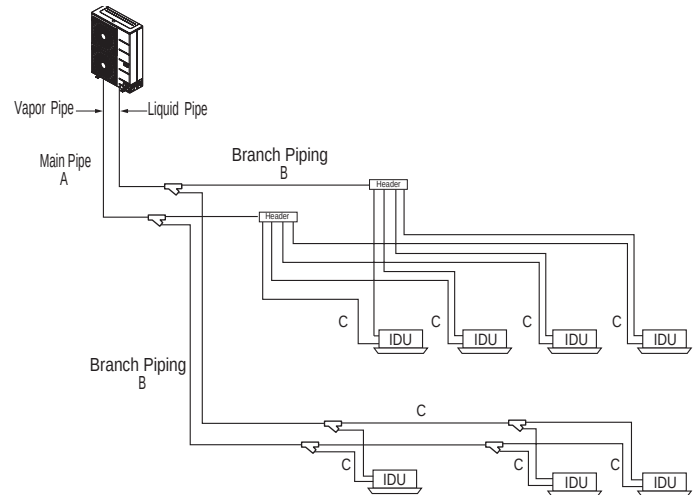


Table 67: Main Pipe (A) Diameters from Outdoor Unit to First Y-branch (When System is Operating in Heat Pump Mode)..

| ODU Capacity (ton) | Pipe Diameter When Pipe Length is ≤295 Feet Equivalent |                          | Pipe Diameter When Pipe Length is ≥295 Feet Equivalent |                          |
|--------------------|--------------------------------------------------------|--------------------------|--------------------------------------------------------|--------------------------|
|                    | Liquid Pipe (inches O.D.)                              | Vapor Pipe (inches O.D.) | Liquid Pipe (inches O.D.)                              | Vapor Pipe (inches O.D.) |
| 2.0                | 3/8Ø                                                   | 5/8Ø                     | 1/2Ø                                                   | 3/4Ø                     |
| 3.0                | 3/8Ø                                                   | 5/8Ø                     | 1/2Ø                                                   | 3/4Ø                     |
| 4.0                | 3/8Ø                                                   | 5/8Ø                     | 1/2Ø                                                   | 3/4Ø                     |
| 5.0                | 3/8Ø                                                   | 3/4Ø                     | 1/2Ø                                                   | 7/8Ø                     |

Table 68: Branch Pipe (B) Diameters from Y-branch to Y-branch / Header.

| Downstream Total Capacity of IDUs (Btu/h) <sup>1</sup> | Liquid Pipe (inches O.D.) | Vapor Pipe (inches O.D.) |
|--------------------------------------------------------|---------------------------|--------------------------|
| ≤12,300                                                | 1/4Ø                      | 3/8Ø                     |
| ≤32,400                                                | 1/4Ø                      | 1/2Ø                     |
| ≤54,600                                                | 3/8Ø                      | 5/8Ø                     |
| ≤76,400                                                | 3/8Ø                      | 3/4Ø                     |

<sup>1</sup>7,500~48,100 Btu/h 4-way 3 feet x 3 feet Cassette indoor units have Ø3/8 (liquid) and Ø5/8 (vapor); 7,500~19,100 Btu/h High Static Ducted indoor units have Ø1/4 (liquid) and Ø1/2 (vapor); 24,200 Btu/h High Static Ducted indoor units have Ø3/8 (liquid) and Ø5/8 (vapor).

Table 69: Indoor Unit Connecting Pipe from Branch (C).

| Indoor Unit Capacity <sup>1</sup> | Liquid Pipe (inches O.D.) | Vapor Pipe (inches O.D.) |
|-----------------------------------|---------------------------|--------------------------|
| ≤12,300                           | 1/4Ø                      | 3/8Ø                     |
| ≤32,400                           | 1/4Ø                      | 1/2Ø                     |
| ≤54,600                           | 3/8Ø                      | 5/8Ø                     |
| ≤76,400                           | 3/8Ø                      | 3/4Ø                     |

<sup>1</sup>7,500~48,100 Btu/h 4-way 3 feet x 3 feet Cassette indoor units have Ø3/8 (liquid) and Ø5/8 (vapor); 7,500~19,100 Btu/h High Static Ducted indoor units have Ø1/4 (liquid) and Ø1/2 (vapor); 24,200 Btu/h High Static Ducted indoor units have Ø3/8 (liquid) and Ø5/8 (vapor).

### Conditional Applications

Conditional application are computed in LATS. See below for an explanation of when pipes are upsized.

When one or both conditions listed below are present, the diameter of main pipe (A) must be increased.

- If equivalent length between the outdoor unit and the farthest indoor unit is ≥295 feet, the diameters of the liquid and vapor pipes must be sized up.
- If elevation differential between the outdoor unit and the farthest indoor unit is ≥164 feet, the diameter of only the liquid pipe must be sized up.

# PIPING LIMITATIONS

## For Systems Operating in Heat Recovery Mode



The following pages present Multi V S piping limitations and are for illustrative purposes only. Designers MUST use LATS when designing LG systems.

### NOTICE

Various tools are available to assist in properly designing LG R32 split systems. Refer to the "R32 Application Guide"; the "Simple Calculator for Capacity, Refrigerant Charge and ESP"; the "LG Air Conditioner Technical Solutions" (LATS) software program; and the local LG Sales Representative.

Figure 73: Heat Recovery System Building Layout Listing the Piping Limitations — When the Outdoor Unit is Above the Indoor Units.

Figure 74: Heat Recovery System Building Layout Listing the Piping Limitations — When the Outdoor Unit is Below the Indoor Units.

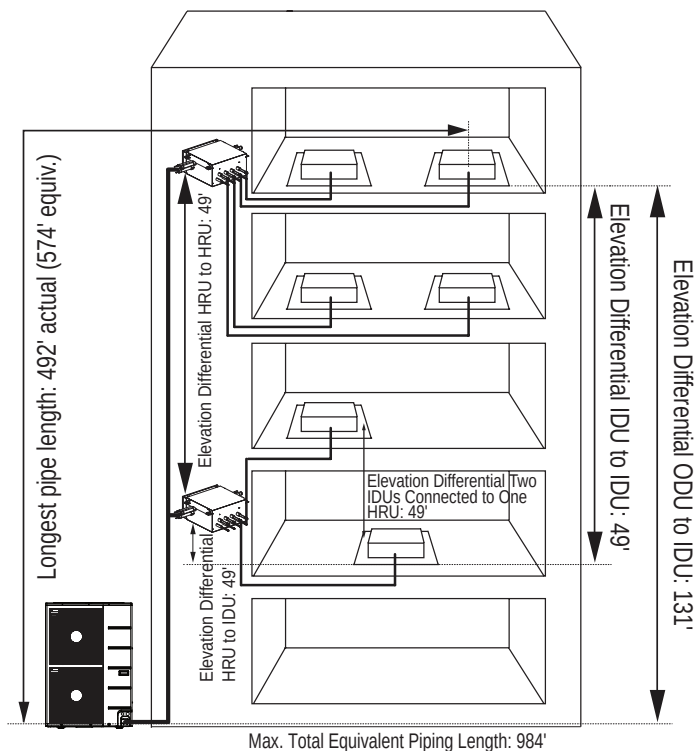
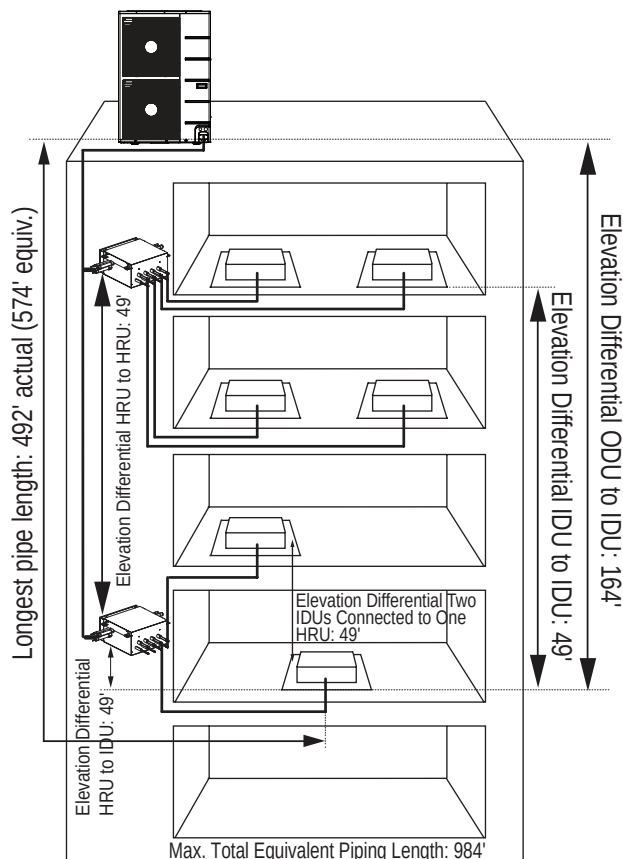


Table 70: Piping Limitations for Heat Recovery Operation (See next page).

| Length                                                                           | Total pipe length<br>$A + \Sigma B + \Sigma C \leq 984$ feet                                                                                                             | Longest actual pipe length<br>$\leq 492$ feet | Equivalent pipe length<br>$\leq 574$ feet |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-------------------------------------------|
| $\ell$                                                                           | Longest pipe length after first branch<br>$\leq 131$ feet                                                                                                                |                                               |                                           |
| Elevation1                                                                       | Elevation differential (Outdoor Unit ↔ Indoor Unit)<br>Height $\leq 164$ feet (Outdoor Unit Above Indoor Unit); Height $\leq 131$ feet (Outdoor Unit Below Indoor Unit); |                                               |                                           |
| Elevation2                                                                       | Elevation differential (Indoor Unit ↔ Indoor Unit)<br>height $\leq 49$ feet                                                                                              |                                               |                                           |
| Elevation3                                                                       | Elevation differential (Indoor Unit ↔ Heat Recovery Unit)<br>49 feet                                                                                                     |                                               |                                           |
| Elevation4                                                                       | Elevation differential (Indoor Unit ↔ Indoor Unit [connected to same Heat Recovery Unit])<br>49 feet                                                                     |                                               |                                           |
| Distance between fittings and Indoor Unit                                        |                                                                                                                                                                          | $\geq 20$ inches                              |                                           |
| Distance between fittings and Y-branches / Headers                               |                                                                                                                                                                          | $\geq 20$ inches                              |                                           |
| Distance between two Y-branches / Headers                                        |                                                                                                                                                                          | $\geq 20$ inches                              |                                           |
| Height differential between two Heat Recovery Units if installed with a Y-branch |                                                                                                                                                                          | $\leq 49$ feet                                |                                           |
| Height differential between two series-piped Heat Recovery Units                 |                                                                                                                                                                          | $\leq 16$ feet                                |                                           |

The following pages present Multi V S piping limitations and are for illustrative purposes only. Designers **MUST** use LATS when designing LG systems.

### NOTICE

Various tools are available to assist in properly designing LG R32 split systems. Refer to the "R32 Application Guide"; the "Simple Calculator for Capacity, Refrigerant Charge and ESP"; the "LG Air Conditioner Technical Solutions" (LATS) software program; and the local LG Sales Representative.

### Example of Pipe Sizing When Installing For Heat Recovery Operation

Example: Heat recovery system with four (4) heat recovery units, one (1) header, and twelve (12) indoor units connected ODU: Outdoor Units.

HRU: Heat Recovery Units.

IDU: Indoor units.

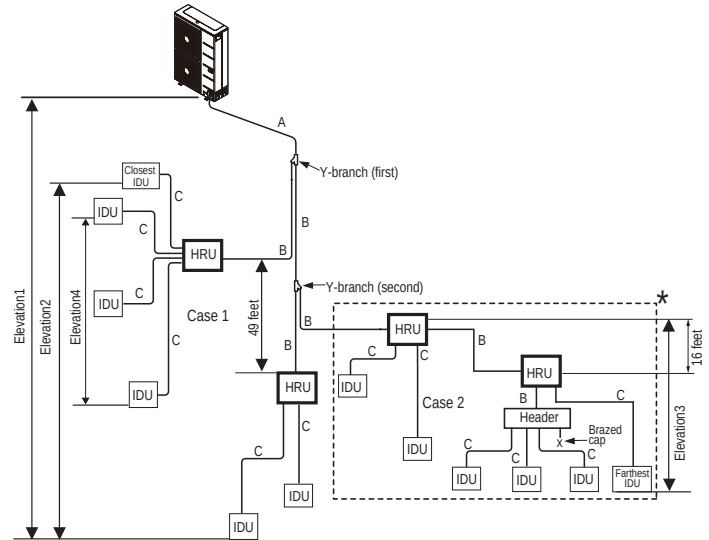
A: Main Pipe from Outdoor Unit to First Y-branch.

B: Heat Recovery Unit to Heat Recovery Unit, Y-branch to Heat Recovery Unit, Heat Recovery Unit to Header, or Y-branch to Y-branch.

C: Heat Recovery Unit / Header to Indoor Unit.

### NOTICE

- Always reference the LATS Multi V software report.
- Connection piping from branch to branch cannot exceed the main pipe diameter (A) used by the outdoor unit.
- Install the header branches or heat recovery units so that the pipe distances between the connected indoor units are minimized. Large differences in pipe distances can cause indoor unit performances to fluctuate.
- Y-branches and other header branches cannot be installed downstream of the initial header branch.
- If large capacity indoor units (>12,000 Btu/h with piping sizes >5/8Ø / 3/8Ø) are installed, the valve group setting must be used. (Refer to the PCB of the heat recovery unit for the valve group control setting.)



Case 1: Maximum height is 49 feet if installed with a Y-branch.  
Case 2: Maximum height is 16 feet in heat recovery control unit series connection.

Table 71: Main Pipe (A) Diameters from Heat Recovery Outdoor Unit to First Y-branch.

| ODU Capacity (Ton)  | Pipe Diameter When Pipe Length is ≤295 feet |                                        |                                       | Pipe Diameter When Pipe Length is ≥295 feet |                                        |                                       |
|---------------------|---------------------------------------------|----------------------------------------|---------------------------------------|---------------------------------------------|----------------------------------------|---------------------------------------|
|                     | Liquid Pipe (inches O.D.)                   | High Pressure Vapor Pipe (inches O.D.) | Low Pressure Vapor Pipe (inches O.D.) | Liquid Pipe (inches O.D.)                   | High Pressure Vapor Pipe (inches O.D.) | Low Pressure Vapor Pipe (inches O.D.) |
| 3.0, 4.0, 5.0 Combo | 3/8Ø                                        | 5/8Ø                                   | 3/4Ø                                  | 1/2Ø                                        | 3/4Ø                                   | 7/8Ø                                  |

Table 72: Refrigerant Pipe (B) Diameters between Y-branches and Y-branches / Heat Recovery Unit / Headers.

| Downstream Total Capacity of IDUs (Btu/h) <sup>1</sup> | Liquid Pipe (inches O.D.) | Vapor Pipe (inches O.D.) |               |
|--------------------------------------------------------|---------------------------|--------------------------|---------------|
|                                                        |                           | Low Pressure             | High Pressure |
| ≤12,300                                                | 1/4Ø                      | 1/2Ø                     | 3/8Ø          |
| ≤32,400                                                | 3/8Ø                      | 5/8Ø                     | 1/2Ø          |
| ≤54,600                                                | 3/8Ø                      | 3/4Ø                     | 5/8Ø          |
| ≤76,400                                                | 3/8Ø                      | 3/4Ø                     | 5/8Ø          |

<sup>1</sup>7,500~48,100 Btu/h 4-way 3 feet x 3 feet Cassette indoor units have Ø3/8 (liquid) and Ø5/8 (vapor); 7,500~19,100 Btu/h High Static Ducted indoor units have Ø1/4 (liquid) and Ø1/2 (vapor); 24,200 Btu/h High Static Ducted indoor units have Ø3/8 (liquid) and Ø5/8 (vapor).

Table 73: Indoor Unit Connecting Pipe from Branch (C).

| Indoor Unit Capacity <sup>1</sup> | Liquid Pipe (inches O.D.) | Vapor Pipe (inches O.D.) |
|-----------------------------------|---------------------------|--------------------------|
| ≤12,300                           | 1/4Ø                      | 3/8Ø                     |
| ≤32,400                           | 1/4Ø                      | 1/2Ø                     |
| ≤54,600                           | 3/8Ø                      | 5/8Ø                     |
| ≤76,400                           | 3/8Ø                      | 3/4Ø                     |

<sup>1</sup>7,500~48,100 Btu/h 4-way 3 feet x 3 feet Cassette indoor units have Ø3/8 (liquid) and Ø5/8 (vapor); 7,500~19,100 Btu/h High Static Ducted indoor units have Ø1/4 (liquid) and Ø1/2 (vapor); 24,200 Btu/h High Static Ducted indoor units have Ø3/8 (liquid) and Ø5/8 (vapor).

### Conditional Applications

Conditional application are computed in LATS. See below for an explanation of when pipes are upsized.

When one or both conditions listed below are present, the diameter of main pipe (A) must be increased.

- If equivalent length between the outdoor unit and the farthest indoor unit is ≥295 feet, the diameters of the liquid, high pressure vapor, and low pressure vapor pipes must be sized up.
- If elevation differential between the outdoor unit and the farthest indoor unit is ≥164 feet, the diameter of only the liquid pipe must be sized up.

# PLACEMENT CONSIDERATIONS

## Selecting the Best Location for the Outdoor Unit(s)

### Selecting the Best Location for the Outdoor Unit(s)

#### **⚠ DANGER**

- ⓧ Do not install the unit in an area where combustible gas will generate, flow, stagnate, or leak. These conditions can cause a fire, resulting in bodily injury or death.
- ⓧ Do not install the unit in a location where acidic solution and spray (sulfur) are often used as it can cause bodily injury or death.
- ⓧ Do not use the unit in environments where oil, steam, or sulfuric gas are present as it can cause bodily injury or death.

#### **⚠ WARNING**

When deciding on a location to place the outdoor unit, be sure to choose an area where run-off from defrost will not accumulate and freeze on sidewalks or driveways, which will create unsafe conditions. Properly install and insulate any drain hoses to prevent the hose from freezing, cracking, leaking, and causing unsafe conditions from frozen condensate.

Install a fence to prevent pests from crawling into the unit or unauthorized individuals from accessing it. Pests and unauthorized individuals can damage internal components which can cause a fire, electric shock, physical injury or death. Follow the placement guidelines set forth in "Clearance Requirements".

Select a location for installing the outdoor unit that will meet the following conditions:

#### **Dos**

- Where there is enough strength to bear the weight of the outdoor unit.
- A location that allows for optimum air flow and is easily accessible for inspection, maintenance, and service.
- Where piping between the outdoor unit and indoor unit(s) are within allowable limits.
- Include space for drainage to ensure condensate flows properly out of the unit when it is in heating mode. ⓧ Avoid placing the outdoor unit in a low-lying area where water could accumulate.
- If the outdoor unit is installed in a highly humid environment (near an ocean, lake, etc.), ensure that the site is well-ventilated and has a lot of natural light (Example: Install on a rooftop).



#### **Do Not**

- Where it will be subjected to direct thermal radiation from other heat sources, or an area that would expose the outdoor unit to heat or steam like discharge from boiler stacks, chimneys, steam relief ports, other air conditioning units, kitchen vents, plumbing vents, and other sources of extreme temperatures.
- Where high-frequency electrical noise / electromagnetic waves will not affect operation.
- Where operating sound from the unit will disturb inhabitants of surrounding buildings.
- Where the unit will be exposed to direct, strong winds.
- Where the discharge of one outdoor unit will blow into the inlet side of an adjacent unit (when installing multiple outdoor units).

#### **NOTICE**

The indoor units may take longer to provide heat, or heating performance will be reduced in winter if the outdoor unit is installed:

1. In a narrow, shady location.
2. Near a location that has a lot of ground moisture.
3. In a highly humid environment.
4. In an area in which condensate does not drain properly.

### Outdoor Unit Condensate Drain Piping

Outdoor unit requires condensate drain piping. Condensate drain pipe is constructed with materials approved by local code. See pages 137-143 for information in reference to outdoor unit placement.



### Planning for Snow and Ice

To ensure the outdoor unit operates properly, certain measures are required in locations where there is a possibility of heavy snowfall or severe windchill or cold:

1. Prepare for severe winter wind chills and heavy snowfall, even in areas of the country where these are unusual phenomena.
2. Position the outdoor unit so that its airflow fans are not buried by direct, heavy snowfall. If snow piles up and blocks the airflow, the system will malfunction.
3. Remove any snow that has accumulated four (4) inches or more on the top of the outdoor unit.
4. In climates that will experience significant snow buildup, mount the outdoor unit on a raised, field-provided platform or stand. The raised support platform must be high enough to allow the unit to remain above possible snow drifts, and must be higher than the maximum anticipated snowfall for the location.
5. Design the mounting base to prevent snow accumulation on the platform in front or back of the unit frame.
6. Provide a field fabricated snow protection hood to keep snow and ice and/or drifting snow from accumulating on the coil surfaces.
7. Install a hail guard kit and air guide accessories (sold separately) to prevent snow or rain from accumulating on the fan inlet / outlet guards.
8. Consider tie-down requirements in case of high winds or where required by local codes.

#### ⚠ CAUTION

When deciding on a location to place the outdoor unit, be sure to choose an area where run-off from defrost will not accumulate and freeze on sidewalks or driveways, which will create unsafe conditions. Properly install and insulate any drain hoses to prevent the hose from freezing, cracking, leaking, and causing unsafe conditions from frozen condensate.

#### NOTICE

Choose an area where run-off from defrost mode will not accumulate and freeze on sidewalks or driveways. Properly install and insulate any drain hoses to prevent the hose from freezing, cracking, leaking, and damaging the outdoor unit.

### Tie-Downs, Lightning Protection, and Wind Protection

#### Tie-Downs

- The strength of the roof must be checked before installing the outdoor units.
- The strength of the outdoor unit frames is adequate to be used with field-provided wind restraint tie-downs.
- If the installation site is prone to high winds or earthquakes, when installing on the wall or roof, securely anchor the mounting base using a field-provided tie-down configuration approved by a local professional engineer.
- The overall tie-down configuration must be approved by a local professional engineer.

#### NOTICE

Always refer to local code when using a wind restraint system.

#### Lightning Protection

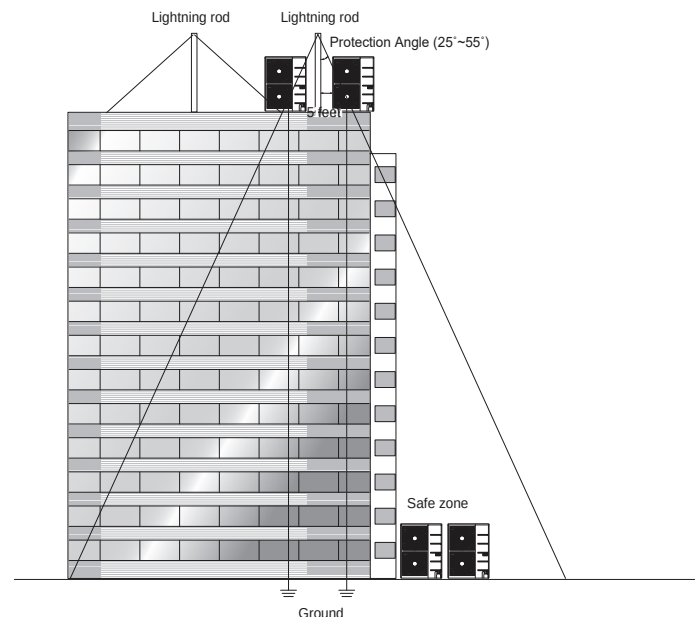
- To protect the outdoor unit from lightning, it must be placed within the specified lightning safety zone.

Table 74: Safety Zone Specifications.

| Building Height (feet) | 66 | 98 | 148 | 197 |
|------------------------|----|----|-----|-----|
| Protection Angle (°)   | 55 | 45 | 35  | 25  |

- Power cable and communication cable must be installed five (5) feet away from lightning rod.
- A high-resistance ground system must be included to protect against induced lightning or indirect strike.

Figure 75: Lightning Protection Diagram (Outdoor Unit Appearances Differ According to Model).



#### NOTICE

If the building does not include lightning protection, the outdoor unit will be damaged from a lightning strike. Inform the customer of this possibility in advance.



# PLACEMENT CONSIDERATIONS

## Selecting the Best Location for the Outdoor Unit(s)

### Oceanside Applications

#### Wind Protection

If the outdoor unit is placed on a roof, position it with the compressor end (no coil surface) in the direction of the prevailing wind as shown in the figure at right. In cooler climates, it can be beneficial to position the unit in direct sunlight to assist with defrost operations.

If the outdoor unit is not placed on a roof, place it on the leeward side of the building or in a location where the unit will not be exposed to constant wind.

If placement exposes the unit to constant wind activity, construct a wind break in front of the unit. Follow the placement guidelines set forth in "Clearance Requirements".

Figure 76: Prevailing Wind Direction.

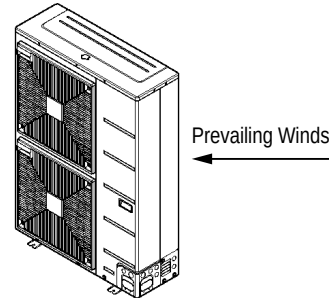
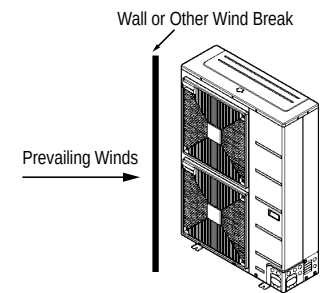


Figure 77: Leeward Side of the Building.



Figure 78: Wind Break.



### Oceanside Application Precautions

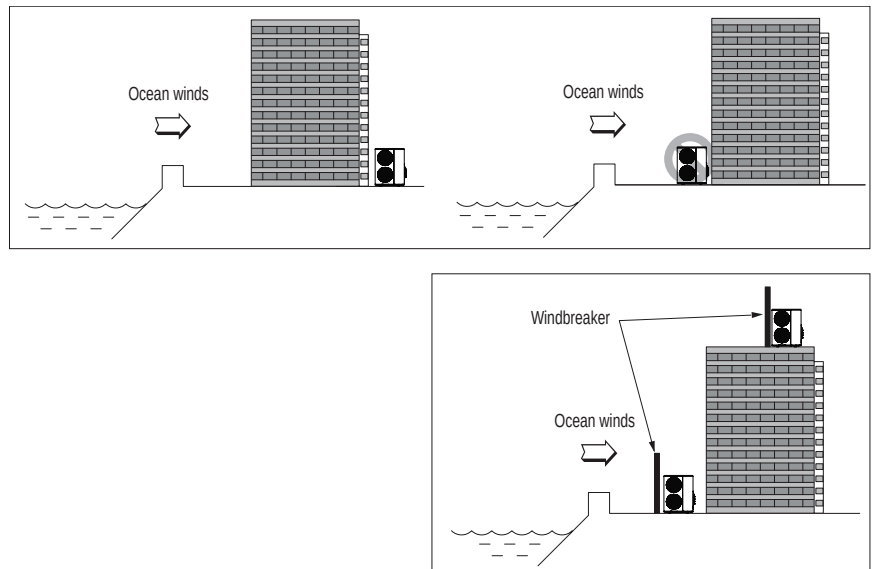
#### NOTICE

*Ocean winds will cause corrosion, particularly on the condenser and evaporator fins, which, in turn could cause product malfunction or inefficient performance.*

- ⚠ Avoid installing the outdoor unit where it would be directly exposed to ocean winds.
- Install the outdoor unit on the side of the building opposite from direct ocean winds.
- Select a location with good drainage.
- Periodically clean dust or salt particles off of the heat exchanger with water.

If the outdoor unit must be placed in a location where it would be subjected to direct ocean winds, install a concrete windbreaker strong enough to block any winds. Windbreaker height and width must be more than 150% of the outdoor unit, and be installed at least 14 to 28 inches away from the outdoor unit to allow for airflow (depending on the location and outdoor unit size).

Figure 79: Oceanside Placement Using a Building as Shield, and Placement Using a Wind-break.



#### NOTICE

*Additional anti-corrosion treatment will need to be applied to the outdoor unit at oceanside locations.*

### Minimum Allowable Clearance and Service Access Requirements

Proper clearance for the outdoor unit coil is critical for proper unit operation. When installing the outdoor unit, consider service, inlet and outlet and minimum allowable space requirements as illustrated in the diagrams below and on the following pages.

- Include enough space for airflow and for service access. If installing multiple outdoor units, ⚡ avoid placing the units where the discharge of one unit will blow into the inlet side of an adjacent unit.
- If an awning is built over the unit to prevent direct sunlight or rain exposure, make sure that the discharge air of the outdoor unit isn't restricted.
- ⚡ No obstacles to air circulation around the unit; keep proper distances from ceilings, fences, floor, walls, etc. (Install a fence to prevent pests from damaging the unit or unauthorized individuals from accessing it.)

### Minimum Clearance Requirements for Multi V S Single Fan Outdoor Units

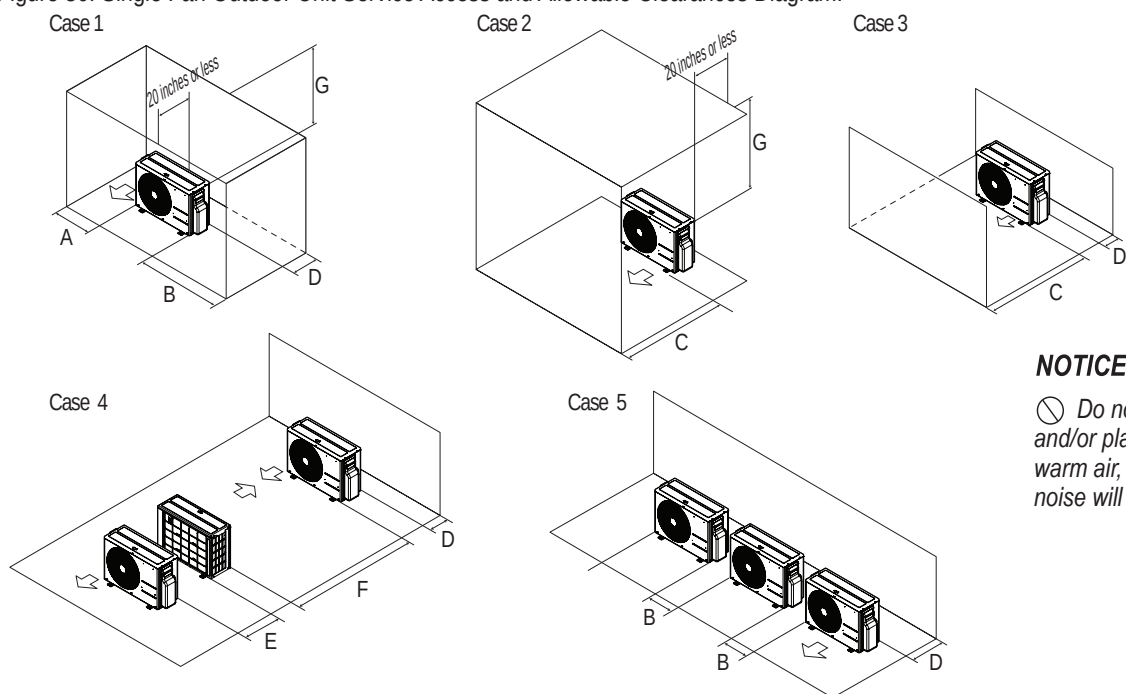
Specific clearance requirements in the diagram below are for single fan outdoor units. The figure below shows the overall minimum clearances that must be observed for safe operation and adequate airflow around the outdoor unit.

When placing the outdoor unit under an overhang, awning, sunroof or other "roof-like structure", observe the clearance requirements (as shown in Cases 1 and 2 for height in relation to the unit). To have successful service access to the outdoor unit, see the figure below for minimum spacing. When installing multiple outdoor units, see Cases 4 and 5 for correct spacing requirements.

#### NOTICE

*If the outdoor unit is installed between standard and minimum clearances, capacity decreases approximately 10%.*

Figure 80: Single Fan Outdoor Unit Service Access and Allowable Clearances Diagram.



#### NOTICE

⚡ Do not place the unit where animals and/or plants will be in the path of the warm air, or where the warm air and / or noise will disturb neighbors.

Table 75: Single Fan Outdoor Unit Service Access and Allowable Clearances Diagram Legend.

| Unit: Inch |          | A  | B  | C  | D  | E  | F  | G  |
|------------|----------|----|----|----|----|----|----|----|
| Case 1     | Standard | 12 | 24 | -  | 12 | -  | -  | -  |
|            | Minimum  | 4  | 10 | -  | 4  | -  | -  | 40 |
| Case 2     | Standard | -  | -  | 20 | -  | -  | -  | -  |
|            | Minimum  | -  | -  | 14 | -  | -  | -  | 40 |
| Case 3     | Standard | -  | -  | 20 | 12 | -  | -  | -  |
|            | Minimum  | -  | -  | 14 | 4  | -  | -  | -  |
| Case 4     | Standard | -  | -  | -  | 12 | 24 | -  | -  |
|            | Minimum  | -  | -  | -  | 4  | 8  | 79 | -  |
| Case 5     | Standard | -  | 24 | -  | 12 | -  | -  | -  |
|            | Minimum  | -  | 10 | -  | 4  | -  | -  | -  |

# PLACEMENT CONSIDERATIONS

## Outdoor Unit Clearance Requirements

### Minimum Clearance Requirements for Dual Fan Outdoor Units

Figures below and on the next page illustrate clearance requirements for various installation scenarios for dual fan outdoor units. Use the hot isle / cold isle approach when placing multiple units in close proximity to each other. Outdoor unit fans draw air from the back of the unit and discharges out the front. Place units back to back and face to face.

#### NOTICE

- Installation clearances must comply with local building codes.
- All figures not to scale.
- ⚠ Never place multiple units facing back to front or front to back as shown immediately below here or high and low system pressure problems will occur.

Figure 81: Improper Outdoor Unit Placement.

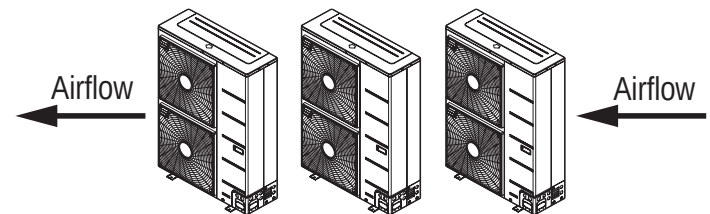
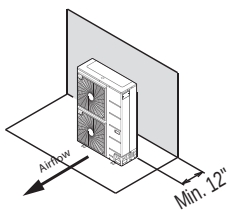
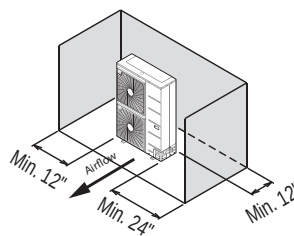


Figure 82: Proper Outdoor Unit Placement and Clearances When There Are Obstacles on the Suction Side.

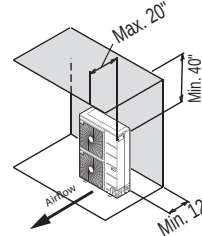
Single Unit—High Rear Wall



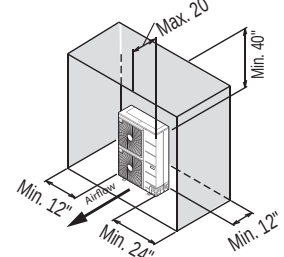
Single Unit—High Rear Wall with High Side Walls



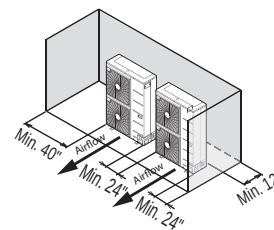
Single Unit—High Rear Wall with Building Overhang



Single Unit—High Rear and Side Walls with Building Overhang



Side by Side—High Rear and Side Walls



Side by Side—High Rear and Side Walls with Building Overhang

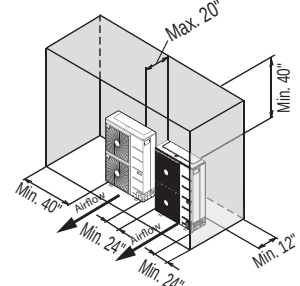
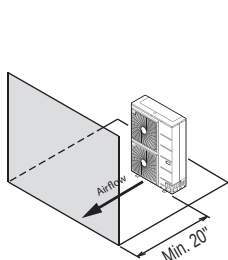
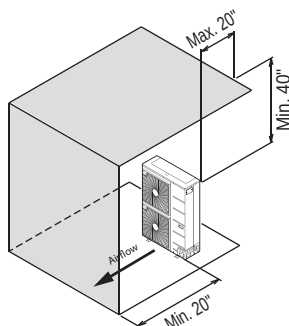


Figure 83: Proper Outdoor Unit Placement and Clearances When There Are Obstacles on the Discharge Side.

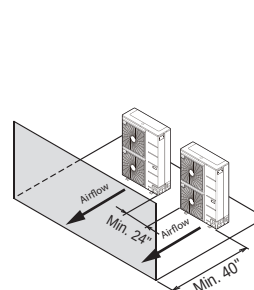
Single Unit—High Front Wall with No Side Walls



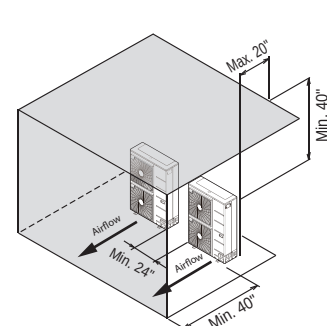
Single Unit—High Front Wall with Building Overhang and No Side Walls



Side by Side—High Front Wall with No Side Walls



Side by Side—High Front Wall with Building Overhang and No Side or Rear Walls



### Minimum Clearance Requirements for Dual Fan Outdoor Units, Continued.

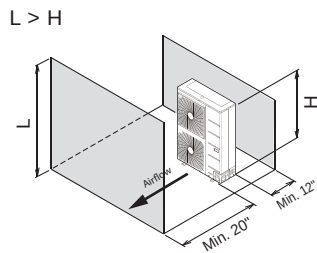
#### NOTICE

- Installation clearances must comply with local building codes.
- All figures not to scale.

Figure 84: Proper Outdoor Unit Placement and Clearances When There Are Obstacles on the Suction and the Discharge Sides.

When Obstacle Height of the Discharge Side is Higher than the Outdoor Unit.

Single Unit—High Rear and Front Walls with No Side Walls



Single Unit—High Rear and Front Walls with Building Overhang

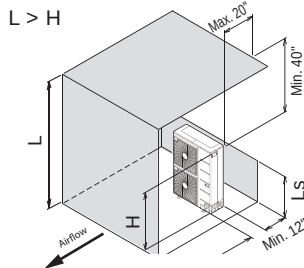


Table 76: H, A, and L Ratio.

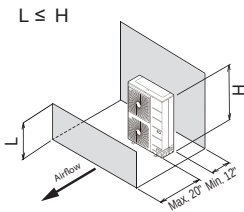
|            | Ls                       | A (Inches) |
|------------|--------------------------|------------|
| $L \leq H$ | $0 < L_s \leq 1/2 H$     | 30         |
|            | $1/2 H < L_s$            | 40         |
| $H < L$    | Set Stand as: $L \leq H$ |            |

#### NOTICE

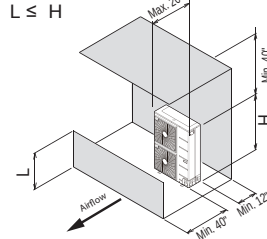
"L" must be lower than "H". If a stand is necessary, it must be made of solid material (not an open frame) to prevent the discharge air from short cycling.

Obstacle Height of Discharge Side Is Lower than the Outdoor Unit.

Single Unit—High Rear Wall and Low Front Wall with No Side Walls

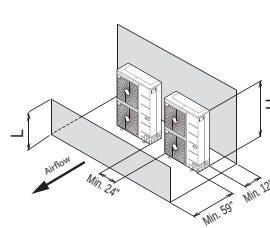


Single Unit—High Rear Wall and Low Front Wall with Building Overhang and No Side Walls



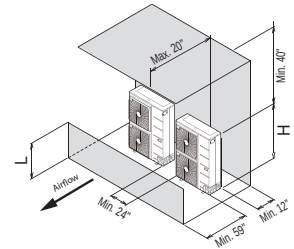
Side by Side—High Rear Wall and Low Front Wall with No Side Walls

$L < H/2$



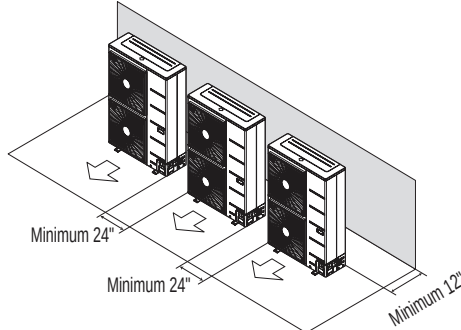
Side by Side—High Rear Wall and Low Front Wall with Building Overhang and No Side Walls

$L < H/2$

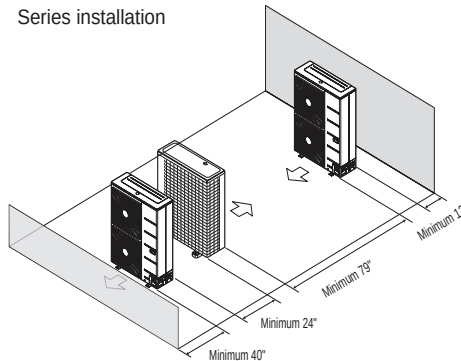


#### Series Installation

Side-by-side series installation.



#### Series installation



# PLACEMENT CONSIDERATIONS

## Installing Outdoor Units Indoors



### Installing Outdoor Units Indoors

LG Multi V outdoor units are engineered to be mounted outdoors and include technology designed to minimize the negative effects of winter weather's freezing rain, sleet, and snow. Some building projects, however, necessitate placing the HVAC outdoor units indoors:

- Lack of ground space.
- Lack of an appropriate outdoor location that meets system design requirements.
- When mounting on the roof is not an option due to a lack of roof space.
- Roof warranty will be voided if mechanical equipment is placed on the membrane.
- On retrofit projects, a former chiller / boiler / air handler equipment room, mechanical area, or penthouse already exists.
- Where a project has vertical, self-contained VAV air handlers on each floor (in lieu of a centralized mechanical room).
- To curtail the potential need for redundant zone heating devices such as wall-fin radiators or duct heaters.
- In extremely cold environments where there is a significant amount of run-time at temperatures well below freezing outside the outdoor unit ambient air temperature range published in this engineering manual.

### Benefits of Installing Outdoor Units Indoors

- Shelters the outdoor unit from direct exposure to prevailing winds that decrease the heating capability of the outdoor unit.
- Protects equipment from freezing precipitation and / or potential ice build-up that could hinder unit operation.
- Maintains coil heat transfer efficiency by reducing the number of and shortening the cycle time for defrost operation.
- Easier maintenance and servicing during inclement weather.
- When mounted in a fully enclosed space, limiting the ambient air temperature will allow the Multi V system designer to eliminate oversizing the outdoor unit to compensate for loss of capacity at low ambient temperatures.
- Can also curtail the need to provide inefficient redundant zone heating devices such as wall-fin radiators and second-stage ancillary heating devices.

### Design Considerations Include:

- Enclosure types and elements such as louvers, rain hoods, dampers and controls, heating methods and sizing of heating devices
- Heating strategies
- Duct design
- Condensate handling

### General Guidelines

- Follow ASHRAE 62.1 design guidelines.
- Depending on the project / application, a roof over the outdoor units in combination with a wind break could be all that is necessary.
- Consider the potential for snow accumulation near louvers / roof openings. Outside air intakes and discharge ducts/louvers must be engineered to clear anticipated snow accumulation levels by at least one (1) foot.
- In situations where operation is anticipated at temperatures lower than the product's minimum operating temperature, ancillary heat must be provided to heat the outdoor unit coils to ensure continuous compressor operation and heating.

It will be necessary to use an air guide accessory to prevent discharge air from short-cycling back to the coil inlet.

- Another option is to field manufacture ductwork and mount on top of the unit to encompass the outdoor unit fan discharge and connect to the exterior discharge grille on the building.
- ⚠ Avoid using a single duct on multi-fan units to prevent short cycling. Provide a dedicated duct for each outdoor unit fan discharge.
- Consider the direction of prevailing winds and opening placement. If possible, locate inlet openings upwind of discharge openings and other exhaust outlets.
- When inlet and outlet openings are placed on the same wall, minimum distance between the two openings must be approximately three (3) feet (minimum distance varies significantly with variations in outlet opening face velocity).
- If roof-mounted ventilation openings are used, strategically locate the inlet ventilation opening(s) upwind of the outlet opening(s).
- Discharge and supply ductwork must be designed to avoid weather related long periods of water entrainment.

Provide a means to drain the condensate generated during heating mode and defrost cycle in addition to rainwater that infiltrates the inlet louver enclosed area.

- Install a field-provided drain pan under the outdoor units and provide a path to a nearby floor drain.
- If the ambient air temperature is expected to drop below 32°F in the enclosure, heat the bottom surface of the pan, drain line, and floor drain so that the condensate does not freeze before reaching the drain.

### **▲ CAUTION**

*When deciding on a location to place the outdoor unit, be sure to choose an area where run-off from defrost will not accumulate and freeze on walkways, which will create unsafe conditions.*

Allow for ventilation intake and exhaust air based on maximum outdoor unit fan capacity.

- Select the size, type and orientation of architectural louvers with adequate “net free area” face velocity to ensure the total external static pressure from the outdoor unit fan does not exceed design limitations (see specification data tables).
-  No obstructions must be placed in front of the louver that could hamper the free flow (throw) of air.
- Roof top openings and / or discharge and supply louvers must be equipped with screens to prevent bird and insect infiltration.

As always, the best solution for each project balances acceptable heating performance (considering local weather conditions), capital costs, life cycle energy consumption, and limitations set forth by local building codes. For more detailed information on how to design indoor spaces for LG Multi V outdoor units, see the white paper “Air-Source VRF Mechanical Room Design Considerations for Outdoor Unit Placement in Enclosures” on [www.lghvac.com](http://www.lghvac.com).

### **NOTICE**

**For detailed placement considerations and installation requirements for indoor units, refer to its Indoor Unit Engineering and / or Installation Manuals.**



# PLACEMENT CONSIDERATIONS



## Selecting the Best Location / Clearance Requirements for the Heat Recovery Unit(s)

### NOTICE

Heat recovery units are for use with systems designed for heat recovery operation only.

Select an installation space for the heat recovery unit that meets the following conditions:

- Install the heat recovery unit indoors in a level and upright position.
- Ensure there is enough space in the installation area for service access.
- Install the heat recovery unit in a location where any sound it generates will not disturb occupants in the surrounding rooms.
- Install so that the refrigerant piping, drainage piping, and electrical wiring system are easily accessible.

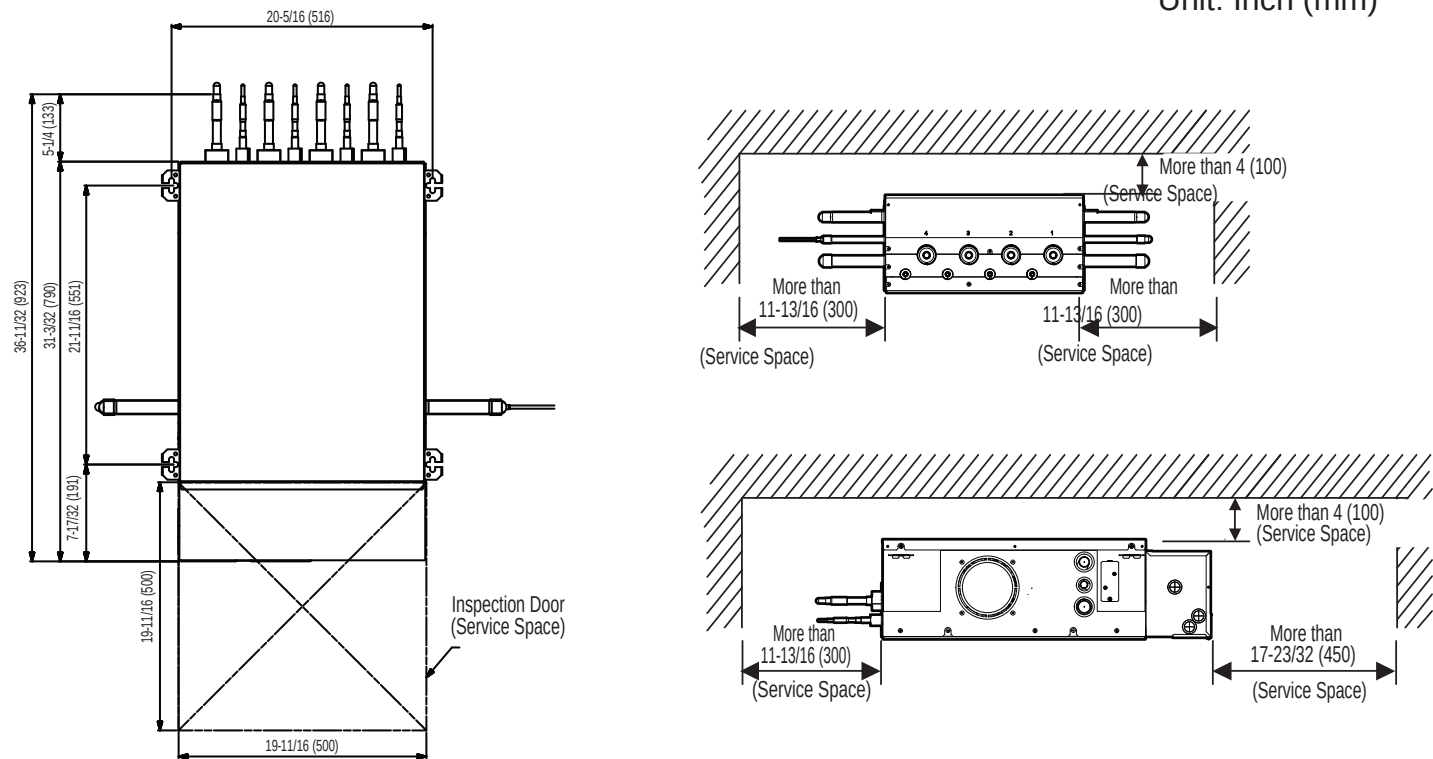
### ⊘ Dont's

- Refrigerant pipes must not exceed lengths specified by LG Electronics.
- Do not install the heat recovery unit in a location where rain may enter.
- Do not install the heat recovery unit in a location where it would be subjected to strong radiant heat from heat sources.
- Avoid an installation environment where more than 80% high humidity, or where oil splattering and / or vapor spray will occur.
- Avoid an installation environment where high-frequency electric noise could occur.

Figure 85: PRHR024C, PRHR034C, PRHR044C, PRHR065C, and PRHR085C Clearance Requirements.

### Two-, Three-, Four-, Six-, and Eight-Port Heat Recovery Unit When NOT connecting the strainer directly to the heat recovery unit.

Unit: Inch (mm)





# PLACEMENT CONSIDERATIONS

Selecting the Best Location / Clearance Requirements for the  
Heat Recovery Unit(s)

Figure 86: PRHR034C, PRHR044C, PRHR065C, and PRHR085C Clearance Requirements, continued.

When connecting the strainer directly to the heat recovery unit (Except PRHR024C).

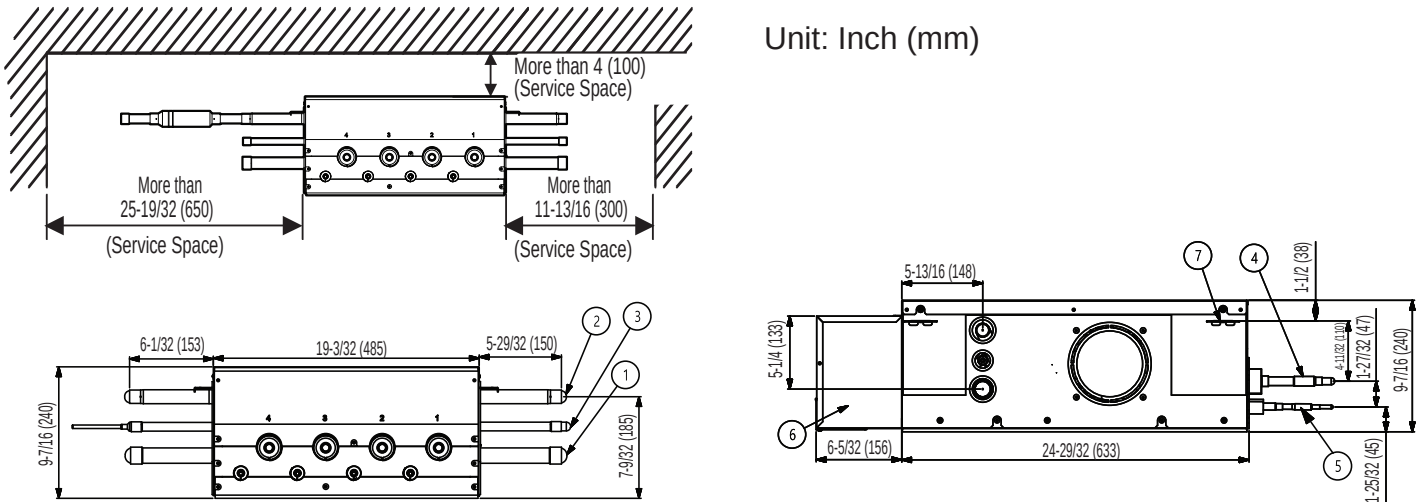


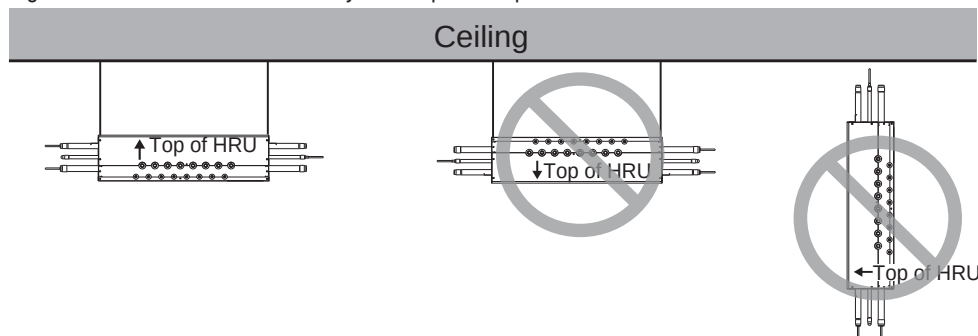
Table 77: PRHR024C, PRHR034C, PRHR044C, PRHR065C, and PRHR085C Heat Recovery Unit Components and Legend.

| Part No. | Part Name                                | Connection Size (in.) / Type                                                        |              |              |              |              |
|----------|------------------------------------------|-------------------------------------------------------------------------------------|--------------|--------------|--------------|--------------|
|          |                                          | PRHR024C                                                                            | PRHR034C     | PRHR044C     | PRHR065C     | PRHR085C     |
| 1        | Low Pressure Vapor Pipe Connection Port  | Ø7/8 Braze                                                                          | Ø1-1/8 Braze | Ø1-1/8 Braze | Ø1-1/8 Braze | Ø1-1/8 Braze |
| 2        | High Pressure Vapor Pipe Connection Port | Ø3/4 Braze                                                                          | Ø7/8 Braze   | Ø7/8 Braze   | Ø7/8 Braze   | Ø7/8 Braze   |
| 3        | Liquid Pipe Connection Port              | Ø3/8 Braze                                                                          | Ø1/2 Braze   | Ø5/8 Braze   | Ø1/2 Braze   | Ø5/8 Braze   |
| 4        | Indoor Unit Vapor Pipe Connection Port   | Ø5/8 Braze – Ø1/2 Braze                                                             |              |              |              |              |
| 5        | Indoor Unit Liquid Pipe Connection Port  | Ø3/8 Braze – Ø1/4 Braze                                                             |              |              |              |              |
| 6        | Control Box                              | –                                                                                   | –            | –            | –            | –            |
| 7        | Hanger Bracket                           | M8 or M10 Suspension Bolt                                                           |              |              |              |              |
| 8        | Drain Hole                               | Connect the drain hose (field supplied), and tighten with a metal clamp (included). |              |              |              |              |

<sup>1</sup>Include an access panel at the side of the heat recovery unit where the control box is located.

<sup>2</sup>If reducers are used, service space must be increased equal to the dimensions of the reducer.

Figure 87: Install the Heat Recovery Unit Top Side Up.



## NOTICE

Heat Recovery Unit must be installed so that the top side faces up. If the heat recovery unit is installed incorrectly, it may fail.

# PLACEMENT CONSIDERATIONS

## Selecting the Best Location / Clearance Requirements for the Shutoff Valve Unit(s)

Select an installation space for the shutoff valve unit that meets the following conditions:

- Install the shutoff valve unit indoors in a level and upright position.
- Ensure there is enough space in the installation area for service access.
- Install the shutoff valve unit in a location where any sound it generates will not disturb occupants in the surrounding rooms.
- Install so that the refrigerant piping and electrical wiring system are easily accessible.



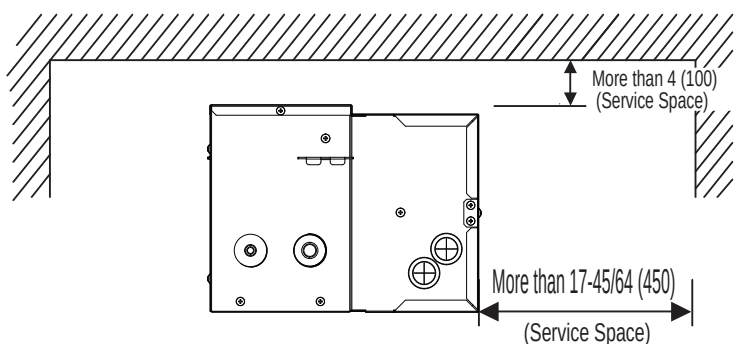
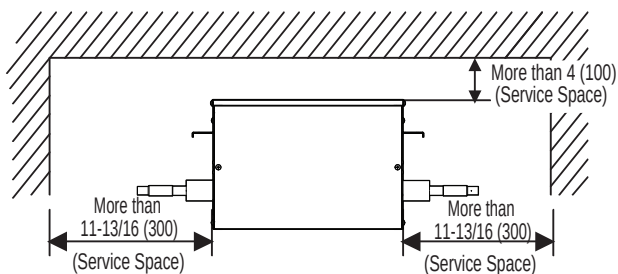
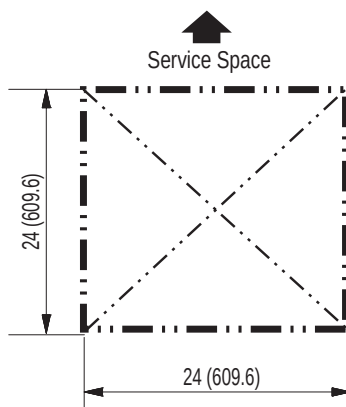
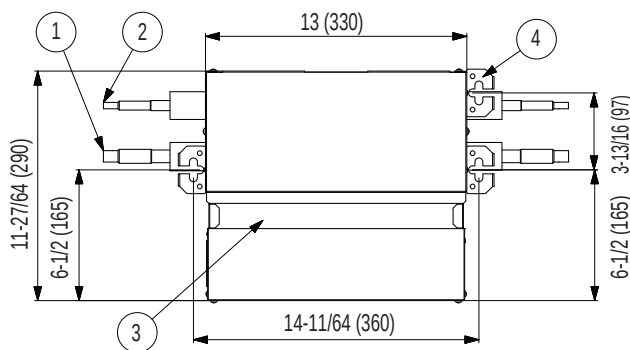
### Don't's

- Refrigerant pipes must not exceed lengths specified by LG Electronics.
- Do not install the shutoff valve unit in a location where rain may enter.
- Do not install the shutoff valve unit in a location where it would be subjected to strong radiant heat from heat sources.
- Avoid an installation environment with no more than 80% high humidity, or where oil splattering and / or vapor spray will occur.
- Avoid an installation environment where high-frequency electric noise could occur.

Figure 88: PRHPZ010A Clearance Requirements.

### One-Port Shutoff Valve Units

Unit: Inch (mm)



# PLACEMENT CONSIDERATIONS

## Selecting the Best Location / Clearance Requirements for the Shutoff Valve Unit(s)

Figure 89: PRHPZ010A Clearance Requirements, Continued.

### One-Port Shutoff Valve Units

Unit: Inch (mm)

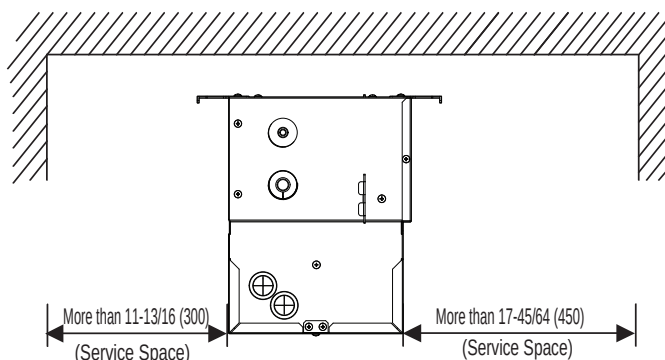
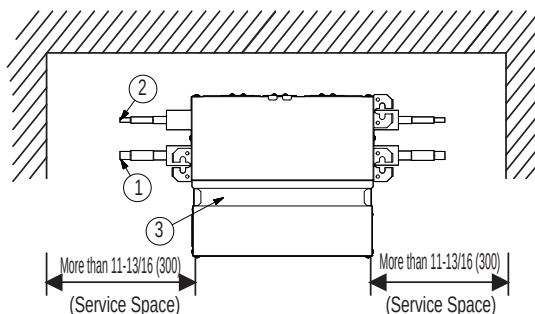
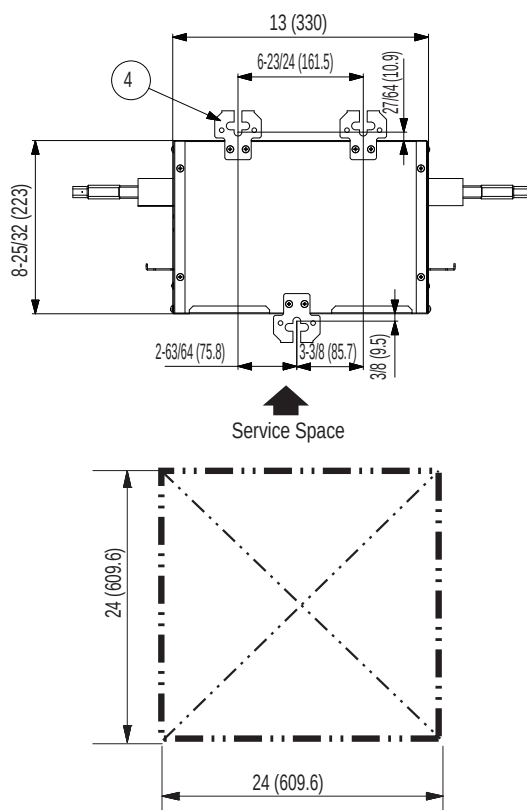


Table 78: PRHPZ010A Shutoff Valve Unit Components and Legend.

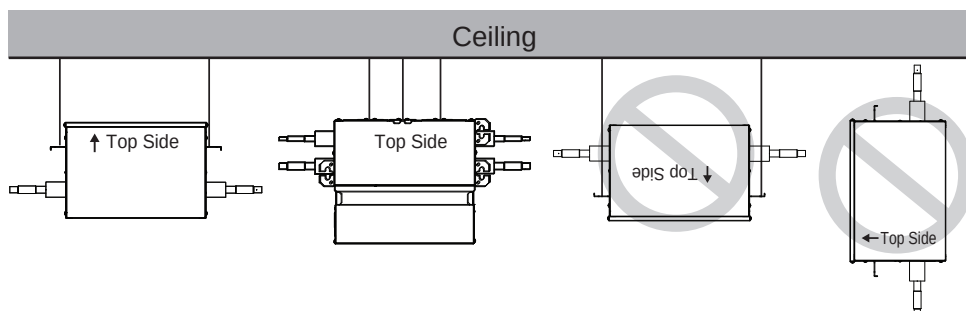
| Part No. | Part Name                   | Connection Size (in.) / Type |
|----------|-----------------------------|------------------------------|
|          |                             | PRHPZ010A                    |
| 1        | Vapor Pipe Connection Port  | Ø5/8 Braze – Ø1/2 Braze      |
| 2        | Liquid Pipe Connection Port | Ø3/8 Braze – Ø1/4 Braze      |
| 3        | Control Box                 | –                            |
| 4        | Hanger Bracket              | M8 or M10 Suspension Bolt    |

<sup>1</sup>Include an access panel at the side of the shutoff valve unit where the control box is located.

### NOTICE

Use the hanger accessories (included) when rotating the Shutoff Valve Units 90° in certain installations.

Figure 90: Install the One-Shutoff Valve Unit Top Side Up or Towards the Front.



### NOTICE

The one-port shutoff valve unit must be installed so that the top side faces up or towards the front. If the shutoff valve unit is installed incorrectly, it may fail.

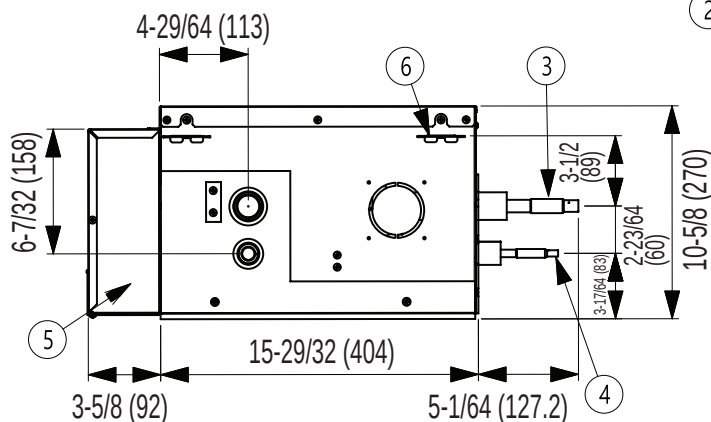
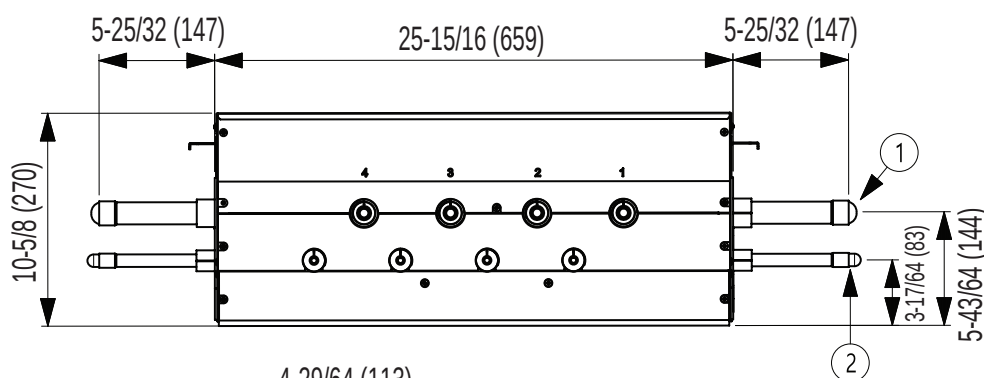
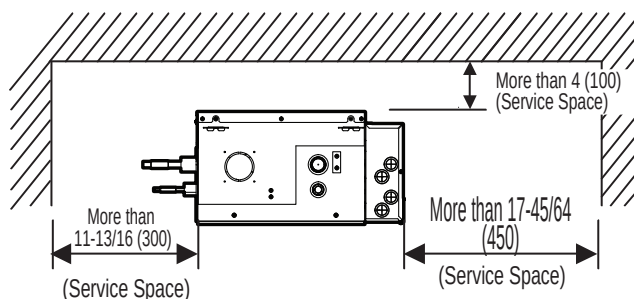
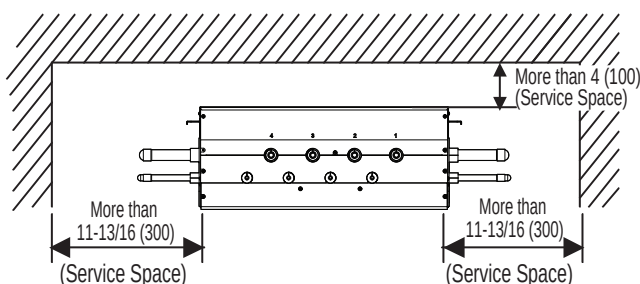
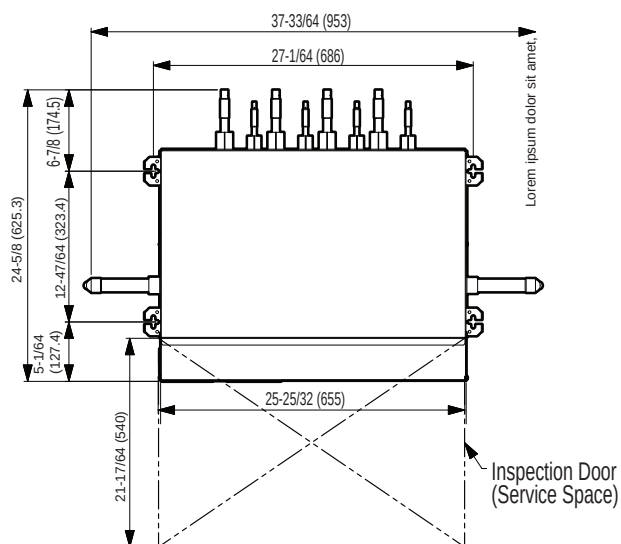
# PLACEMENT CONSIDERATIONS

## Selecting the Best Location / Clearance Requirements for the Shutoff Valve Unit(s)

Figure 91: PRHPZ020A, PRHPZ030A, and PRHPZ040A Clearance Requirements.

### Two-, Three-, and Four-Port Shutoff Valve Units

Unit: Inch (mm)



# PLACEMENT CONSIDERATIONS

Selecting the Best Location / Clearance Requirements for the  
Shutoff Valve Unit(s)

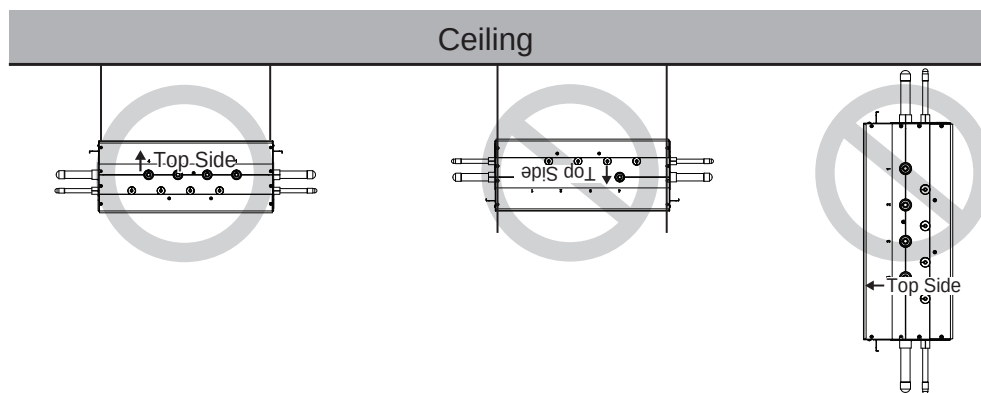
Table 79: PRHPZ020A, PRHPZ030A, and PRHPZ040A Shutoff Valve Unit Components and Legend.

| Part No. | Part Name                                | Connection Size (in.) / Type |              |              |
|----------|------------------------------------------|------------------------------|--------------|--------------|
|          |                                          | PRHPZ020A                    | PRHPZ030A    | PRHPZ040A    |
| 1        | Outdoor Unit Vapor Pipe Connection Port  | Ø7/8 Braze                   | Ø1-1/8 Braze | Ø1-1/8 Braze |
| 2        | Outdoor Unit Liquid Pipe Connection Port | Ø3/8 Braze                   | Ø1/2 Braze   | Ø5/8 Braze   |
| 3        | Indoor Unit Vapor Pipe Connection Port   | Ø5/8 Braze – Ø1/2 Braze      |              |              |
| 4        | Indoor Unit Liquid Pipe Connection Port  | Ø3/8 Braze – Ø1/4 Braze      |              |              |
| 5        | Control Box                              | –                            | –            | –            |
| 6        | Hanger Bracket                           | M8 or M10 Suspension Bolt    |              |              |

<sup>1</sup>Include an access panel at the side of the shutoff valve unit where the control box is located.

<sup>2</sup>If reducers are used, service space must be increased equal to the dimensions of the reducer.

Figure 92: Install the Shutoff Valve Unit Top Side Up.



## NOTICE

The two-, three- and four-port shutoff valve units must be installed so that the top side faces up. If these shutoff valve unit is installed incorrectly, they may fail.

# LIMITED WARRANTY (USA)



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The product's full Limited Warranty terms and conditions and arbitration requirements are available at <https://www.lghvac.com>.

*Inverter*



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