



# R32 SINGLE ZONE MULTI-POSITION AIR HANDLING UNIT QUICK INSTALLATION GUIDE



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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, catalogs, installation, owner's, and service manuals, visit [www.lghvac.com](http://www.lghvac.com).**

This guide is only intended as a supplement to the installation manual. Please refer to product installation manual(s) for complete installation instructions, procedures, and safety guidelines.

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 CONTENTS

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Table of Symbols .....	4
Applicable Systems.....	5
Installation Location and Clearances .....	6
Refrigerant Piping .....	7-9
Power and Communication .....	10
Controllers .....	11-15
Wiring Diagrams .....	16
Indoor / Outdoor Dip Switches.....	17-18
Auxiliary Electric Heater Installation .....	19-23
Auxiliary Electric Heater Configuration.....	24-26
External Static Pressure (ESP).....	27-28
Drain Shutoff Switch Wiring .....	29-30
Limited Warranty .....	31

# 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, WILL RESULT IN DEATH OR SERIOUS INJURY. <sup>1</sup>
<b>⚠ WARNING</b>	Indicates a hazardous situation that, if not avoided, COULD RESULT IN DEATH OR SERIOUS INJURY. <sup>1</sup>
<b>⚠ CAUTION</b>	Indicates a hazardous situation that, if not avoided, COULD RESULT IN MINOR OR MODERATE INJURY. <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.

# APPLICABLE SYSTEMS

The installation procedures described in this manual are applicable to the following Multi-Position Air Handling Unit (MPAHU) models.

LGRED MPAHU models	
Outdoor Unit Model	Indoor Unit Model
KUSXA121A	KNSLB121A
KUSXA181A	KNSLA181A
KUSXA241A	KNSLA241A
KUSXA301A	KNSLA301A
KUSXA361A	KNSLA361A
KUSXA421A	KNSLB421A
KUSXA481A	KNSLB481A

High Efficiency MPAHU models	
Outdoor Unit Model	Indoor Unit Model
KUSXB121A	KNSLB121A
KUSXB181A	KNSLB181A
KUSXB241A	KNSLB241A
KUSXB301A	KNSLB301A
KUSXB361A	KNSLB361A
KUSXB421A	KNSLB421A
KUSXB481A	KNSLB481A
KUSXB601A	KNSLB601A

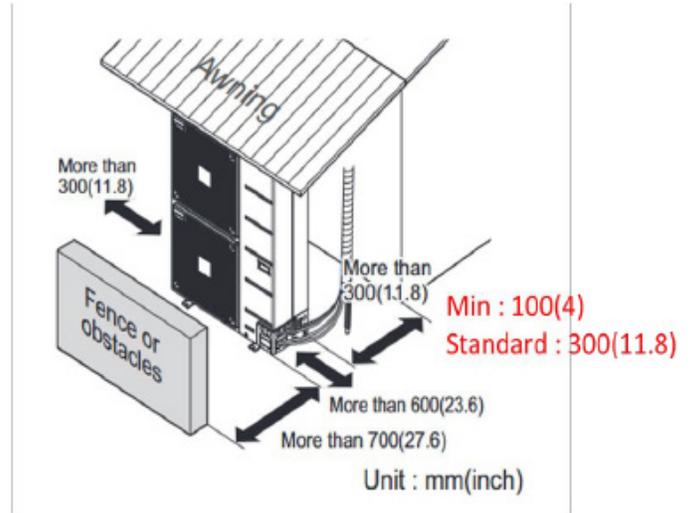
# INSTALLATION LOCATION AND CLEARANCES

## Installation Location and Clearances

Use the reference diagrams below to install the indoor unit and outdoor unit in the proper location and with correct clearances:

### Outdoor Unit

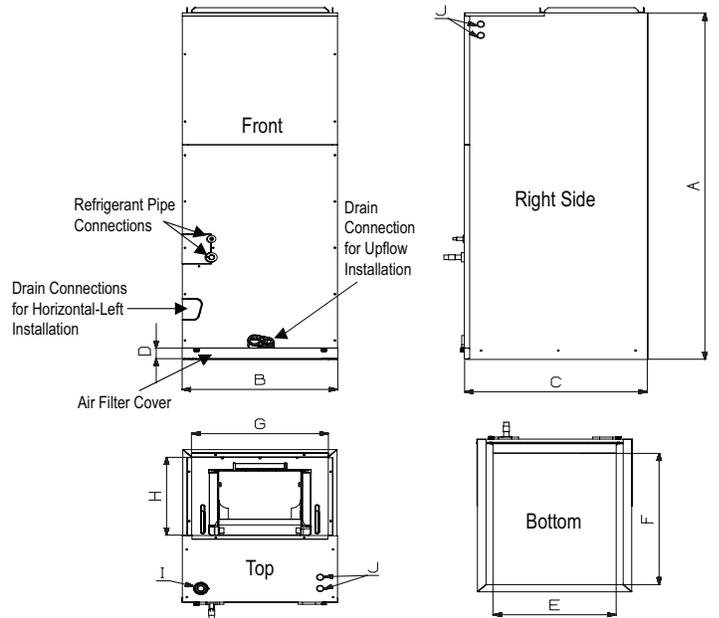
- If an awning is built over the unit to prevent direct sunlight or rain exposure, make sure that heat radiation from the condenser is not restricted.
- Ensure to maintain the spaces indicated by arrows around front, back and side of the unit.
- Take the unit weight into consideration when selecting a location.
- Select a place so that the warm air and noise from the unit does not disturb neighbors.
- Ensure that there are no animals or plants in the path of the warm air.



### Indoor Unit

Select a location for installing the indoor units that will meet the following conditions:

- Where optimum air distribution can be ensured.
- Where nothing blocks air passage and duct work can be installed.
- Where condensate can be properly drained.
- Where the ceiling is strong enough to bear the indoor unit weight.
- If top panel access holes for wiring and communication cable are utilized, the clearance between the unit and the wall could be 0mm.
- Where piping between indoor and outdoor units is possible within the allowable limit.
- Multi-Position Air Handling Units can be installed for upflow, downflow, horizontal left, and horizontal right positions.

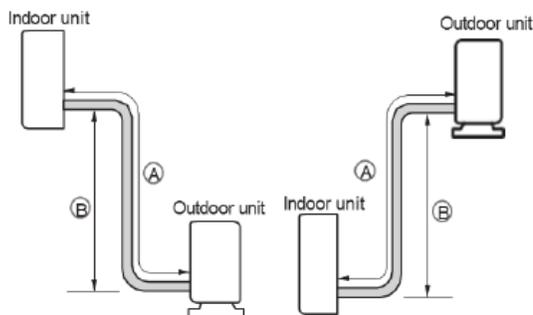


# REFRIGERANT PIPING

## Refrigerant Pipe Sizes, Max. Lengths, and Additional Charge Calculation

Refer to the table below for piping requirements and limitations.

Model	Pipe Size mm (in)		Length A Unit: m (ft)		Elevation B Unit: m (ft)		Additional refrigerant Unit: g/m (oz/ft)
	Gas	Liquid	Standard	Max	Standard	Max	
KUSXB091A KUSXB121A	Ø 9.52 (3/8)	Ø 6.35 (1/4)	7.5 (24.6)	20 (66)	5 (16)	30 (98)	20 (0.22)
KUSXA121A	Ø 9.52 (3/8)	Ø 6.35 (1/4)	7.5 (24.6)	50 (164)	5 (16)	30 (98)	35 (0.38)
KUSXB181A KUSXB241A KUSXB301A KUSXA181A KUSXA241A	Ø 15.88 (5/8)	Ø 9.52 (3/8)	7.5 (24.6)	50 (164)	5 (16)	30 (98)	35 (0.38)
KUSXB361A KUSXB421A KUSXB481A KUSXA301A KUSXA361A	Ø 15.88 (5/8)	Ø 9.52 (3/8)	7.5 (24.6)	75 (246)	5 (16)	30 (98)	40 (0.43)
KUSXA421A KUSXA422A KUSXA481A KUSXA482A	Ø 15.88 (5/8)	Ø 9.52 (3/8)	7.5 (24.6)	75 (246)	5 (16)	30 (98)	40 (0.43)
KUSXB601A	Ø 19.05 (3/4)	Ø 9.52 (3/8)	7.5 (24.6)	75 (246)	5 (16)	30 (98)	40 (0.43)



If installed pipe is shorter than 25ft additional refrigerant charging is not necessary.

Total Additional Refrigerant = [A – 25ft] x Additional refrigerant (oz/ft)

Ex) Outdoor Unit - KUSXB181A, Total pipe length(A) is 50ft

Total Additional Refrigerant = (50 – 25) x 0.38 (oz/ft) = 9.5 oz

# REFRIGERANT PIPING

## Reusing Existing Refrigerant Pipes

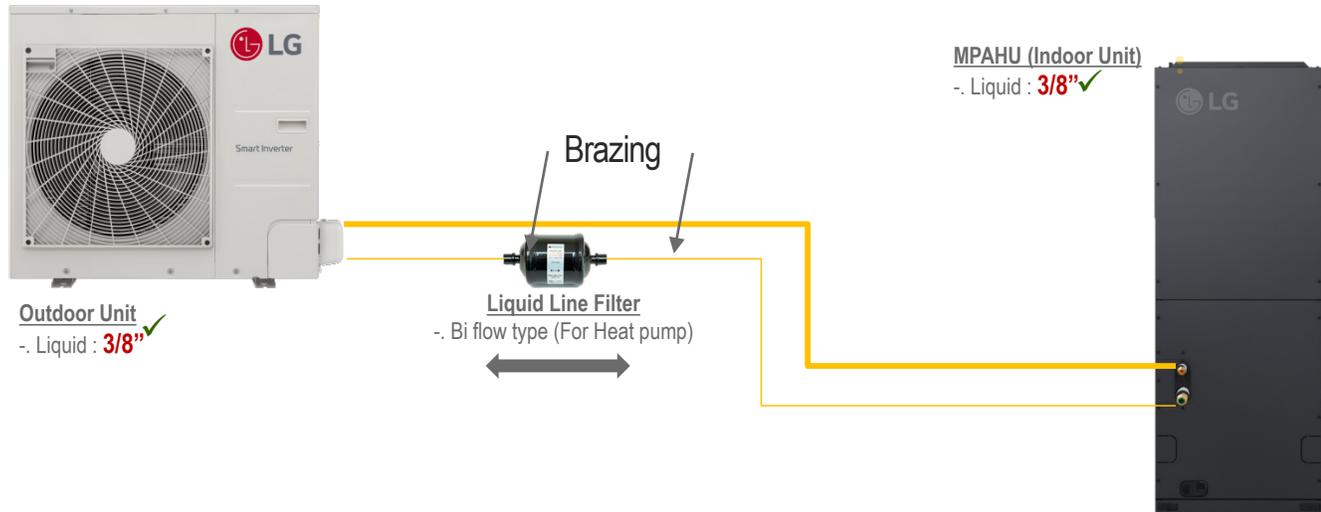
Multi-Position Air Handling Unit includes an indoor EEV. Therefore, existing refrigerant lines can be reused, provided that the refrigerant lines are free of leaks, acid, foreign substance and oil. Industry standard flushing and purging procedures must be used. Ensure that the flush kit is compatible with R32 refrigerant.

The following adaptor kits are provided to connect to the existing lines:

Capacity	Outdoor Unit	Connection Size (Flare)		Adaptor (ODU side) (Included in Outdoor Unit Package)	Available Pipe Size		Adaptor (IDU side) (Included in Outdoor Unit Package)	Connection Size (Brazing)		Indoor Unit
		Gas	Liquid		Gas	Liquid		Gas	Liquid	
1.5RT	KUSXA181A KUSXB181A	5/8"	3/8"	<b>Gas : 5/8" → 3/4"</b> 	5/8"	3/8"	<b>Gas : 5/8" → 3/4"</b> 	5/8"	3/8"	KNSXA181A KNSXB181A
		(Ø15.88)	(Ø9.52)					(Ø15.88)	(Ø9.52)	
2.0RT	KUSXA241A KUSXB241A	5/8"	3/8"	<b>Liq : 3/8" → 3/8"</b> 	5/8"	3/8"		5/8"	3/8"	KNSXA241A KNSXB241A
		(Ø15.88)	(Ø9.52)					(Ø15.88)	(Ø9.52)	
2.5RT	KUSXA301A KUSXB301A	5/8"	3/8"	<b>Gas : 5/8" → 3/4"</b> 	5/8"	3/8"	<b>Gas : 5/8" → 3/4"</b> 	5/8"	3/8"	KNSXA301A KNSXB301A
3.0RT	KUSXA361A KUSXB361A	5/8"	3/8"					5/8"	3/4"	
		(Ø15.88)	(Ø9.52)	(Ø15.88)	(Ø9.52)					
3.5RT	KUSXA422A KUSXB422A	5/8"	3/8"	<b>Gas : 5/8" → 7/8"</b> Brazing 	5/8"	3/8"	<b>Gas : 5/8" → 3/4"</b> <b>5/8" → 7/8"</b> 	5/8"	3/8"	KNSXA422A KNSXB422A
		(Ø15.88)	(Ø9.52)					(Ø15.88)	(Ø9.52)	
4.0RT	KUSXA482A KUSXB482A	5/8"	3/8"		5/8"	3/8"		5/8"	3/8"	KNSXA482A KNSXB482A
		(Ø15.88)	(Ø9.52)					(Ø15.88)	(Ø9.52)	
5.0RT	KUSXB601A	3/4"	3/8"	<b>Liq : 3/8" → 3/8"</b> 	3/8"	3/8"		3/4"	3/8"	KNSXB601A
		(Ø19.05)	(Ø9.52)					(Ø19.05)	(Ø9.52)	

- It is not required to insulate the liquid line for this system combination.
- When adapting the pipes on the indoor MPAHU, depending on the installation method, it may be necessary to cut off the flare socket connection before adapting to the existing pipe.
- When reusing existing refrigerant pipes, it is recommended to install filter drier to provide the system additional protection.

# REFRIGERANT PIPING



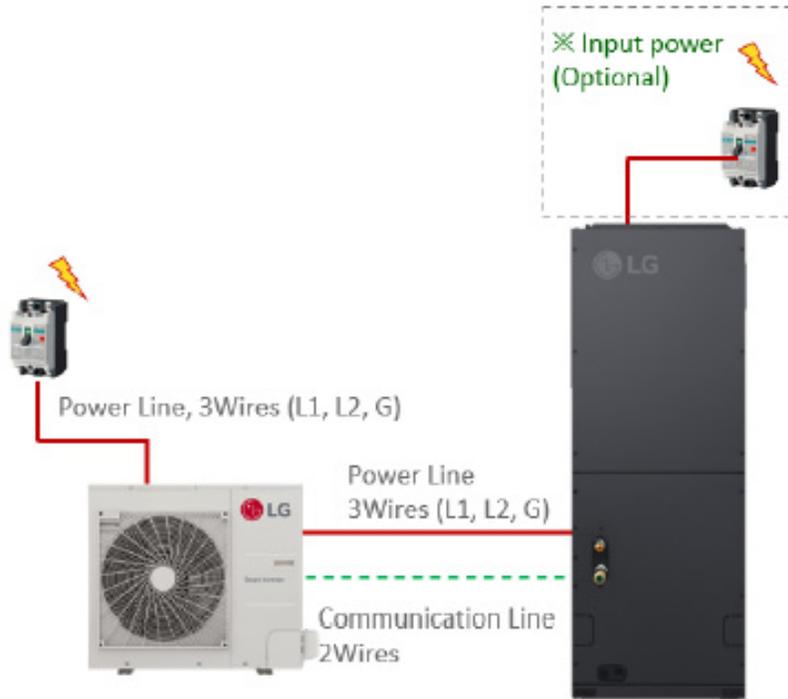
System Spec.				
Capacity	System type	Refrigerant	System oil	Pipe diameter (Liquid)
1 ton	Heat pump	R32	PVE	3/8"
1.5 ton			PVE	
2 ton			PVE	
2.5 ton			PVE	
3 ton			PVE	
3.5 ton			PVE	
4 ton			PVE	
5 ton			PVE	

- Install a liquid line filter drier.
- Use a Heat Pump compatible liquid line filter drier. (Bi-Flow Type).
- Install a Heat Pump type liquid line filter drier that is compatible with the system capacity, refrigerant, and oil.
- A proper refrigerant piping flush must be performed on the existing line set (if used) before the liquid line filter is installed.
- A refrigerant piping flush must be performed when replacing R410A system with R32 system. Use industry standard flushing practices and a compatible flush kit.

# POWER AND COMMUNICATION

## Power and Communication

Refer to the power and wire sizing guidelines below. The indoor unit can be powered separately using a 208/230V 1Ph 15A circuit.



### ⚠ WARNING

All power wiring and communication cable installation must be performed by trained service providers working in accordance with local, state, and National Electrical Code (NEC) / UL / ETL federal regulations related to electrical equipment and wiring, and following the manufacturer product diagrams, requirements, and instructions in this manual. Failure to do so will lead to electric shock which can cause physical injury or death.

Outdoor				Indoor (ODU → IDU)		
Standard MPAHU Model	MCA	MOP	Power Wire Size	Standard MPAHU Model	Power Wire Size	Comm Wire Size
KUSXB121A	13.4	30	14 AWG	KNSLB121A	14 AWG	18 AWG
KUSXB181A	16.0	30	12 AWG	KNSLB181A		
KUSXB241A	16.0	30	12 AWG	KNSLB241A		
KUSXB301A	19.1	35	12 AWG	KNSLB301A		
KUSXB361A	32.0	35	10 AWG	KNSLB361A		
KUSXB421A	32.0	40	10 AWG	KNSLB421A		
KUSXB481A	32.0	40	10 AWG	KNSLB481A		
KUSXB601A	32.0	40	10 AWG	KNSLB601A		

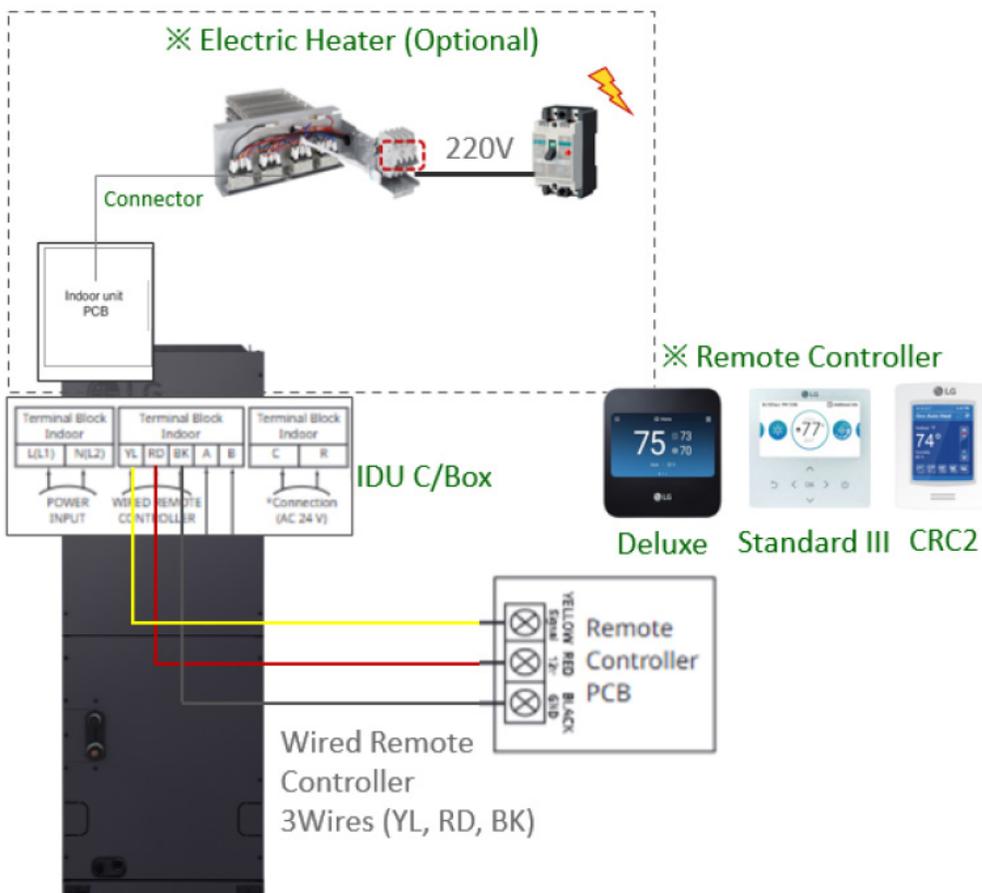
Outdoor				Indoor (ODU → IDU)		
LGRED MPAHU Model	MCA	MOP	Power Wire Size	LGRED MPAHU Model	Power Wire Size	Comm Wire Size
KUSXA121A	19.1	30	14 AWG	KNSLB121A	14 AWG	18 AWG
KUSXA181A	19.1	30	14 AWG	KNSLA181A		
KUSXA241A	19.1	30	12 AWG	KNSLA241A		
KUSXA301A	32.0	35	12 AWG	KNSLA301A		
KUSXA361A	32.0	35	12 AWG	KNSLA361A		
KUSXA422A	32.0	40	10 AWG	KNSLB421A		
KUSXA482A	32.0	40	10 AWG	KNSLB481A		

When installing the Multi-Position Air Handling Unit system, it is required to have communication between the indoor and outdoor unit. LG highly recommends using 18/2 stranded shielded wire whenever possible to ensure communication integrity. In replacement applications LG understands that installing new wiring can present challenges. In these applications, use of 18/2 solid core wire is allowed under the following conditions:

- Ring connectors are used when connecting the wire to the terminal block to ensure contact is properly made between the wire and the terminal.
- Continuity of the existing wire has been verified.
- If existing wire has been used and site communication errors occur, LG recommends pulling new 18/2 stranded shielded wire to correct any issues.

## Connecting an LG Controller

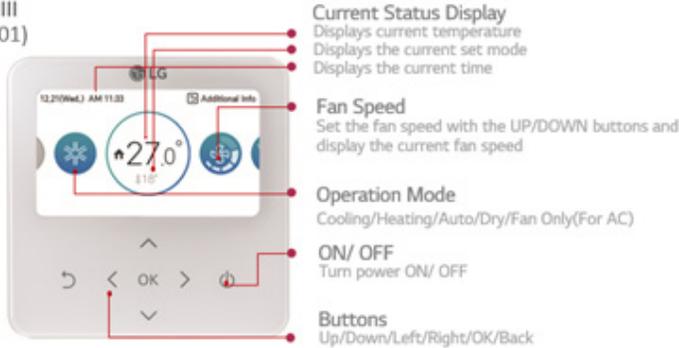
Refer to the diagram below for LG controller wiring. Use 22 AWG wire when connecting the controller.



# CONTROLLERS

## LG Controller Types

Standard III  
(PREMTB101)



LG Deluxe  
(PREMTA201)



LG CRC2  
(PREMTBVC2,3)

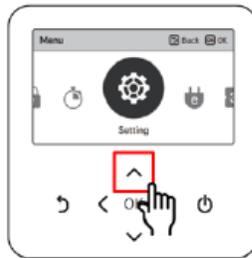


## LG Controller – Accessing Installer Settings

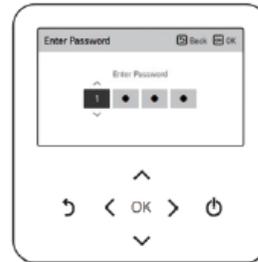
LG Standard (PREMTB101) – Password is software version



Go to the Menu → Setting screen by using left/right arrow and OK button.



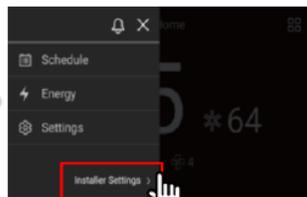
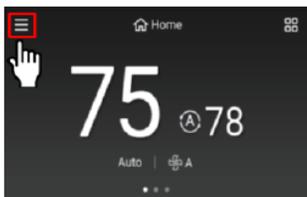
Press and hold up arrow button more than 3 seconds until password prompt will appear.



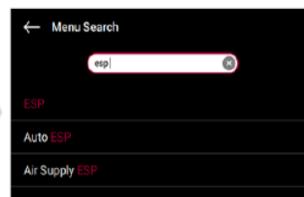
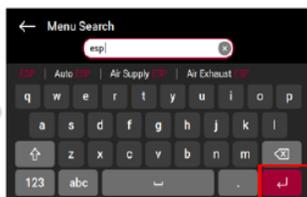
Enter the correct password using up/down/left/right arrow button and hit the OK.

## LG Deluxe (PREMTA201)

A password entry prompt will appear to prevent from unauthorized access.



Check the SW version at Menu-> Settings -> Service -> SW version  
If the version is 1.000, the password is 1000



Magnifier icon will help you to search setting item by name or function code.

## LG CRC2



Touch and hold here for 3 seconds to enter configuration mode.



Select Installer menu  
→ Setting General, Temperature, Fan and Heat settings and Accessories configuration

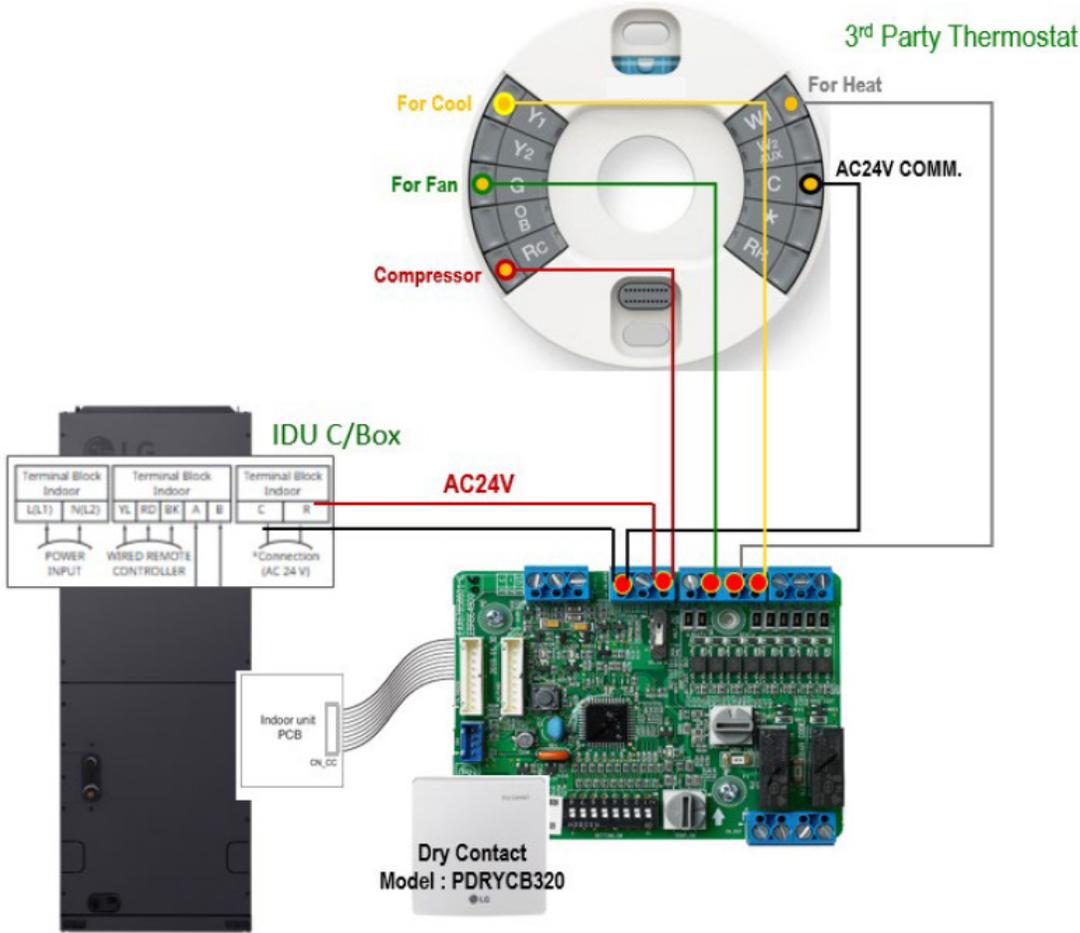


Code search  
→ Use the Up and Down arrows to choose an available Function Code and select the Code Search button to navigate to the screen where that function code resides

# CONTROLLERS

## Connecting a Third Party 24v controller

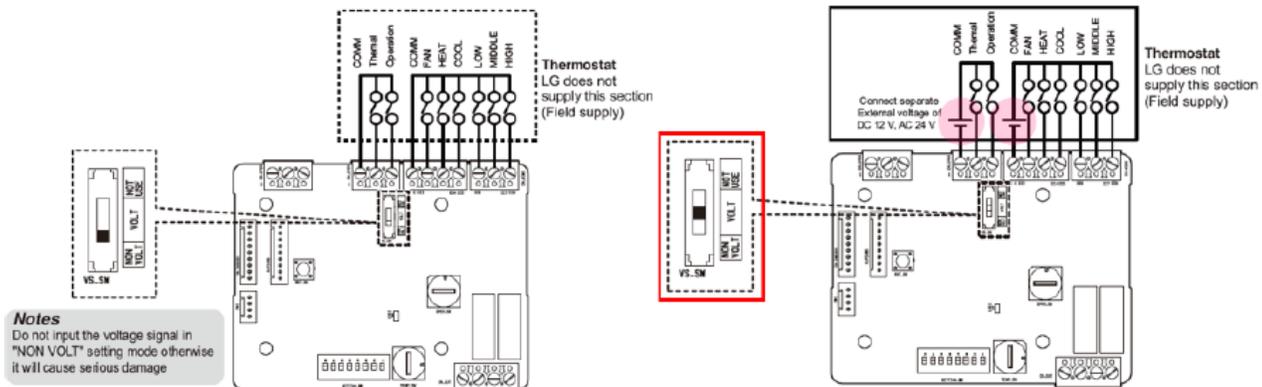
- Note that PDRYC320 accessory is required.



### Voltage Setting

✓ Non voltage setting

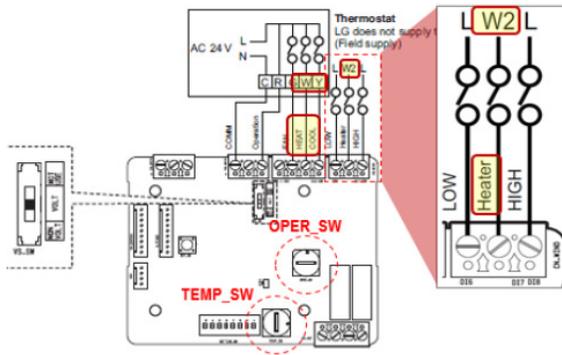
✓ Voltage setting : DC 12V(3A), AC 24V(3A)



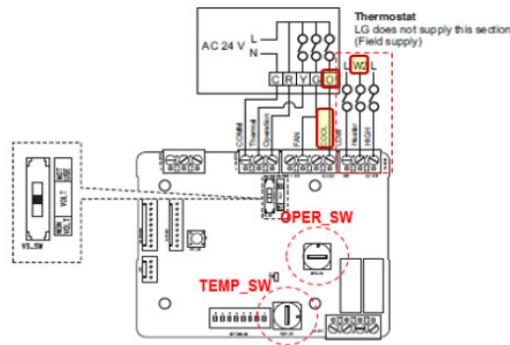
## Thermostat Type Configuration

Note that these are PDRYC320 DIP and rotary dial settings.

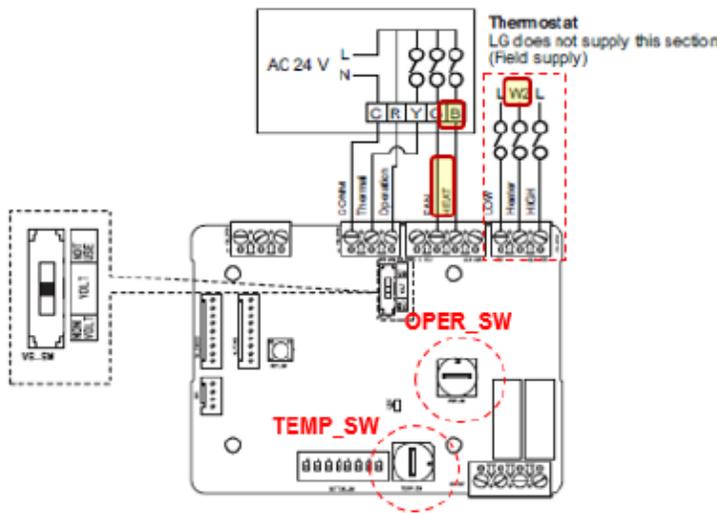
Conventional thermostat \_ Cool / Heat



Heat pump thermostat with O terminal signal input \_ Cool



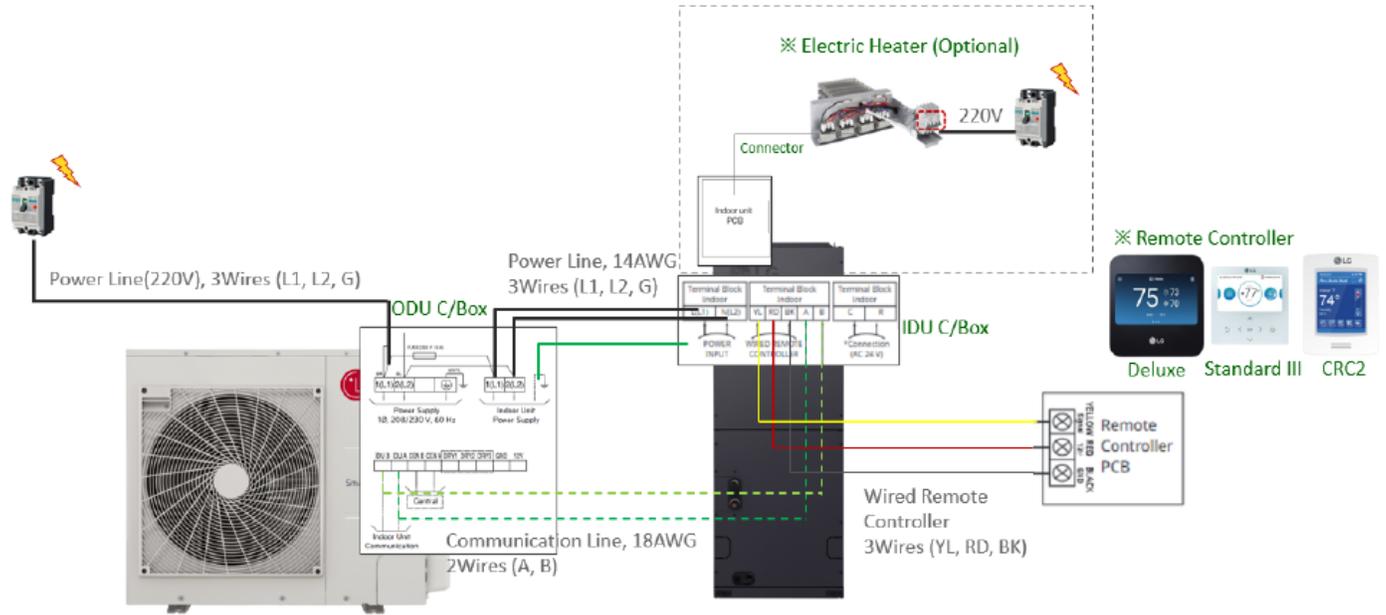
Heat Pump Thermostat with B Terminal signal input \_ Heat



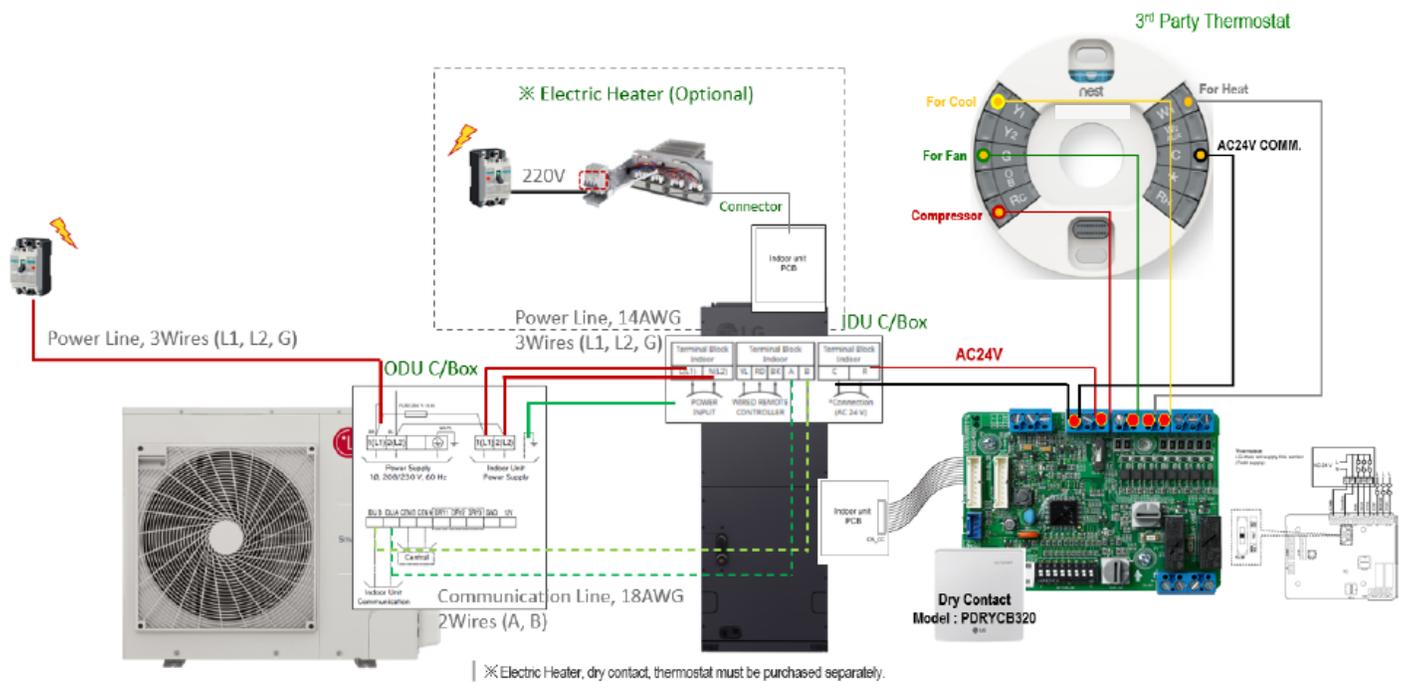
Temp_SW	Oper_SW	Product	Thermostat Type	Wind Signal Enable / Disable (Low/Med/High)	W2 Signal Enable / Disable
F	0	Aircon	Conventional	Disable	Disable
	1			Enable	Disable
	2		Heat Pump "O" Terminal	Disable	Disable
	3			Enable	Disable
	4		Heat Pump "B" Terminal	Disable	Disable
	5			Enable	Disable
	6	MPAHU	Conventional	Disable	Enable
	7			Enable (Low/High only)	Enable
	8		Heat Pump "O" Terminal	Disable	Enable
	9			Enable (Low/High only)	Enable
	A		Heat Pump "B" Terminal	Disable	Enable
	B			Enable (Low/High only)	Enable

# WIRING DIAGRAMS

## Wiring Diagram (when using LG Controller)

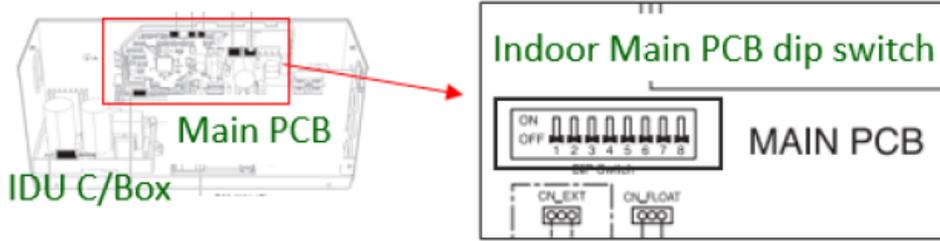


## Wiring Diagram (when using Third Party Controller)



# INDOOR / OUTDOOR DIP SWITCHES

## Indoor Unit DIP Switches



	Function	Description	Setting Off	Setting On	Default
SW1	Communication	N/A (Default)	-	-	Off
SW2	Cycle	N/A (Default)	-	-	Off
SW3	Group Control	Selection of Main or Sub	Main	Sub	Off
SW4	Dry Contact Mode	Selection of Dry Contact Mode	Wire/Wireless Remote Controller selection of Manual or Auto operation Mode	3rd party Thermostat use with Dry Contact	Off
SW5	Installation	Fan Continuous Operation	Default	-	Off
SW6	Heater Linkage	Aux (Internal) Heater Installed / Uninstalled	Manual Mode	Auto Mode (LG Internal Logic)	Off
SW7	Ventilator Linkage	Selection of Ventilator Linkage	Linkage Removal	Working	Off
	Vane Selection (Console)	Selection of up/down side vane	Upside + Downside Vane	Upside Vane Only	
	Region Selection	Selection of Tropical Region	General model	Tropical model	
SW8	Refrigerant Leak Detector	Selection of Installed / Uninstalled	Not Installed	Indoor Unit with Internal Electric Heater	On

- Related Thermostat
- Related Electric heater

In case of Indoor Unit without Internal Electric Heater

- DIP Switch 1, 2, 6, 8 must be set to OFF.

In case of Indoor Unit with Internal Electric Heater, DIP Switch 6 must be set to ON.

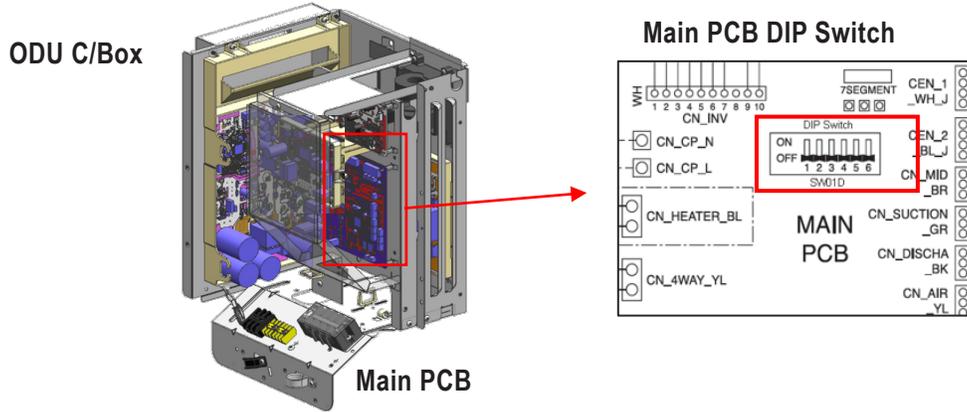
- SW6 ON: Automatic Heater operation: Heater operates automatically according to heater logic.
- SW6 OFF: Manual Heater operation: Owner's involvement is required for on/off operation.

In case of Indoor Unit with Internal Electric Heater, if DIP Switch 5 is set to ON.

- SW5 ON: Fan operates continuously. During defrosting or oil return operation, uninterrupted heating can be attained as a result of continuous heater and fan operation.
- SW5 OFF: Fan discontinuous operation. There could be reduction in heating capacity.

# INDOOR / OUTDOOR DIP SWITCHES

## Outdoor Unit DIP Switches



DIP Switch 1 2 3 4 5 6 7	Function
	Normal Operation (No Function)
	Pump Down
	Mode Lock (Cooling)
	Mode Lock (Heating)
	Night Quiet Mode (Step 1)
	Night Quiet Mode (Step 2)
	Mode Lock (Cooling) + Night Quiet Mode (Step 1)
	Mode Lock (Cooling) + Night Quiet Mode (Step 2)

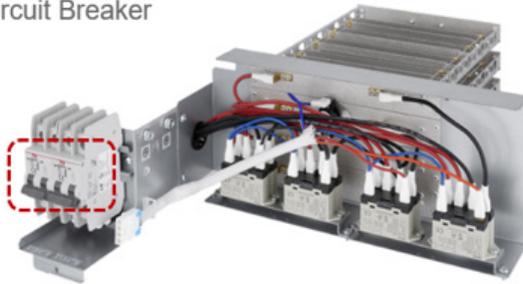
- If you set the DIP Switch when power is on, the change in setting is not applicable. The setting change is enabled only when Power is reset.

# AUXILIARY ELECTRIC HEATER INSTALLATION

## Electric Heater Size Options



Terminal Block with Circuit Breaker



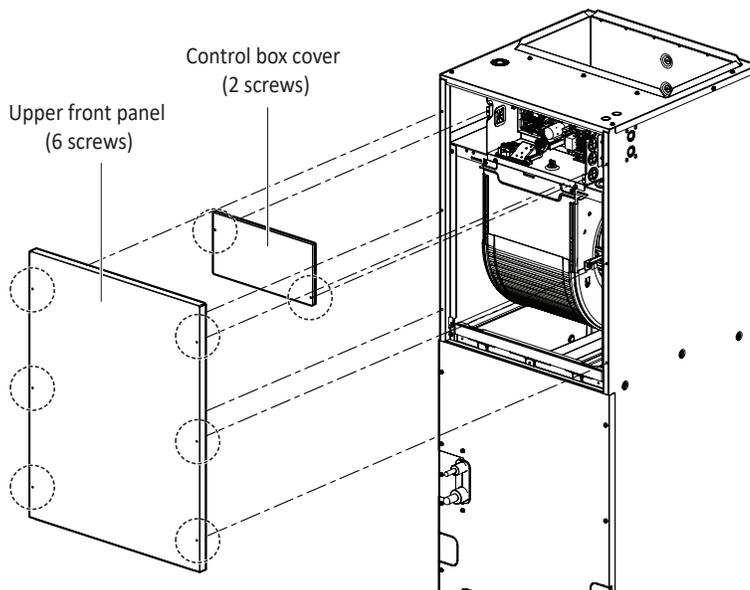
Capacity	Model Number
3kW Electric Heater	ANEH033C1
5kW Electric Heater	ANEH053C1
8kW Electric Heater	ANEH083C2
10kW Electric Heater	ANEH103C2
15kW Electric Heater	ANEH153C3
20kW Electric Heater	ANEH203C3

Image shown above may vary depending on model capacity. For additional information, refer to the Electric Heater Manual.

If a Third-Party Dry Contact and an LG internal heater or an LG Auxiliary Heat Kit is installed, supplemental heat capability cannot be controlled by the Third-Party Thermostat.

## Electric Heater Installation Steps

Step 1: Open an upper front panel and a control box cover.

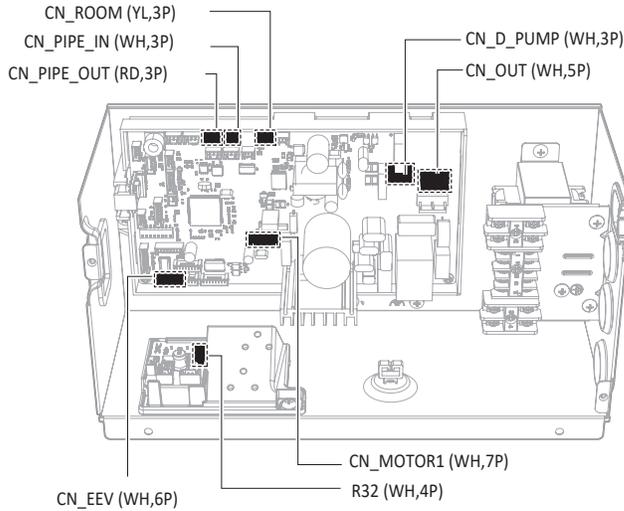


# AUXILIARY ELECTRIC HEATER INSTALLATION

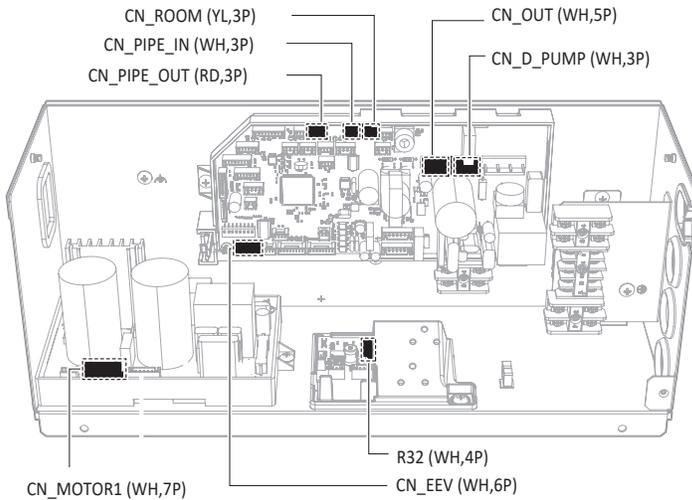
Step 2: Separate connectors to disassemble the control box.

Three thermistors (CN\_PIPE OUT, CN\_PIPE IN, CN\_ROOM), two empty connectors (CN\_OUT, CN\_D\_PUMP), and CN\_EEV, CN\_MOTOR1 and R32 connectors.

## NA, NB Chassis

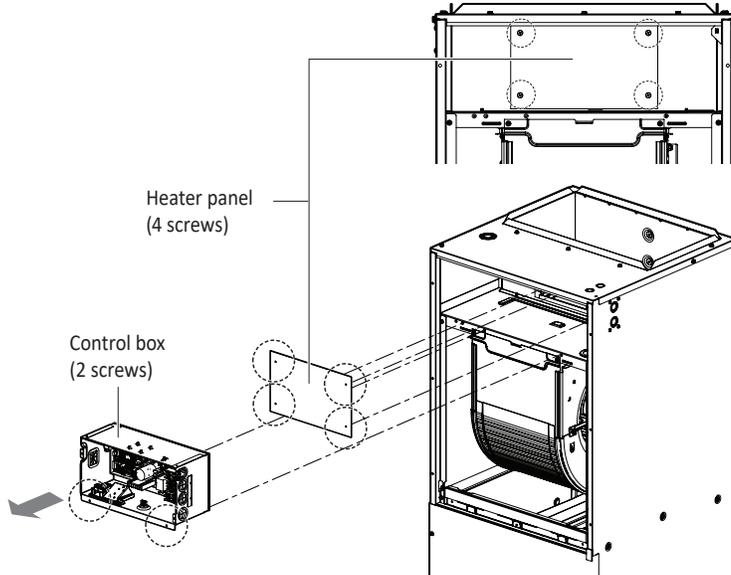


## NC Chassis

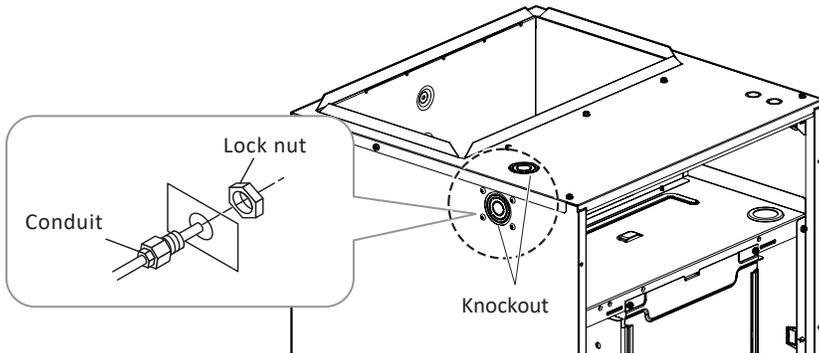


# AUXILIARY ELECTRIC HEATER INSTALLATION

Step 3: After removing screws, pull out the control box and remove heater panel.



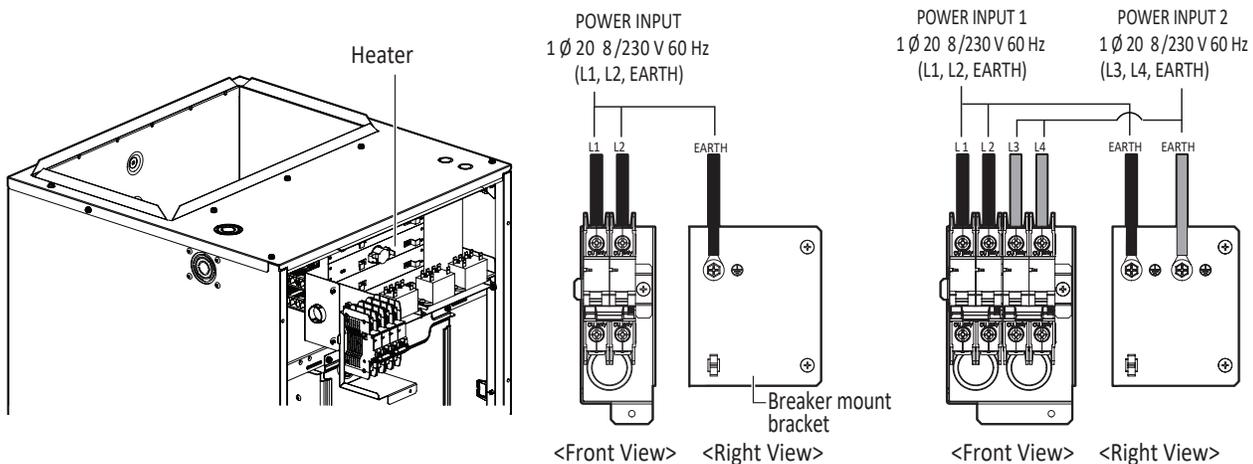
Step 4: Remove one knockout and connect a conduit.



Step 5: Connect two or four power cables to a circuit breaker. Connect one or two earth cables to a breaker mount bracket.

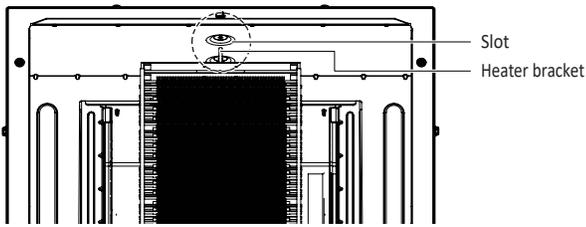
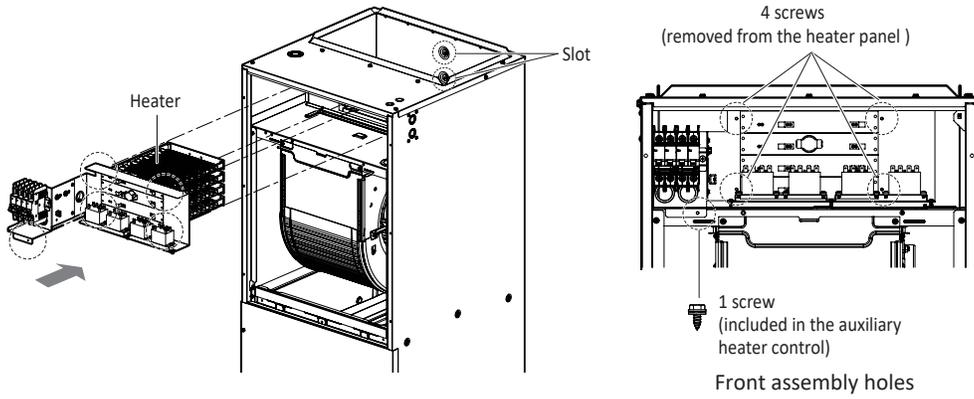
3, 5, 8, 10 kW Heater

15, 20 kW Heater

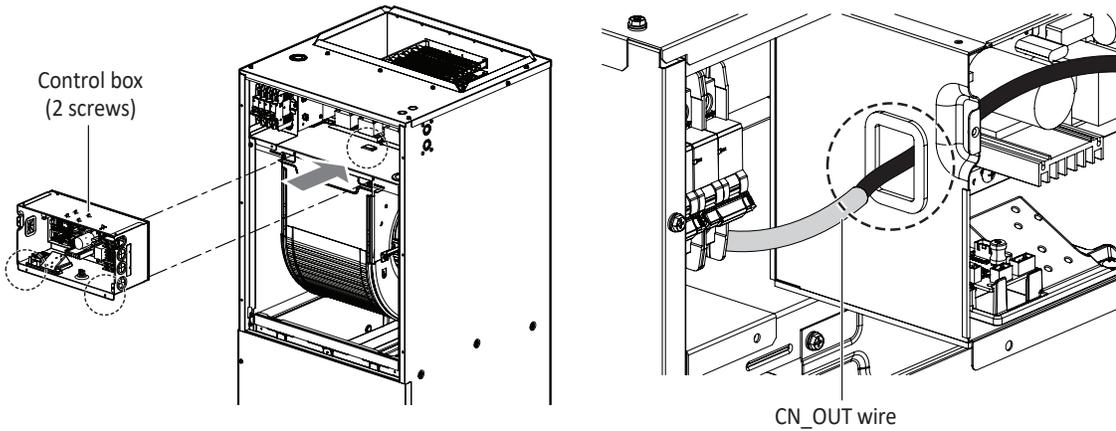


# AUXILIARY ELECTRIC HEATER INSTALLATION

Step 6: Fully install the heater by inserting a heater into one or two slots. Assemble the heater to the panel using existing holes and screws.



Step 7: Push and insert the control box and assemble the screws.

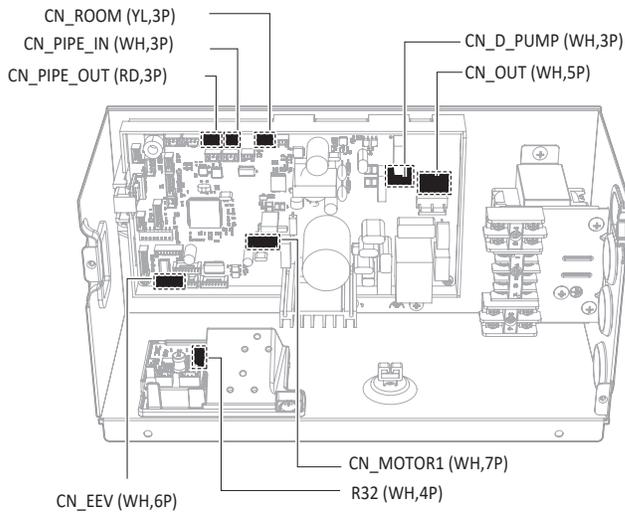


# AUXILIARY ELECTRIC HEATER INSTALLATION

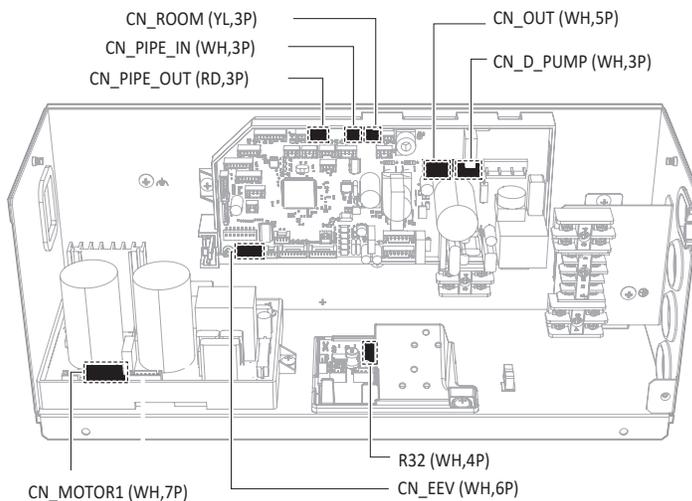
Step 8: Connect the connectors shown below.

Three thermistors (CN\_PIPE OUT, CN\_PIPE IN, CN\_ROOM), two empty connectors (CN\_OUT, CN\_D\_PUMP), and CN\_EEV, CN\_MOTOR1 and R32 connectors.

## NA, NB Chassis



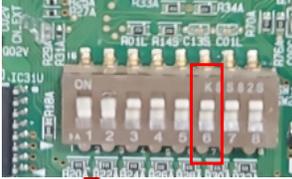
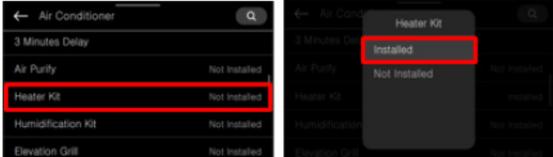
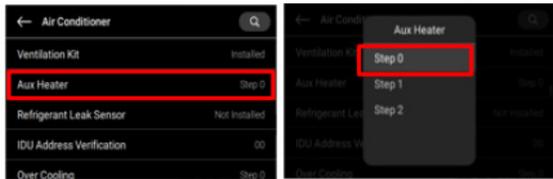
## NC Chassis



Step 9: Lastly reinstall control box panel and front cover.

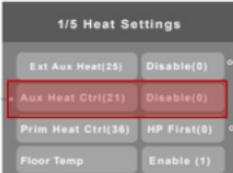
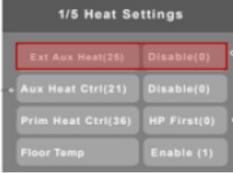
# AUXILIARY ELECTRIC HEATER CONFIGURATION

## LG Controllers Configuration

	 <b>LG Heater (Auto mode)</b>
<p>Step 1. Indoor PCB Dip switch Setting</p>	<p>Dip SW : 6 ON</p> 
<p>Step 2. Wired Remote Controller</p>  <p>Deluxe Standard III</p>	<p>*FC21 Installer Setting → Heater Kit → <b>Installed (default)</b></p> 
	<p>*FC25 Installer Setting → Aux Heater → <b>Step0 (default)</b></p> 

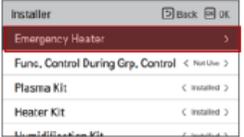
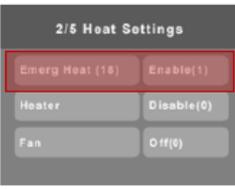
Note: DIP Switch SW6

- ON : Auto mode
- OFF : Manual mode

<p>Step 2. Wired Remote Controller</p>  <p>CRC2</p>	<p>*FC21 1/5 Heating Settings → Aux Heat ctrl(21) → <b>Enable(1)</b></p> 
	<p>*FC25 1/5 Heating Settings → Ext Aux Heat(25) → <b>Disable(0)</b></p> 

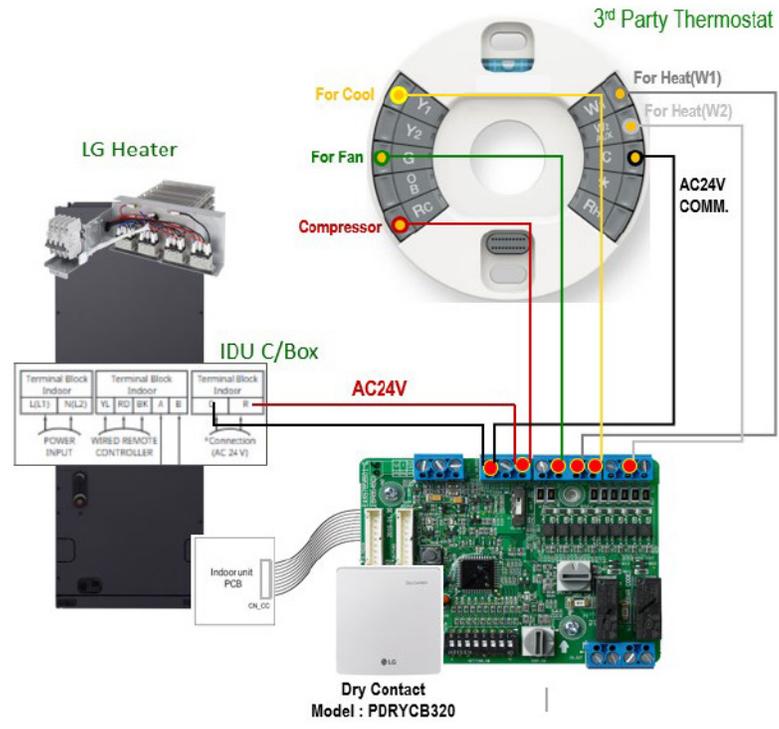
# AUXILIARY ELECTRIC HEATER CONFIGURATION

## LG Controllers Emergency Heat Configuration

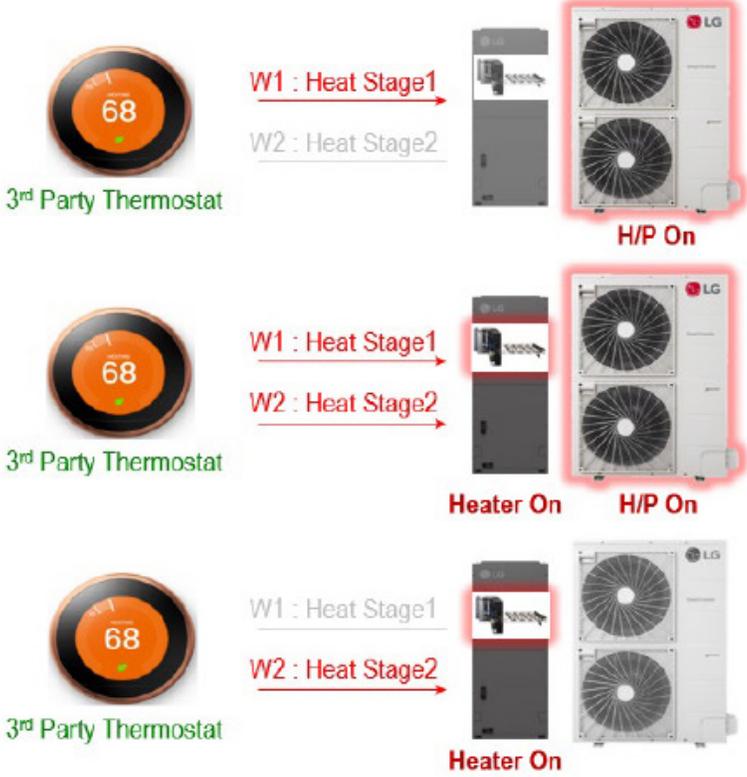
	 <b>LG Heater, Auxiliary Heater Kit (Emergency Heater Setting, FC18)</b>	
 <b>Deluxe</b>	<b>[Deluxe] Emergency Heater</b>	 
 <b>Standard III</b>	<b>[Standard III] Installer → Emergency Heater → USE</b>	 
 <b>CRC2</b>	<b>[CRC2] 2/5 Heat Settings → Emerg Heat(18) → Enable(1)</b>	

# AUXILIARY ELECTRIC HEATER CONFIGURATION

## Third party 24V Controllers Configuration



W1 and W2 calls need to be configured according to the chosen thermostat.



# EXTERNAL STATIC PRESSURE (ESP)

## Static Pressure Setting

The values in the table shown below are from 000 – 255 and are adjusted in the LG remote controller.

### NOTICE

- LG controller is required to make static pressure adjustments. The controller can be plugged in to make the necessary adjustments and then removed when using the third party controller.
- Power must be cycled if an LG remote is used to make settings changes and then removed.

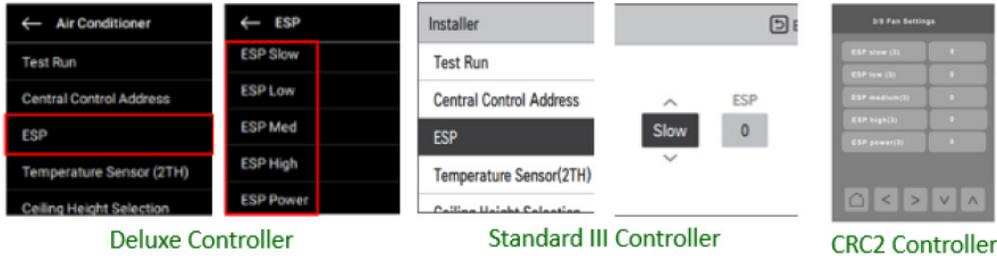
Model	Step	CFM	Setting Value @ ESP (in.wc)									
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
KNSLB121A KNMLB121A	HIGH	500	Constant Flow Rate condition									
	MID	460										
	LOW	420										
KNSLB181A KNSLA181A KNMLB181A	HIGH	600	Constant Flow Rate condition									
	MID	510										
	LOW	440										
KNSLB241A KNSLA241A KNMLB241A	HIGH	800	Constant Flow Rate condition									
	MID	700										
	LOW	580										
KNSLB301A KNMLB301A	HIGH	875	56	64	70	77	83	88	93	99	103	109
	MID	750	50	56	62	66	70	77	82	85	90	93
	LOW	630	50	50	52	56	59	64	69	72	75	76
KNSLA301A	HIGH	875	58	65	73	78	83	90	96	101	105	11
	MID	750	51	58	62	66	70	78	83	87	90	93
	LOW	630	50	50	53	56	59	65	70	73	75	77
KNSLB361A KNMLB361A	HIGH	1050	64	71	77	81	87	92	97	102	106	111
	MID	980	55	61	66	70	75	81	84	88	93	97
	LOW	900	50	52	56	60	64	68	71	74	78	81
KNSLA361A	HIGH	1050	63	70	76	82	86	94	98	104	105	112
	MID	980	58	63	70	75	81	84	87	91	95	98
	LOW	900	54	58	66	71	75	78	81	84	78	83
KNSLB421A	HIGH	1225	71	77	83	88	93	98	102	11	111	116
	MID	1100	61	66	71	76	83	84	87	93	95	101
	LOW	1000	56	62	67	72	76	79	82	85	88	91
KNSLB481A	HIGH	1400	79	85	90	94	99	105	105	113	115	120
	MID	1200	67	74	79	81	86	89	93	97	10	105
	LOW	1070	61	65	69	73	77	80	83	86	89	92
KNSLB601A	HIGH	1750	81	86	90	95	100	104	109	112	116	120
	MID	1575	73	76	81	85	89	92	97	10	105	108
	LOW	1400	66	67	73	77	79	82	87	90	95	97

# EXTERNAL STATIC PRESSURE (ESP)

## ESP Setting (FC03)

### NOTICE

- LG controller is required to make static pressure adjustments. The controller can be plugged in to make the necessary adjustments and then removed when using the third party controller.
- Power must be cycled if an LG remote is used to make settings changes and then removed.



### [Set Value]

- 01: ESP Slow – ESP setting for fan speed Slow
- 02: ESP Low – ESP setting for fan speed Low
- 03: ESP Med – ESP setting for fan speed Med
- 04: ESP High – ESP setting for fan speed High
- 05: ESP Power – ESP setting for fan speed Power

- 0 is the number displayed for factory settings.
- If FC3 value(s) are changed from default settings (000) then FC5, FC6, and FC32 values will not be used.
- Only select products have five fan speeds.
- CFM settings can be set with LG remote control. In case of 24V controller, default settings cannot be changed.
- For details, refer to the Remote Control Installation Manual.

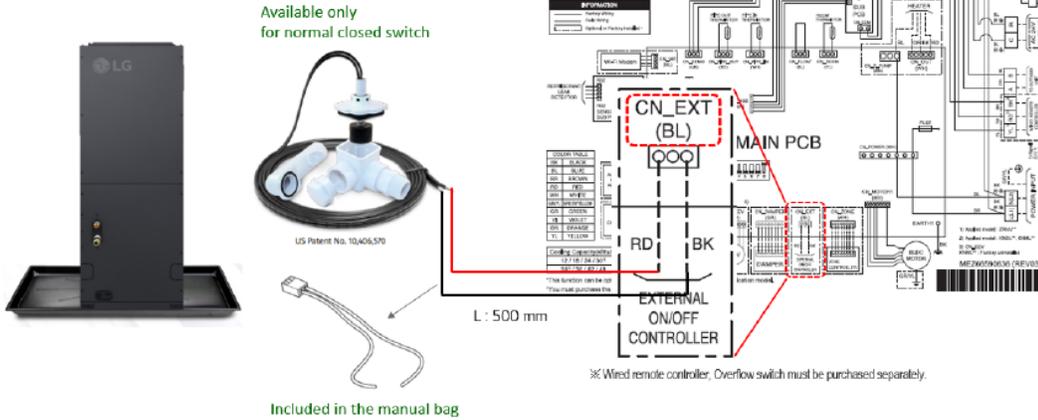
# DRAIN SHUTOFF SWITCH WIRING

## Drain Shutoff Switch Wiring (When Using LG Controllers)

Note that the drain overflow switch is a third party accessory.

### Wiring

Connect Overflow Switch to CN\_EXT of PCB



## LG Controller Configuration and Error Display

### Setting

Set Installer Setting : CN\_EXT(FC52) → Single Emergency Stop



### Operation Scenario

1. Detect overflow
2. Switch status is changed from Close to Open
3. Operate CN\_EXT
4. Product Stop & Lock



Can't apply operation. Please check central control.

This message indicates when overflow switch has been tripped

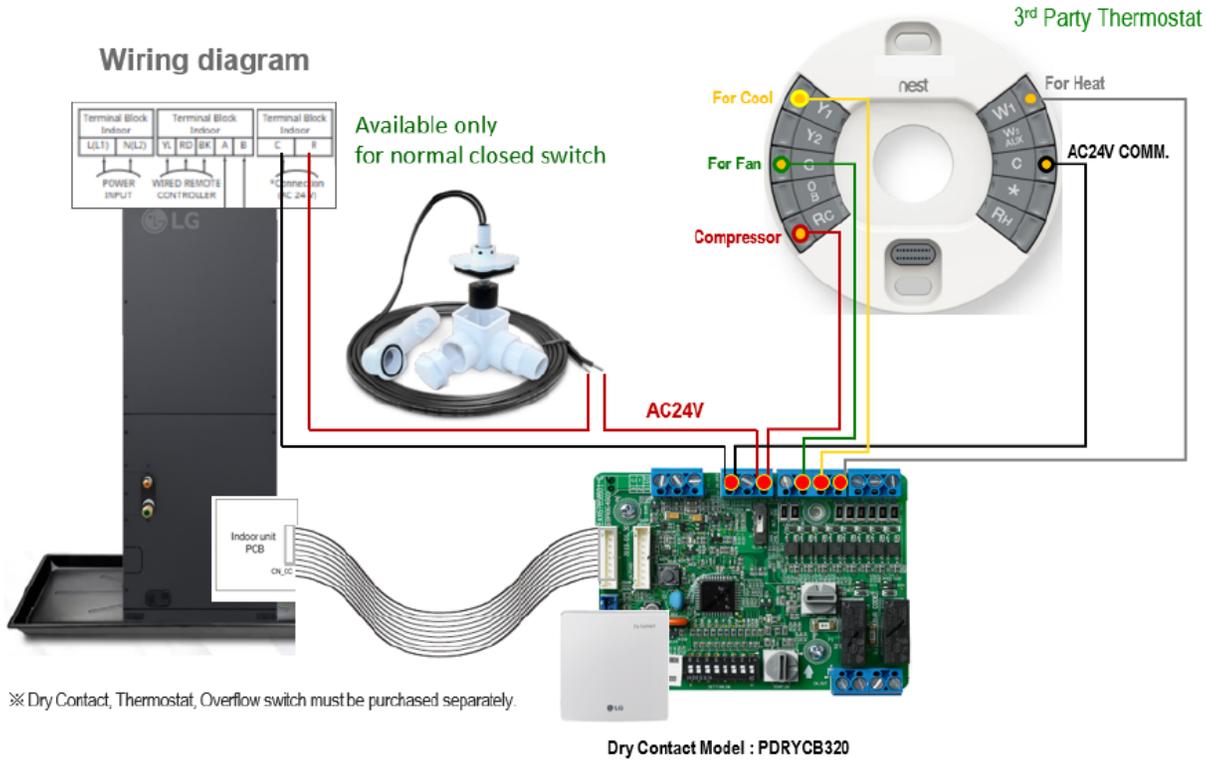


Available only for normal closed switch



# DRAIN SHUTOFF SWITCH WIRING

## Drain Shutoff Switch Wiring (When Using Third Party 24V Controllers)



# 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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www.lghvac.com

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