

Please read this manual carefully before installation and keep it for future reference.

Installation & Owner's Manual



MRCOOL®

COMFORT MADE SIMPLE

Hyper-Heat Single-Zone 24K-60K Ducted Air Handler & Condenser







Due to updates and constantly improving performance, the information and instructions within this manual are subject to change without notice. Please visit www.mrcool.com/documentation to ensure you have the latest version of this manual.

Version Date: 06/27/23

Installation of Air Handler Heat Kit (Optional, not included)

3

Accessories Included with Heat Kit

PART	LOOKS LIKE.....	QUANTITY
Owner's and Installation Manual		1
Foam Gasket		1
Screws		7
Silicone Breaker Cover		1
Electric Auxiliary Heating Wiring Diagram		1
Air Switch/Circuit Breaker Label		1

NOTE

Installation of heat kit must be performed by an authorized dealer or specialist. Please make sure to wear protective gear and follow all necessary rules and regulations when installing the heat kit.

The heat kits available for the central ducted unit are to be only installed internally within the unit in accordance with the installation instructions on the following pages. The sizes available are 5kw, 8kw, 10kw, 15kw, & 20kw. Only certain capacities of the heat kits are compatible with each capacity of the air handler.

NOTE: If the incorrect capacity heat kit is used it could cause damage to your unit, property, and/or personal injury. Please use the table below to determine which heat kit capacities are compatible with the capacity of unit being installed and will best suit the needs of the application.

AHU Capacity (BTU/hr)	MRCOOL Heat Kit Compatibility Chart Heat Kit Capacity (Kilowatts)				
	CENTRALHK05 (5kW)	CENTRALHK08 (8kW)	CENTRALHK10 (10kW)	CENTRALHK15 (15kW)	CENTRALHK20 (20kW)
24K	Y	Y	Y	Y	/
36K	Y	Y	Y	Y	Y
48K	/	Y	Y	Y	Y
60K	/	/	Y	Y	Y

Installation of Air Handler Heat Kit

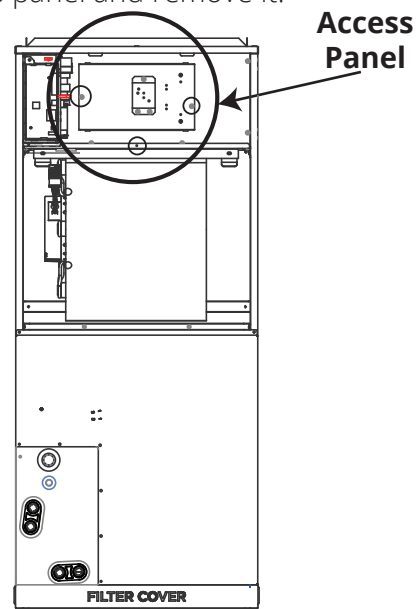
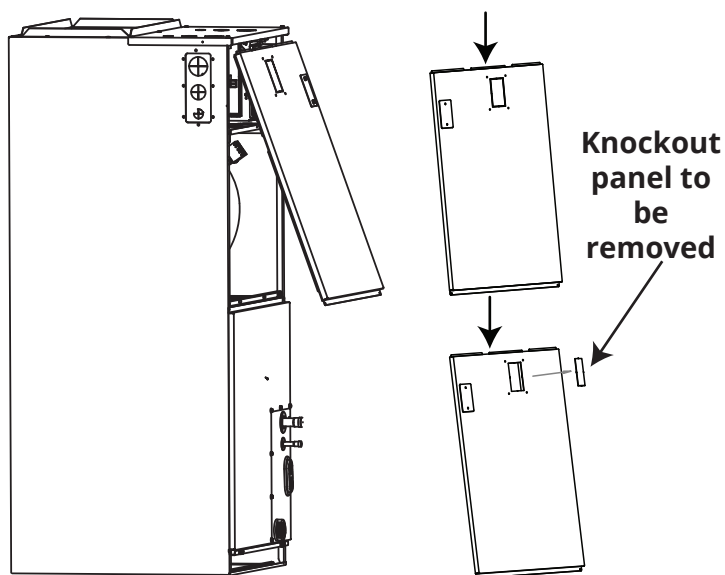
Installation Requirements

Before performing installation of the heat kit, ensure that the heat kit and accessories have not been damaged in shipping. If any damage is found, please contact the MRCOOL® tech department or your local dealer immediately. Also, confirm that all of the included accessories required for the installation are present and accounted for.

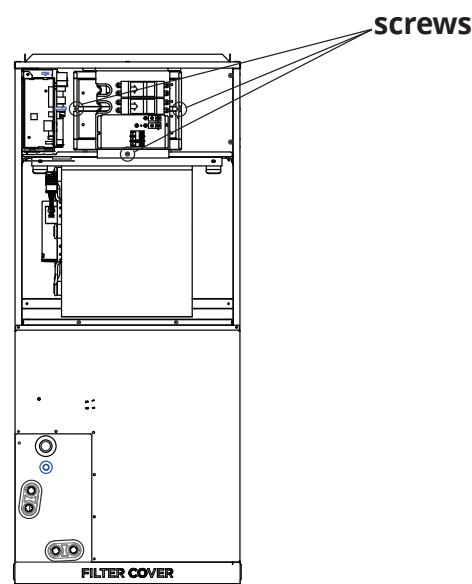
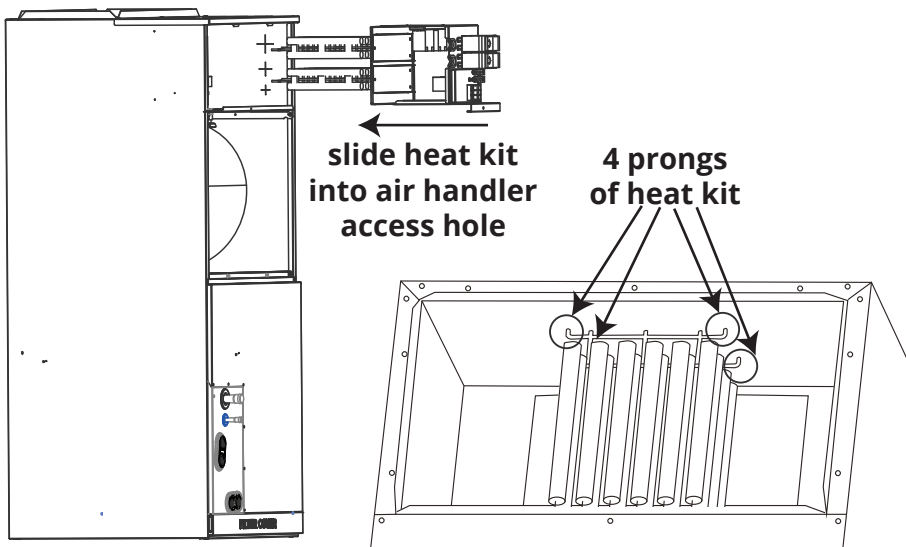
NOTE: Please check the table on the previous page and ensure the capacity of the heat kit you have is compatible with the capacity of the air handler being installed.

Heat Kit Installation Instructions

1. Remove the upper cover and use tools to completely remove the knockout panels from the cover.
2. Remove the terminal block and power cord. Then, loosen the screws that are securing the access panel and remove it.

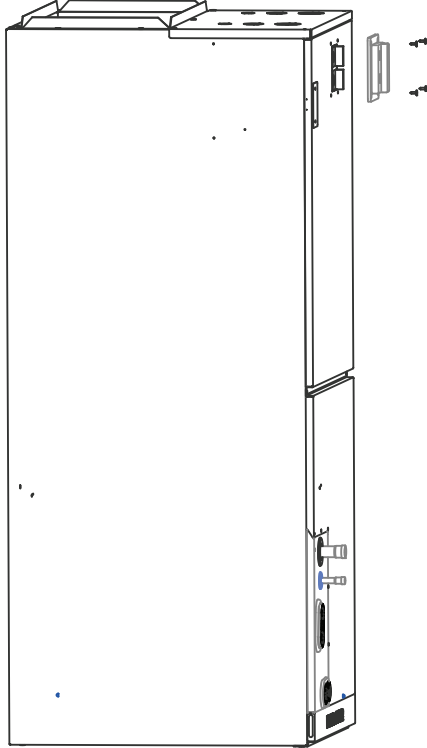


3. Now, slide the electric heat kit into the access hole of the air handler. There are four prongs on the front of the heat kit, ensure these line up and lock into the corresponding four support holes on the back of the cabinet.
4. Secure the heat kit in place with screws.



Installation of Air Handler Heat Kit

5. Complete wiring of heat kit according to the wiring nameplate.
6. Reinstall the upper cover of the air handler.
7. Install silicone breaker cover to the upper cover.



Once the electric heat kit wiring is connected and the unit installation is completed, please perform the following checks before powering on the unit and heat kit.

- Check all wiring and ensure that all wiring is securely and properly connected.
- Ensure the screws used to mount the heat kit are securely fastened.
- Ensure the size of the power wire meets the power supply requirements and NEC/local codes using the information below and contained within the electrical connections section further in this manual.

Heat Kit Capacity (kilowatts)	Number of circuit breakers	Number of relays	Number of power cord groups	Number of power cord grounding screws
5kW	1	1	2	2
8kW	1	2	2	2
10kW	1	2	2	2
15kW	2	3	3	3
20kW	2	4	3	3

NOTE

- The heat kit wiring diagram is with the included accessories.
- Please attach or paste the wiring diagram to the inside cover once the installation is complete for future reference.
- After installing the heat kit, affix the air switch label near the upper cover air switch.

Heat Kit Electrical Data 208/230V



Heat Kit Capacity (kilowatt)	Internal Circuit Protection	Circuit 1			Circuit 2		
		Heat Kit Amps	MCA (1)	MOCP (2)	Heat Kit Amps	MCA (1)	MOCP (2)
5kW	Ckt Bkr	18.0/20.0	23.0/27.0	25.0/30.0			
8kW	Ckt Bkr	28.8/32.0	37.0/42.0	40.0/45.0			
10kW	Ckt Bkr	36.1/40.0	46.0/53.0	50.0/60.0			
15kW	Ckt Bkr	18.0/20.0	23.0/27.0	25.0/30.0	36.1/40	46.0/53.0	50.0/60.0
20kW	Ckt Bkr	36.1/40.0	46.0/53.0	50.0/60.0	36.1/40	46.0/53.0	50.0/60.0

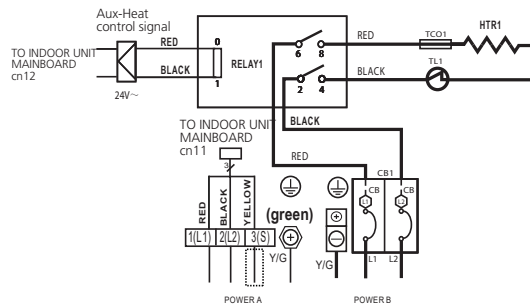
1. Minimum Circuit Ampacity (Heater Amps + Motor Amps) x 1.25
2. Maximum Overcurrent Protection = 2.25 x (Motor Amps + Heater Amps)


Installation of Air Handler Heat Kit

Heat Kit Wiring Diagrams

5KW HEAT KIT

-  :thermal cut-out
-  :thermal link, self-resetting



NOTE 1:  This symbol indicates the element is optional. The wiring type of the actual unit shall prevail.

NOTE 2: Please attach the nameplate to the cover of the electric control box. All the round holes located on the plate represent numbers. Please refer to the Installation Manual for details.

NOTE 3: TO BE WIRED IN ACCORDANCE WITH NEC AND LOCAL CODES.



NOTE 4: POWER A,B,C,D ARE DIFFERENT POWERS.

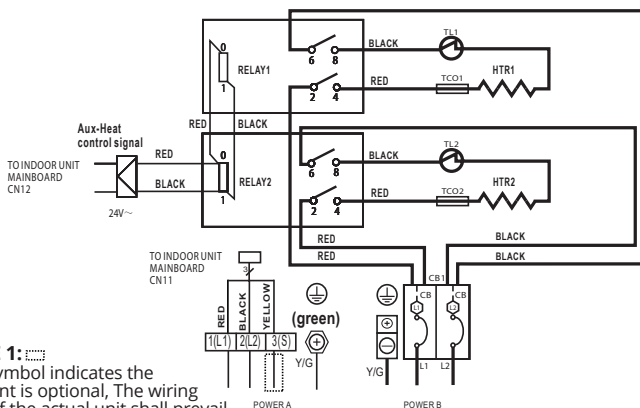
Round hole number	Relay number	Round hole number	Circuit breaker number
○	RELAY 1	○	CB1
○○			
○○○			
○○○○			
○○○○○			


The wiring mode of power supply A shall be based on the type of original wiring terminal of the Central Ducted Unit; for type A, S position must be connected to the outdoor S; for type B, S position shall not be connected.



8KW/10KW HEAT KIT

-  :thermal cut-out
-  :thermal link, self-resetting



NOTE 1:  This symbol indicates the element is optional. The wiring type of the actual unit shall prevail.

NOTE 2: Please attach the nameplate to the cover of the electric control box. All the round holes located on the plate represent numbers. Please refer to the Installation Manual for details.

NOTE 3: TO BE WIRED IN ACCORDANCE WITH NEC AND LOCAL CODES.

NOTE 4: POWER A,B,C,D ARE DIFFERENT POWERS.

Round hole number	Relay number	Round hole number	Circuit breaker number
○	RELAY 1	○	CB1
○○	RELAY 2		
○○○			
○○○○			
○○○○○			

The wiring mode of power supply A shall be based on the type of original wiring terminal of the Central Ducted Unit; for type A, S position must be connected to the outdoor S; for type B, S position shall not be connected.





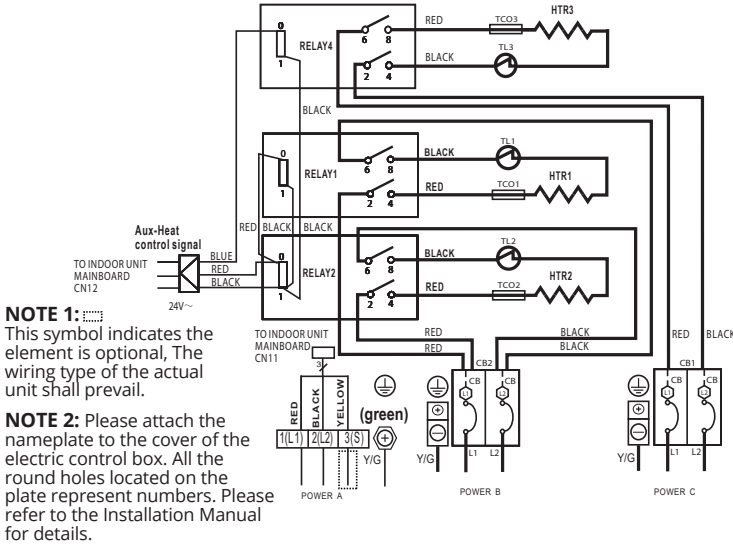
NOTE

The optional heat kits use a power supply that is independent of the power supply of the air handler & blower. Please be aware of this when wiring the heat kit.

Installation of Air Handler Heat Kit

15KW HEAT KIT

-  :thermal cut-out
-  :thermal link, self-resetting



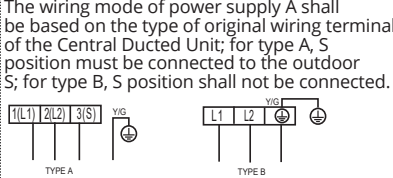
NOTE 1: This symbol indicates the element is optional, The wiring type of the actual unit shall prevail.

NOTE 2: Please attach the nameplate to the cover of the electric control box. All the round holes located on the plate represent numbers. Please refer to the Installation Manual for details.



NOTE 3: TO BE WIRED IN ACCORDANCE WITH NEC AND LOCAL CODES.

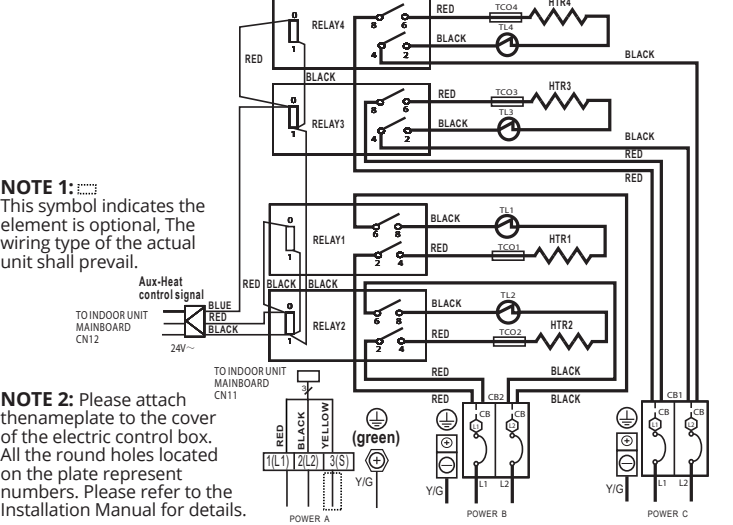
NOTE 4: POWER A,B,C,D ARE DIFFERENT POWERS.

Round hole number	Relay number	Round hole number	Circuit breaker number
○	RELAY1	○	CB1
○○	RELAY2	○○	CB2
○○○	RELAY4		
○○○○			
○○○○○			



20KW HEAT KIT

-  :thermal cut-out
-  :thermal link, self-resetting



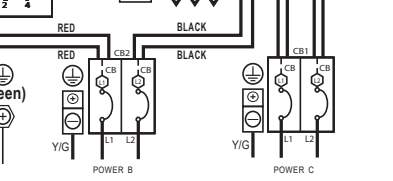
NOTE 1: This symbol indicates the element is optional, The wiring type of the actual unit shall prevail.

NOTE 2: Please attach the nameplate to the cover of the electric control box. All the round holes located on the plate represent numbers. Please refer to the Installation Manual for details.

NOTE 3: TO BE WIRED IN ACCORDANCE WITH NEC AND LOCAL CODES.

NOTE 4: POWER A,B,C,D ARE DIFFERENT POWERS.

Round hole number	Relay number	Round hole number	Circuit breaker number
○	RELAY1	○	CB1
○○	RELAY2	○○	CB2
○○○	RELAY3		
○○○○	RELAY4		
○○○○○			



NOTE

The optional heat kits use a power supply that is independent of the power supply of the air handler & blower. Please be aware of this when wiring the heat kit.