YORK Technical Guide: JHC Series

Premium Variable Speed ECM Single Piece Multi-position Air Handlers

York International Corporation, 5005 York Drive, Norman, OK 73069

6523686-YTG-B-0824

Supersedes: 6523686-YTG-A-0624

B

2024-08-28

Contents

Description

The single-piece air handler series provides the flexibility for installation in any position. This unit may be used for upflow, downflow, horizontal right, or horizontal left applications. These units may be located in a closet, utility room, attic, crawl space, or basement. These versatile models may be used for cooling or heat pump operation with or without electric heat.

Top or side power and control wiring, color-coded leads for control wiring, and electric heaters all combine to make the installation easy and minimize installation cost.

Electric heat kits are available as field-installed accessories. Single-phase kits are available from 2 kW to 25 kW and 208/230 V three-phase kits are available from 10 kW to 25 kW. An R-454B refrigerant detection sensor is factory-installed.

Visit us on the web at www.simplygettingthejobdone.com and www.york.com. Additional rating information can be found at www.ahridirectory.org.

Due to continuous product improvement, specifications are subject to change without notice. **This document is only for distribution use - it is not to be used at point of retail sale.**

Certification

US

AHRI CERTIFIED™ www.ahridirectory.org

Assembled at a facility with an ISO 9001:2015-certified Quality Management System

Features

MaxAlloy™ coil

Long-life aluminum coils built to deliver lasting performance, efficiency, and reliability

Next generation even-flow distributor

Designed for balanced refrigerant flow and even coil circuit performance

Next generation high-efficiency blower

Delivers increased airflow and reduced blower watts by 10%, using a variable speed ECM motor

Variable speed operation

Provides flexibility in application as well as upgraded system efficiency

Next generation insulation and gasket design

Reduces thermal transmission paths and reduces sweating

Electric heat kit

8HK field-installed series available for easy installation and service application

Two-stage operation

Provides flexibility in application with single-stage and two-stage outdoor equipment

Designed for easy installation and service

A casing size of 20.5 in., smooth sides, and rigid construction provide ease access to, for example, attic space and tight applications. In addition, front-facing components, a slide-out blower, laser cut knock outs, and integrated duct flanges help to shorten the install time

Modular blower control board

The control board can be controlled with a standard (conventional) thermostat or with a HX communicating control.

Cabinet air leakage

Less than 2% at 1 in. W.C. external static pressure when tested in accordance with ASHRAE Standard 193

Long lasting quality

Structural components made of post powder painted steel or galvanized steel to prevent corrosion

Thermostat drain pan

Positive slope for drainage to reduce cause for potential mold or contaminant

A2L refrigerant ready

An R-454B refrigerant detection sensor is factory-installed

Accessories

Refer to the *Price Manual* for specific model numbers.

Table 1: Accessories

Single-source power accessory - three-phase	
S1-32436041000	Contains a terminal block and wiring to connect service disconnects together

TXV kits

Air handler units have a factory-installed R-454B TXV. All TXV kits are chatleff style and require no brazing to install.

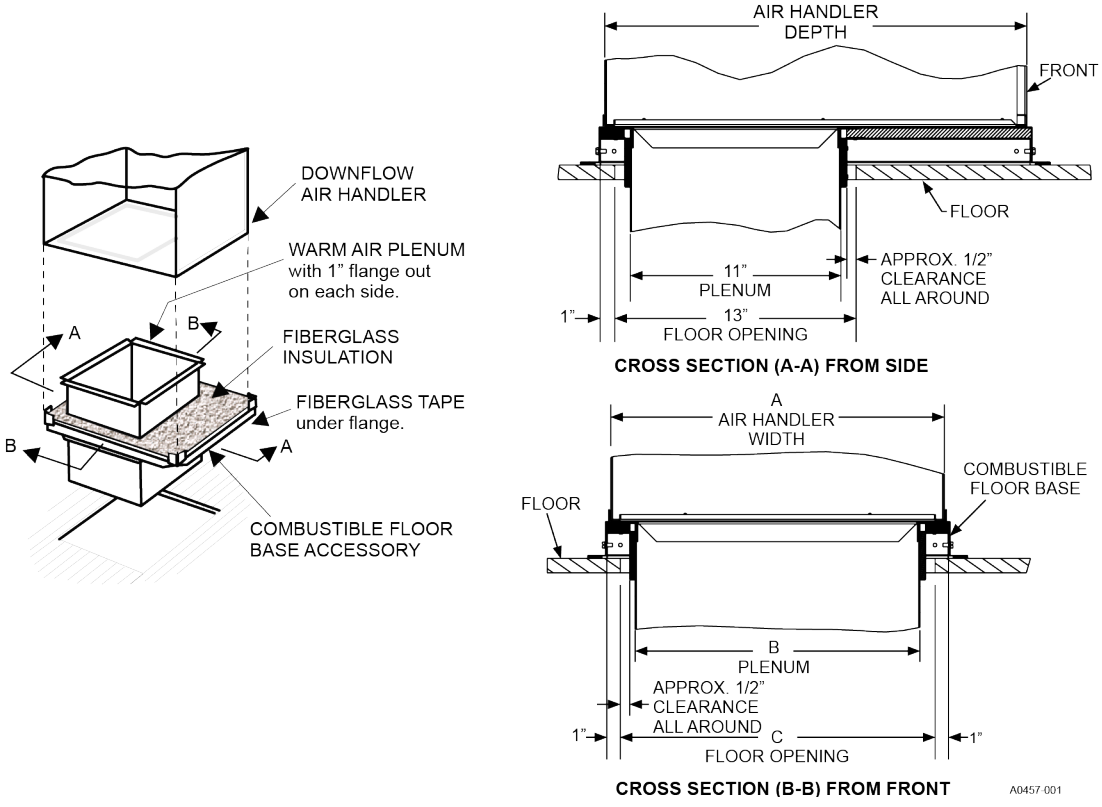
Electric heat kits

8HK models shown under electrical data include sequential operation and temperature dual limit switches for safe, efficient operation. Service disconnects are provided where shown.

Combustible floor base accessory

If an electric heat accessory rated for greater than zero clearance to combustible surfaces is installed in these air handlers in the downflow operating position on a combustible floor, one of the following combustible floor base accessory models is required: S1-1FB1917, S1-1FB1921, S1-1FB1924. See Figure 1.

Figure 1: Combustible floor base accessory



Breaker moisture seal accessory

A clear circuit breaker moisture barrier seals the breakers from humidity and dust. The flexibility of the clear cover allows circuit breakers to be turned on or off without removing the cover. The cover firmly attaches to the access panel around the circuit breakers with the use of double backed adhesive tape. To ensure that moisture or dust does not contaminate circuit breakers, an S1-02435672000, a circuit breaker, and a cover seal may be ordered.

Thermostat

Compatible thermostat controls are available through accessory sourcing. For optimum performance, these indoor units are fully compatible with our residential Hx™ Touch Screen Thermostat with proprietary hexagon interface. For more information, refer to the Thermostat & Controllers section at www.simplygettingthejobdone.com.

Filter rack

Filtration must be installed external to the unit using an accessory filter rack kit. See the filter rack dimensions in Figure 2.

Figure 2: Filter rack dimensions

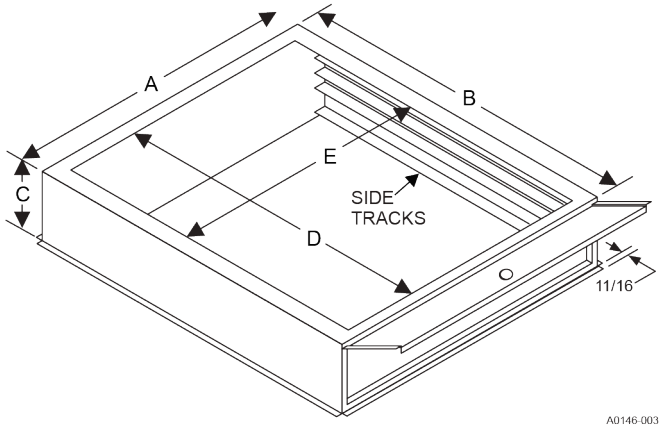


Table 2: Filter rack dimensions

Galvanised model	A	B (in.)	C	D	E	Filter size
1BR01117	17.5	21.56	4	18.63	14.25	16 x 20 x 1 or 2
1BR01121	21	21.56	4	18.63	17.75	20 x 20 x 1 or 2
1BR01124	24.5	21.56	4	18.63	21.25	20 x 24 x 1 or 2
ⓘ **Note:** The filter is not supplied.						

JHC Nomenclature

Table 3: Model nomenclature description

Number	Category	Option	Description
1	Product type	J	Air handler
2	Air handler type	H	One piece
		S	Shorter cabinet
3	Motor type	E	Constant torque
		C	Constant CFM
		V	Variable speed ECM
4, 5	Nominal capacity	18	1.5 ton
		24	2.0 ton
		30	2.5 ton
		36	3.0 ton
		42	3.5 ton
		48	4.0 ton
		60	5.0 ton
6	Cabinet width	A	14.5 in.
		B	17.5 in.
		C	21.0 in.
		D	24.5 in.
		E	19.6 in.
		F	22.0 in.
7	Refrigerant	5	R-454B
8	Metering device	A-W	TXV
		1-9	EEV
		X	No valve
9	Slab Size	A	2R-14-18
		B	2R-16-18
		C	2R-20-18
		D	3R-20-14
		E	3R-22-14
		F	3R-24-12
		G	3R-28-12
		H	3R-32-12
		J	4R-28-12
10	Voltage (voltage-phase-hertz)	2	208/230-1-60
		3	208/230-3-60
		4	460-3-60
11	Control strategy	C	Communicating
		B	Wireless (communicating)
		S	Standard (conventional)
		W	Wireless (conventional)
12	Accessories	S	A2L sensor
		N	None (no sensor)
13	Generation (major revision)	1	First generation
		2	Second generation
		3	Third generation
		4	Fourth generation
14	Style letter (minor revision) not used for ordering	A	Style A
		B	Style B
		C	Style C
		D	Style D

Table 4: Model nomenclature example

Number	1	2	3	4, 5	6	7	8	9	10	11	12	13	14
Option	J	H	C	18	B	5	A	B	2	S	S	1	A

Example:
The JHC18B5AB2SS1A is a one-piece air handler using constant CFM. It is a 1.5 ton model with a cabinet width of 17.5 in. It uses R-454B refrigerant, has a TXV, has a slab size of 2R-16-18 first-generation and uses 208/230-1-60 voltage. This conventional air handler has an A2L sensor and is a Style-A model.

Dimensions

Figure 3: Dimensions and duct connection dimensions

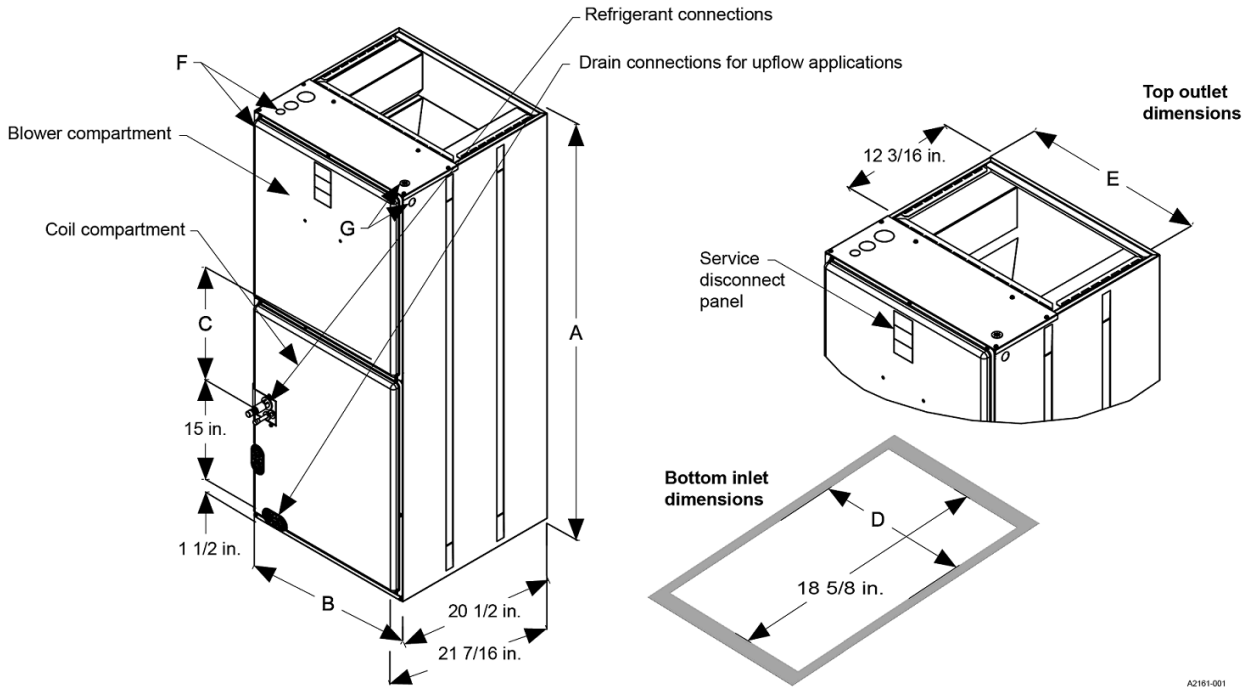


Table 5: Dimensions

Model	Dimensions					Wiring knockouts (actual conduit size)		Refrigerant connections line size	
	A	B	C	D	E	F	G		
	Height (in.)	Width (in.)		Opening Width (in.)		Power (in.)	Control (in.)	Liquid (in.)	Vapor
JHC18B5AB2SS1	45 5/8	17 1/2	7 1/2	16 1/2	16 1/2	7/8 (1/2) 1 3/8 (1) 1 23/32 (1 1/4)	7/8 (1/2)	3/8	3/4
JHC24B5AC2SS1	48 3/8	17 1/2	10	16 1/2	16 1/2				
JHC36B5AD2SS1	48 3/8	17 1/2	10	16 1/2	16 1/2				
JHC36C5AD2SS1	49 5/8	21	11 1/2	20	20				
JHC42C5AF2SS1	55 5/8	21	17 1/2	20	20				7/8
JHC42D5AF2SS1	55 1/2	24 1/2	17 1/4	23 1/2	23 1/2				
JHC48C5CG2SS1	60	21	21 3/4	20	20				
JHC48D5CG2SS1	60	24 1/2	21 3/4	23 1/2	23 1/2				
JHC60C5CH2SS1	61 6/8	21	23 1/2	20	20				
JHC60D5CH2SS1	61 6/8	24 1/2	23 1/2	23 1/2	23 1/2				
JHC60D5CJ2SS1	60	24 1/2	21 3/4	23 1/2	23 1/2				

Coil technical data

Table 6: Coil technical data

Model	Application	Refrigerant connection types	Face area (sq. ft.)	Rows deep	Fins per in.	Coil size	Tube geometry	Tube diameter	Fin type
JHC18B5AB2SS1	Cooling /Heat pump	Sweat	3.8	2	18	(2) 16 x 17	1 x 0.675	3/8	Lanced
JHC24B5AC2SS1	Cooling /Heat pump	Sweat	4.7	2	18	(2) 20 x 17	1 x 0.675	3/8	Lanced
JHC36B5AD2SS1	Cooling /Heat pump	Sweat	4.7	3	14	(2) 20 x 17	1 x 0.675	3/8	Lanced
JHC36C5AD2SS1	Cooling /Heat pump	Sweat	4.7	3	14	(2) 20 x 17	1 x 0.675	3/8	Lanced
JHC42C5AF2SS1	Cooling /Heat pump	Sweat	5.7	3	12	(2) 24 x 17	1 x 0.675	3/8	Lanced
JHC42D5AF2SS1	Cooling /Heat pump	Sweat	5.7	3	12	(2) 24 x 17	1 x 0.675	3/8	Lanced
JHC48C5CG2SS1	Cooling /Heat pump	Sweat	6.6	3	12	(2) 28 x 17	1 x 0.675	3/8	Lanced
JHC48D5CG2SS1	Cooling /Heat pump	Sweat	6.6	3	12	(2) 28 x 17	1 x 0.675	3/8	Lanced
JHC60C5CH2SS1	Cooling /Heat pump	Sweat	7.6	3	12	(2) 32 x 17	1 x 0.675	3/8	Lanced
JHC60D5CH2SS1	Cooling /Heat pump	Sweat	7.6	3	12	(2) 32 x 17	1 x 0.675	3/8	Lanced
JHC60D5CJ2SS1	Cooling /Heat pump	Sweat	6.6	4	12	(2) 28 x 17	1 x 0.675	3/8	Lanced

Cooling capacity

Table 7: Cooling capacity

Model	Rated CFM	Entering air dry bulb/wet bulb (°F)	MBH at evaporation temperature and corresponding R-454B pressure (°F/psig)			
			35/107.9	40/118.9	45/130.7	50/143.3
JHC18B5*B	600	85/72	56.0	50.0	43.3	35.9
		80/67	45.5	39.5	32.6	25.2
		75/62	36.0	29.8	23.0	15.4
		70/57	27.3	21.0	14.8	11.4
JHC24B5*C	800	85/72	66.1	60.1	52.9	44.6
		80/67	54.6	48.2	40.2	31.9
		75/62	43.9	36.9	29.1	19.0
		70/57	33.8	26.6	19.0	14.8
JHC36B5*D	1200	85/72	86.0	77.6	68.0	57.1
		80/67	70.6	61.7	52.0	40.7
		75/62	56.4	47.2	37.2	24.7
		70/57	43.1	33.8	23.9	18.6
JHC36C5*D	1200	85/72	86.0	77.6	68.0	57.1
		80/67	70.6	61.7	52.0	40.7
		75/62	56.4	47.2	37.2	24.7
		70/57	43.1	33.8	23.9	18.6
JHC42C5*F	1400	85/72	95.4	86.1	75.5	63.0
		80/67	78.5	68.7	57.7	45.0
		75/62	62.9	44.6	41.5	27.7
		70/57	48.4	38.1	27.5	21.0
JHC42D5*F	1600	85/72	95.4	86.1	75.5	63.0
		80/67	78.5	68.7	57.7	45.0
		75/62	62.9	44.6	41.5	27.7
		70/57	48.4	38.1	27.5	21.0
JHC48C5*G	1600	85/72	115.6	104.2	91.0	76.2
		80/67	94.9	82.8	67.4	54.3
		75/62	75.6	63.1	49.4	33.6
		70/57	57.9	45.1	32.1	24.8
JHC48D5*G	1600	85/72	115.6	104.2	91.0	76.2
		80/67	94.9	82.8	67.4	54.3
		75/62	75.6	63.1	49.4	33.6
		70/57	57.9	45.1	32.1	24.8
JHC60C5*H	1800	85/72	113.0	102.6	90.1	75.7
		80/67	93.2	82.1	68.8	54.3
		75/62	74.7	62.9	49.4	33.4
		70/57	57.5	45.1	32.2	25.1
JHC60D5*H	1800	85/72	113.0	102.6	90.1	75.7
		80/67	93.2	82.1	68.8	54.3
		75/62	74.7	62.9	49.4	33.4
		70/57	57.5	45.1	32.2	25.1
JHC60D5*J	1800	85/72	111.3	100.0	87.1	72.3
		80/67	91.5	79.6	66.3	51.3
		75/62	73.1	60.9	46.9	32.6
		70/57	56.1	43.0	32.5	25.0

ⓘ **Note:**

- Actual capacity varies with the outdoor air conditioning unit or heat pump that is used with the system. See Condensing Unit or the Heat Pump *Technical Guide* for total cooling capacity and sensible capacity.
- Airflow is calculated for each system tonnage.

Physical and electrical data

Table 8: Physical and electrical data - cooling only

Model		JHC18B5 *B	JHC24B5 *C	JHC36B5 *D	JHC36C5 *D	JHC42C5 *F	JHC42D5 *F	JHC48C5 *G	JHC48D5 *G	JHC60C5 *H	JHC60D5 *H	JHC60D5 *J
Blower - diameter x width		11 x 8	11 x 8	11 x 8	11 x 10	11 x 10	11 x 11	11 x 10	11 x 11	11 x 10	11 x 11	11 x 11
Motor	HP	1/3 HP	1/3 HP	1/2 HP	1/2 HP	3/4 HP	3/4 HP	1 HP	3/4 HP	1 HP	3/4 HP	1 HP
	Nominal RPM	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050	1050
Voltage		208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230
Full load amps at 230 V		2.6	2.6	3.8	3.8	5.4	5.4	7.0	5.4	7.0	5.4	7.0
Filter	Type	Disposable or cleanable										
	Size	16 x 20 x 1	16 x 20 x 1	16 x 20 x 1	20 x 20 x 1	20 x 20 x 1	23 x 20 x 1	20 x 20 x 1	23 x 20 x 1	20 x 20 x 1	23 x 20 x 1	23 x 20 x 1
Shipping / Operating weight (lb)		98 / 90	104 / 96	105 / 97	121 / 111	132 / 122	142 / 131	140 / 129	152 / 140	153 / 141	158 / 146	162 / 150

ⓘ **Note:** The filter is field supplied.

Electrical data - cooling only

Table 9: Electrical data - cooling only

Model	Motor FLA*	Minimum circuit ampacity	MOP
JHC18B5*B/JHC24B5*C	2.6	3.3	15
JHC36B5*D/JHC36C5*D	3.8	4.8	15
JHC42C5*F/JHC42D5*F/ JHC48D5*G/JHC60D5*H	5.4	6.8	15
JHC48C5*G/JHC60C5*H/ JHC60D5*J	7	8.8	15

ⓘ **Note:**

- FLA = Full load amps
- MOP stands for maximum overcurrent protection device. It must be a HACR type circuit breaker or a time delay fuse. Refer to the latest edition of the National Electric Code, or, in Canada, the Canadian electrical Code and local codes to determine correct wire sizing.

Electrical heat - minimum fan speed

Table 10: Electrical heat - minimum fan CFM for single-phase heat kits

Electric heat kit model	Nominal kW at 240 V	Airflow configuration - HEAT DIP switch setting*	AUX heat configuration - Heatkit selection DIP switch setting	Air handler model										
				JHC18B5 *B	JHC24B5 *C	JHC36B5 *D	JHC36C5 *D	JHC42C5 *F	JHC42D5 *F	JHC48C5 *G	JHC48D5 *G	JHC60C5 *H	JHC60D5 *H	JHC60D5 *J
8HK(0,1)6500206	2.4 kW	00	0001	625	650	625	825	825	825	825	825	825	825	825
8HK(0,1)6500506	4.8 kW	00	0010	650	650	650	825	825	825	825	825	825	825	825
8HK(0,1)6500806	7.7 kW	00	0011	750	800	750	1100	1100	1150	1100	1150	1100	1150	1150
8HK(0,1)6501006	9.6 kW	00	0100	790	950	750	1100	1100	1500	1100	1500	1100	1500	1500
8HK(1,2)6501506	14.4 kW	00	0101	—	650, 950	650, 975	825, 1100	825, 1100	825, 1575	825, 1100	825, 1575	825, 1100	825, 1575	825, 1700
8HK(1,2)6502006	19.2 kW	00	0110	—	—	750, 975	1100, 1300	1100, 1300	1325, 1575	1100, 1300	1325, 1575	1100, 1300	1325, 1575	1500, 1700
8HK(1,2)6502506	24 kW	00	0111	—	—	—	—	—	—	—	1325, 1650	—	1325, 1650	1500, 1800

Note:

- For electric heat kit model numbers in this table that include (0,1), 0 indicates no service disconnect or 1 indicates with service disconnect.
- For electric heat kit model numbers in this table that include (1,2) - 1 indicates with service disconnect and no breaker jumper bar or 2 indicates with service disconnect and breaker jumper bar.
- For minimum CFM, if there are two values present, the first value is low-stage CFM (W1) and the second value is full-stage CFM (W1 and W2). If higher kW/CFM is needed for low-stage, refer to Table 12.
- * To increase airflow by approximately 20%, adjust the HEAT DIP switches from 00 to 01.

Table 11: Electrical heat - minimum fan CFM for three-phase heat kits

Heater kit model	Nominal kW at 240 V	Airflow configuration - HEAT DIP switch setting*	AUX heat configuration - Heatkit selection DIP switch setting	Air handler model										
				JHC18B5 *B	JHC24B5 *C	JHC36B5 *D	JHC36C5 *D	JHC42C5 *F	JHC42D5 *F	JHC48C5 *G	JHC48D5 *G	JHC60C5 *H	JHC60D5 *H	JHC60D5 *J
8HK06501025	9.6kW	00	1000	790	950	1150	1150	1150	1500	1150	1500	1150	1500	1700
8HK06501525	14.4kW	00	1001	—	950	1150	1150	1150	1575	1150	1575	1150	1575	1700
8HK16502025	19.2kW	00	1010	—	—	1150, 1150	1150, 1300	1150, 1400	1500, 1575	1150, 1300	1500, 1575	1150, 1300	1500, 1575	1700
8HK16502525	24kW	00	1011	—	—	—	—	—	—	—	1575, 1650	—	1575, 1650	1700, 1800

Note:

- For electric heat kit model numbers in this table that include (0,1), 0 indicates no service disconnect or 1 indicates with service disconnect.
- For electric heat kit model numbers in this table that include (1,2) - 1 indicates with service disconnect and no breaker jumper bar or 2 indicates with service disconnect and breaker jumper bar.
- For minimum CFM, if there are two values present, the first value is low-stage CFM (W1) and the second value is full-stage CFM (W1 and W2). If higher kW/CFM is needed for low-stage, refer to Table 12.
- * To increase airflow by approximately 20%, adjust the HEAT DIP switches from 00 to 01.

Table 12: AUX heat configuration - stage 1 KW DIP switch settings

W1 = W1	00, 01
W1 = W2	10
W1 = W1 and W2	11

Application limitations

Adhere to the following:

- These units must be installed in accordance with all national and local safety codes.
- Airflow must be within the minimum and maximum limits approved for electric heat, indoor coils, and outdoor units.

Table 13: Voltage limits

Air handler voltage (V-phase-Hz)	Normal operating voltage range
208/230-1-60	187-253
ⓘ **Note:** Normal operating voltage range is rated in accordance with ARI standard 110, utilization range A.	

Table 14: Application factors - rated CFM versus actual CFM

Percentage of rated airflow (CFM)	80	90	100	110	120
Capacity factor	0.96	0.98	1	1.02	1.03

Table 15: kW and MBH conversions for total power input requirement

Distribution power (V)	Nominal voltage (V)	Conversion factor
208	240	0.75
220	240	0.84
230	240	0.92

ⓘ **Note:** For a power distribution voltage that is different than the provided nominal voltage, multiply the kW and MBH data from the table by the conversion factor in Table 16.

Electric heat performance data

Table 16: Electric heat performance data: 208/230-1-60 and 208/230-3-60

Electric heat kit model		Nominal kW at 240 V	Total heat				kW staging			
			kW		MBH		W1 only		W1 and W2	
			208 V	230 V	208 V	230 V	208 V	230 V	208 V	230 V
Single phase	8HK(0,1)6500206	2.4	1.8	2.2	6.2	7.5	1.8	2.2	1.8	2.2
	8HK(0,1)6500506	4.8	3.6	4.4	12.3	15	3.6	4.4	3.6	4.4
	8HK(0,1)6500806	7.7	5.8	7.1	19.7	24.1	5.8	7.1	5.8	7.1
	8HK(0,1)6501006	9.6	7.2	8.8	24.6	30.1	7.2	8.8	7.2	8.8
	8HK(1,2)6501506	14.4	10.8	13.2	36.9	45.1	3.6	4.4	10.8	13.2
	8HK(1,2)6502006	19.2	14.4	17.6	49.2	60.2	7.2	8.8	14.4	17.6
	8HK(1,2)6502506	24	18	22	61.5	75.2	7.2	8.8	18	22
Three phase	8HK06501025	9.6	7.2	8.8	24.6	30.1	7.2	8.8	7.2	8.8
	8HK06501525	14.4	10.8	13.2	36.9	45.1	10.8	13.2	10.8	13.2
	8HK16502025	19.2	14.4	17.6	49.2	60.2	7.2	8.8	14.4	17.6
	8HK16502525	24	18	22	61.5	75.2	9	11	18	22

Note:

- For electric heat kit model numbers in this table that include (0,1), 0 indicates no service disconnect or 1 indicates with service disconnect.
- For electric heat kit model numbers in this table that include (1,2) - 1 indicates with service disconnect and no breaker jumper bar or 2 indicates with service disconnect and breaker jumper bar.
- For different power distributions, see Table 15.

Electrical data for single-source power supply - 208/230-1-60

Table 17: Electrical data for single-source power supply: 208/230-1-60

Air handler model	Electric heat kit model	Heater amps (A) at 240 V	Field wiring			
			Minimum circuit ampacity (A)		MOP (A)	
			208 V	230 V	208 V	230 V
JHC18B5*B	8HK(0,1)6500206	10	14.1	15.2	15	20
	8HK(0,1)6500506	20	24.9	27.2	25	30
	8HK(0,1)6500806	32	38.1	41.8	40	45
	8HK(0,1)6501006	40	46.5	51.1	50	60
JHC24B5*C	8HK(0,1)6500206	10	14.1	15.2	15	20
	8HK(0,1)6500506	20	24.9	27.2	25	30
	8HK(0,1)6500806	32	38.1	41.8	40	45
	8HK(0,1)6501006	40	46.5	51.1	50	60
	8HK(1,2)6501506	60	68.2	75.0	70	80
JHC36B5*D	8HK(0,1)6500206	10	15.6	16.7	20	20
	8HK(0,1)6500506	20	26.4	28.7	30	30
	8HK(0,1)6500806	32	39.6	43.3	40	45
	8HK(0,1)6501006	40	48.0	52.6	50	60
	8HK(1,2)6501506	60	69.7	76.5	70	80
	8HK(1,2)6502006	80	91.3	100.4	100	110
JHC36C5*D	8HK(0,1)6500206	10	15.6	16.7	20	20
	8HK(0,1)6500506	20	26.4	28.7	30	30
	8HK(0,1)6500806	32	39.6	43.3	40	45
	8HK(0,1)6501006	40	48.0	52.6	50	60
	8HK(1,2)6501506	60	69.7	76.5	70	80
	8HK(1,2)6502006	80	91.3	100.4	100	110
JHC42C5*F	8HK(0,1)6500206	10	17.6	18.7	20	20
	8HK(0,1)6500506	20	28.4	30.7	30	35
	8HK(0,1)6500806	32	41.6	45.3	45	50
	8HK(0,1)6501006	40	50.0	54.6	60	60
	8HK(1,2)6501506	60	71.7	78.5	80	80
	8HK(1,2)6502006	80	93.3	102.4	100	110
JHC42D5*F	8HK(0,1)6500206	10	17.6	18.7	20	20
	8HK(0,1)6500506	20	28.4	30.7	30	35
	8HK(0,1)6500806	32	41.6	45.3	45	50
	8HK(0,1)6501006	40	50.0	54.6	60	60
	8HK(1,2)6501506	60	71.7	78.5	80	80
	8HK(1,2)6502006	80	93.3	102.4	100	110
JHC48C5*G	8HK(0,1)6500206	10	19.6	20.7	20	25
	8HK(0,1)6500506	20	30.4	32.7	35	35
	8HK(0,1)6500806	32	43.6	47.3	45	50
	8HK(0,1)6501006	40	52.0	56.6	60	60
	8HK(1,2)6501506	60	73.7	80.5	80	90
	8HK(1,2)6502006	80	95.3	104.4	100	110
JHC48D5*G	8HK(0,1)6500206	10	17.6	18.7	20	20
	8HK(0,1)6500506	20	28.4	30.7	30	35
	8HK(0,1)6500806	32	41.6	45.3	45	50
	8HK(0,1)6501006	40	50.0	54.6	60	60
	8HK(1,2)6501506	60	71.7	78.5	80	80
	8HK(1,2)6502006	80	93.3	102.4	100	110
	8HK(1,2)6502506	100	114.9	126.3	125	150
JHC60C5*H	8HK(0,1)6500206	10	19.6	20.7	20	25
	8HK(0,1)6500506	20	30.4	32.7	35	35
	8HK(0,1)6500806	32	43.6	47.3	45	50
	8HK(0,1)6501006	40	52.0	56.6	60	60
	8HK(1,2)6501506	60	73.7	80.5	80	90
	8HK(1,2)6502006	80	95.3	104.4	100	110

Table 17: Electrical data for single-source power supply: 208/230-1-60

Air handler model	Electric heat kit model	Heater amps (A) at 240 V	Field wiring			
			Minimum circuit ampacity (A)		MOP (A)	
			208 V	230 V	208 V	230 V
JHC60D5*H	8HK(0,1)6500206	10	17.6	18.7	20	20
	8HK(0,1)6500506	20	28.4	30.7	30	35
	8HK(0,1)6500806	32	41.6	45.3	45	50
	8HK(0,1)6501006	40	50.0	54.6	60	60
	8HK(1,2)6501506	60	71.7	78.5	80	80
	8HK(1,2)6502006	80	93.3	102.4	100	110
	8HK(1,2)6502506	100	114.9	126.3	125	150
JHC60D5*J	8HK(0,1)6500206	10	19.6	20.7	20	25
	8HK(0,1)6500506	20	30.4	32.7	35	35
	8HK(0,1)6500806	32	43.6	47.3	45	50
	8HK(0,1)6501006	40	52.0	56.6	60	60
	8HK(1,2)6501506	60	73.7	80.5	80	90
	8HK(1,2)6502006	80	95.3	104.4	100	110
	8HK(1,2)6502506	100	116.9	128.3	125	150

Note:

- For electric heat kit model numbers in this table that include (0,1), 0 indicates no service disconnect or 1 indicates with service disconnect.
- For electric heat kit model numbers in this table that include (1,2) - 1 indicates with service disconnect and no breaker jumper bar or 2 indicates with service disconnect and breaker jumper bar.
- MOP = Maximum overcurrent protection device; must be HACR type circuit breaker or time delay fuse. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

Electrical data for multi-source power supply, 208/230-1-60

Table 18: Electrical data for multi-source power supply: 208/230-1-60

Air handler model	Electric heat kit model	Heater amps (A) at 240 V	Minimum circuit ampacity (A)						MOP (A)					
			208 V			230 V			208 V			230 V		
			Circuit						Circuit					
			First	Second	Third	First	Second	Third	First	Second	Third	First	Second	Third
JHC24B5*C	8HK16501506	60	24.7	43.5	—	26.9	48.1	—	25	45	—	30	50	—
JHC36B5*D	8HK16501506	60	26.2	43.5	—	28.4	48.1	—	30	45	—	30	50	—
	8HK16502006	80	48.0	43.3	—	52.6	47.8	—	50	45	—	60	50	—
JHC36C5*D	8HK16501506	60	26.2	43.5	—	28.4	48.1	—	30	45	—	30	50	—
	8HK16502006	80	48.0	43.3	—	52.6	47.8	—	50	45	—	60	50	—
JHC42C5*F	8HK16501506	60	28.2	43.5	—	30.4	48.1	—	30	45	—	35	50	—
	8HK16502006	80	50.0	43.3	—	54.6	47.8	—	60	45	—	60	50	—
JHC42D5*F	8HK16501506	60	28.2	43.5	—	30.4	48.1	—	30	45	—	35	50	—
	8HK16502006	80	50.0	43.3	—	54.6	47.8	—	60	45	—	60	50	—
JHC48C5*G	8HK16501506	60	30.2	43.5	—	32.4	48.1	—	35	45	—	35	50	—
	8HK16502006	80	52.0	43.3	—	56.6	47.8	—	60	45	—	60	50	—
JHC48D5*G	8HK16501506	60	28.2	43.5	—	30.4	48.1	—	30	45	—	35	50	—
	8HK16502006	80	50.0	43.3	—	54.6	47.8	—	50	45	—	60	50	—
	8HK16502506	100	50.0	43.3	21.6	54.6	47.8	23.9	60	45	25	60	50	25
JHC60C5*H	8HK16501506	60	30.2	43.5	—	32.4	48.1	—	35	45	—	35	50	—
	8HK16502006	80	52.0	43.3	—	56.6	47.8	—	60	45	—	60	50	—
JHC60D5*H	8HK16501506	60	28.2	43.5	—	30.4	48.1	—	30	45	—	35	50	—
	8HK16502006	80	50.0	43.3	—	54.6	47.8	—	60	45	—	60	50	—
	8HK16502506	100	50.0	43.3	21.6	54.6	47.8	23.9	60	45	25	60	50	25
JHC60D5*J	8HK16501506	60	30.2	43.5	—	32.4	48.1	—	35	45	—	35	50	—
	8HK16502006	80	52.0	43.3	—	56.6	47.8	—	60	45	—	60	50	—
	8HK16502506	100	52.0	43.3	21.6	56.6	47.8	23.9	60	45	25	60	50	25

Note:

- For electric heat kit model numbers in this table that include (0,1), 0 indicates no service disconnect or 1 indicates with service disconnect.
- For electric heat kit model numbers in this table that include (1,2) - 1 indicates with service disconnect and no breaker jumper bar or 2 indicates with service disconnect and breaker jumper bar.
- MOP = Maximum overcurrent protection device; must be HACR type circuit breaker or time delay fuse. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

Electrical data for single-source power supply, 208/230-3-60

Table 19: Electrical data for single-source power supply: 208/230-3-60

Air handler model	Electric heat kit model	Heater amps (A) at 240 V	Field wiring			
			Minimum circuit ampacity (A)		MOP (A)	
			208 V	230 V	208 V	230 V
JHC18B5*B	8HK06501025	23.1	28.2	30.9	30	35
JHC24B5*C	8HK06501025	23.1	28.2	30.9	30	35
	8HK06501525	34.6	40.7	44.7	45	45
JHC36B5*D	8HK06501025	23.1	29.7	32.4	30	35
	8HK06501525	34.6	42.2	46.2	45	50
	8HK06502025	46.2	54.7	60.0	60	60
JHC36C5*D	8HK06501025	23.1	29.7	32.4	30	35
	8HK06501525	34.6	42.2	46.2	45	50
	8HK06502025	46.2	54.7	60.0	60	60
JHC42C5*F	8HK06501025	23.1	31.7	34.4	35	35
	8HK06501525	34.6	44.2	48.2	45	50
	8HK0502025	46.2	56.7	62.0	60	70
JHC42D5*F	8HK06501025	23.1	31.7	34.4	35	35
	8HK06501525	34.6	44.2	48.2	45	50
	8HK06502025	46.2	56.7	62.0	60	70
JHC48C5*G	8HK06501025	23.1	33.7	36.4	35	40
	8HK06501525	34.6	46.2	50.2	50	60
	8HK06502025	46.2	58.7	64.0	60	70
JHC48D5*G	8HK06501025	23.1	31.7	34.4	35	35
	8HK06501525	34.6	44.2	48.2	45	50
	8HK06502025	46.2	56.7	62.0	60	70
	8HK06502525	57.7	69.2	75.8	70	80
JHC60C5*H	8HK06501025	23.1	33.7	36.4	35	40
	8HK06501525	34.6	46.2	50.2	50	60
	8HK06502025	46.2	58.7	64.0	60	70
JHC60D5*H	8HK06501025	23.1	31.7	34.4	35	35
	8HK06501525	34.6	44.2	48.2	45	50
	8HK06502025	46.2	56.7	62.0	60	70
	8HK06502525	57.7	69.2	75.8	70	80
JHC60D5*J	8HK06501025	23.1	33.7	36.4	35	40
	8HK06501525	34.6	46.2	50.2	50	60
	8HK06502025	46.2	58.7	64.0	60	70
	8HK06502525	57.7	71.2	77.8	80	80

Note:

- MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.
- For electric heat kit model numbers in this table that include (0,1), 0 indicates no service disconnect or 1 indicates with service disconnect. The 20 kW and 25 kW heater models (8HK16502025 and 8HK16502525) come with circuit breakers standard. Single-source power MCA and MOP requirements are given here only for reference if used with field-installed single point power modification.

Electrical data for multi-source power supply, 208/230-3-60

Table 20: Electrical data for multi-source power supply: 208/230-3-60

Air handler model	Electric heat kit model	Heater amps (A) at 240 V	Minimum circuit ampacity (A)				MOP (A)			
			208 V		230 V		208 V		230 V	
			Circuit				Circuit			
			First	Second	First	Second	First	Second	First	Second
JHC36B5*D	8HK16502025	46.2	29.7	25.0	32.4	27.6	30	25	35	30
JHC36C5*D	8HK16502025	46.2	29.7	25.0	32.4	27.6	30	25	35	30
JHC42C5*F	8HK16502025	46.2	31.7	25.0	34.4	27.6	35	25	35	30
JHC42D5*F	8HK16502025	46.2	31.7	25.0	34.4	27.6	35	25	35	30
JHC48C5*G	8HK16502025	46.2	33.7	25.0	36.4	27.6	35	25	40	30
JHC48D5*G	8HK16502025	46.2	31.7	25.0	34.4	27.6	35	25	35	30
	8HK16502525	57.7	38.0	31.2	41.3	34.5	40	35	45	35
JHC60C5*H	8HK16502025	46.2	33.7	25.0	36.4	27.6	35	25	40	30
JHC60D5*H	8HK16502025	46.2	31.7	25.0	34.4	27.6	35	25	35	30
	8HK16502525	57.7	38.0	31.2	41.3	34.5	40	35	45	35
JHC60D5*J	8HK16502025	46.2	33.7	25.0	36.4	27.6	35	25	40	30
	8HK16502525	57.7	40.0	31.2	43.3	34.5	40	35	45	35

Note:

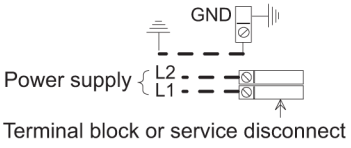
- The 20 kW and 25 kW heater models (8HK16502025 and 8HK16502525) come with circuit breakers standard.
- MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. Refer to the latest edition of the National Electric Code or in Canada the Canadian electrical Code and local codes to determine correct wire sizing.

Power wiring

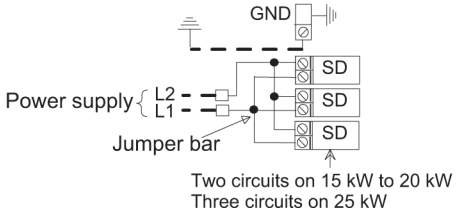
Figure 4: Power wiring - line connections

1 Phase Electric Heat Power Options:

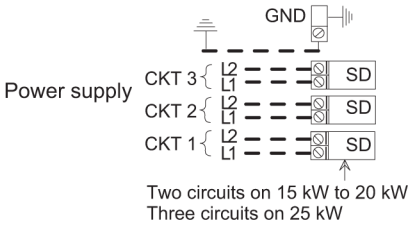
Single source power



Multi-source power with jumper bar

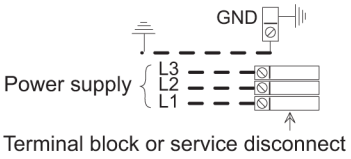


Multi-source power

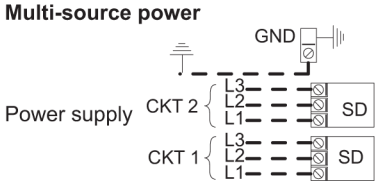


3 Phase Electric Heat Power Options:

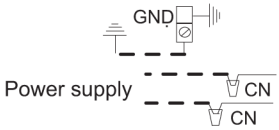
Single source power



Multi-source power



No Electric Heat:



Component Codes:

GND - Ground lug
SD - Service disconnect
CKT - Circuit
CN - Wire connector/nut
Field power wiring (208/230 V)

A1699-001

Airflow data

Table 21: Airflow data JHC18 models to JHC42 models

DIP switch	JHC18B5*B		JHC24B5*C		JHC36B5*D		JHC36C5*D		JHC42C5*F		JHC42D5*F	
	HI COOL	LO COOL	HI COOL	LO COOL	HI COOL	LO COOL	HI COOL	LO COOL	HI COOL	LO COOL	HI COOL	LO COOL
000	575	400	700	475	800	550	825	600	1100	700	1125	675
001	625	450	725	525	900	600	900	650	1200	750	1225	875
010	675	475	800	575	975	650	1000	700	1300	800	1325	925
011	725	525	850	625	1075	700	1050	750	1400	850	1425	1000
100	775	550	925	650	1150	775	1150	825	1500	925	1550	1075
101	850	575	975	700	1250	825	1225	850	1625	975	1675	1150
110	900	625	1075	725	1325	900	1300	900	1725	1050	1775	1225
111	950	650	1100	775	1400	950	1350	950	1825	1100	1875	1275

Table 22: Airflow data for JHC48 models to JHC60 models

DIP switch	JHC48C5*G		JHC48D5*G		JHC60C5*H		JHC60D5*H		JHC60D5*J	
	HI COOL	LO COOL	HI COOL	LO COOL	HI COOL	LO COOL	HI COOL	LO COOL	HI COOL	LO COOL
000	1150	725	1125	700	1400	975	1400	975	1375	925
001	1250	775	1225	875	1525	1075	1550	1075	1475	1050
010	1350	850	1325	925	1650	1150	1700	1150	1750	1125
011	1450	900	1425	1000	1800	1250	1850	1250	1875	1225
100	1575	975	1550	1075	1925	1350	2000	1350	2000	1350
101	1675	1025	1675	1150	2050	1425	2125	1425	2000	1400
110	1775	1100	1800	1225	2050	1525	2125	1550	2000	1475
111	1875	1150	1900	1275	2050	1600	2125	1650	2000	1575

Note:

- Air handler units have been tested to UL 60335-2-40 / CSA 22.2 No. 236 standards up to 0.60 in. W.C. external static pressure.
- Dry coil conditions only, tested without filters.
- For optimal performance, external static pressures of 0.2 in. to 0.5 in. are recommended. Heating applications tested at 0.50 in. W.C. esp. Above 0.5 in. CFM is reduced by 2% per 0.1 in. increase in static.
- Low speed cooling is used only with two-stage outdoor units.
- Dehumidification speed is 85% of the selected High speed COOL.
- When operating in both heat pump and electric heat modes, the airflow (CFM) will be whichever speed is greater.
- At some settings, LOW COOL and/or LOW HEAT airflow may be lower than what is required to operate an airflow switch on certain models of electronic air cleaners. Consult the instructions for the electronic air cleaner for further details.
- Airflow (CFM) indicator light (LED2) flashes once for every 100 CFM. for example, 12 flashes is 1200 CFM. Blinks are approximate +/- 10% of actual CFM.