Technical Guide

Standard ECM Single Piece Multi-position Air Handlers

For use with split-system cooling and heat pumps

Models: JHET Series

ISO 9001 Certified Quality Management System

Due to continuous product improvement, specifications are subject to change without notice.

Visit us on the web at
www.simplygettingthejobdone.com* and *www.york.com

Additional rating information can be found at *www.ahridirectory.org*

WARRANTY SUMMARY

Standard 5-year limited parts warranty.

Extended 10-year limited parts warranty when product is registered online within 90 days of purchase for replacement or closing for new home construction.

Description

This fan coil line offers the ultimate in application flexibility. This unit may be used for upflow, downflow, horizontal right, or horizontal left applications.

All Johnson Controls air handlers and coils can use a TXV to provide our customers with the optimum performance and refrigerant control. Single piece air handlers are available as *Flex-coils* (without a factory-installed metering device). For added flexibility, an R-22 or R-410A TXV or piston must be field-installed to meet the requirement of the chosen refrigerant.

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 standard ECM motor

Two-stage operation - provides flexibility in application with single and two-stage outdoor equipment

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

Tool-less filter access - sliding latch design provides quick and easy access

Designed for easy installation and service - casing size of 20.5 in., smooth sides, and rigid construction provide ease of attic access and tight applications. Front facing components, slide out blower, laser cut knock outs and integrated duct flanges shorten install time.

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 aluminum or galvanized steel to prevent corrosion.

Thermoset drain pan - positive slope for drainage to reduce cause for potential mold or contaminants.

List of sections

Nomenclature

Brand	**J**	**J** = JCI air handler	
Type	**H**	**H** = one piece	
Motor type	**E**	**V** = variable speed ECM **E** = standard ECM **P** = PSC	
Stage	**T**	**S** = single-stage capable **T** = two-stage capable **V** = variable-stage capable	
Cabinet width	**B**	**A** = 14.5 in.	**D** = 24.5 in.
		B = 17.5 in.	**E** = 19.6 in.
		C = 21 in.	**F** = 22 in.
Nominal unit capacity	**24**	**18** = 1.5 ton	**42** = 3.5 ton
		24 = 2 ton	**48** = 4 ton
		30 = 2.5 ton	**60** = 5 ton
		36 = 3 ton	
Slab size	**C**	**A** = 2R-14-18	**F** = 3R-24-14
		B = 2R-16-18	**G** = 3R-28-12
		C = 2R-20-18	**H** = 3R-32-12
		D = 3R-20-14	**J** = 4R-28-12
		E = 3R-22-14	**Z** = HD match only
Metering device	**XX**	**BA-BW** = factory TXV **E1-E9** = factory EEV **XX** = no valve **Y0** = HD match only	
Control strategy	**S**	**C** = communicating **B** = wireless (communicating) **S** = standard (conventional) **W** = wireless (conventional)	
Voltage (voltage-phase-hertz)	**2**	**2** = 208/230-1-60	**4** = 460-3-60
		3 = 208/230-3-60	
Accessories	**N**	**S** = A2L sensor	
		N = none (no sensor)	
Generation (major revision)	**1**	**1** = first generation	
		2 = second generation	
Style letter (minor revision) not used for ordering	**A**	**A** = style A	
		B = style B	

Dimensions and duct connections

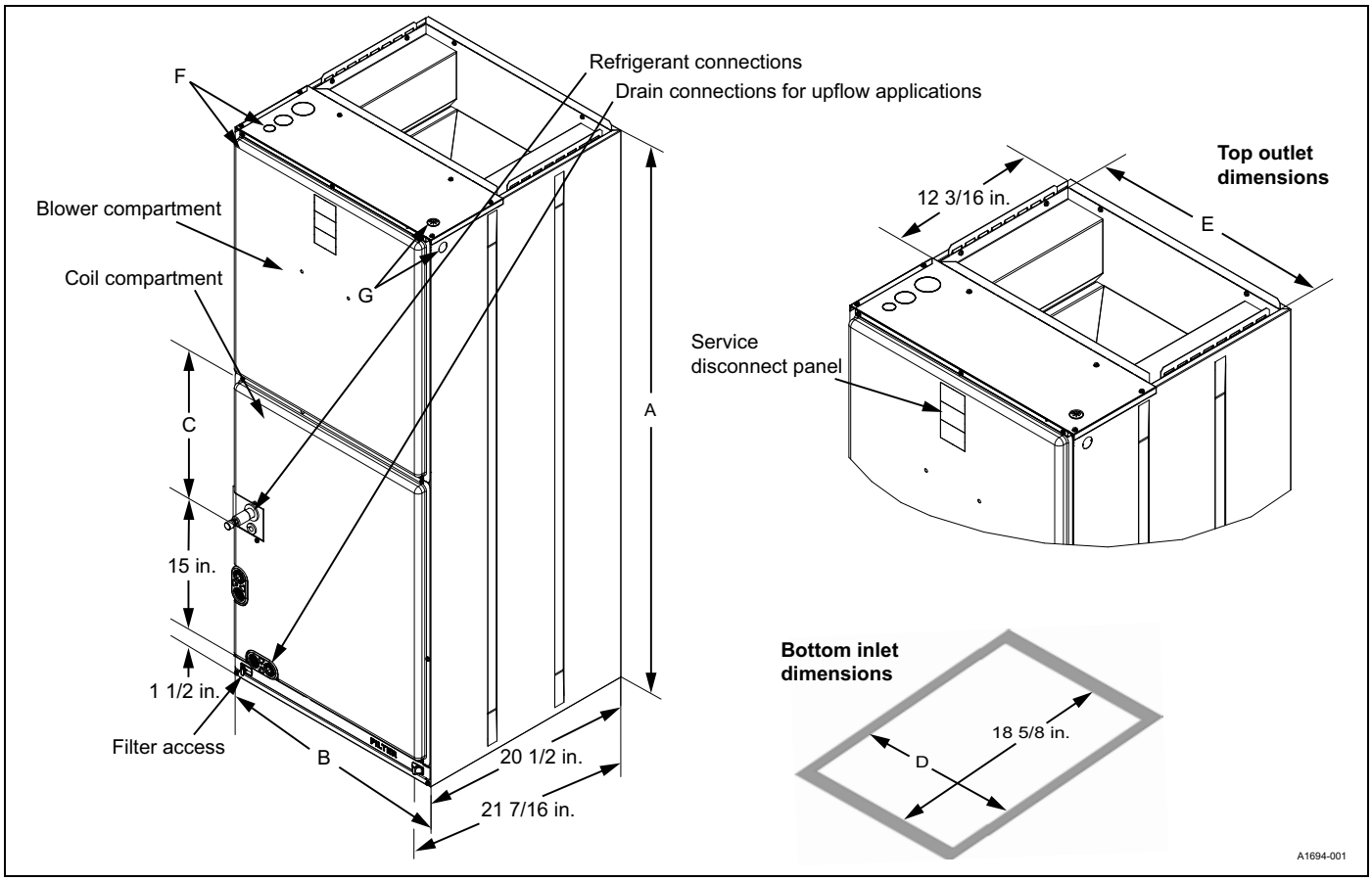

Figure 1: Dimensions and duct connection dimensions

Table 1: Dimensions[1]

Models	Dimensions					Wiring knockouts[2]		Refrigerant connections line size	
	A	B	C	D	E	F	G		
	Height (in.)	Width (in.)	Opening widths (in.)			Power (in.)	Control (in.)	Liquid (in.)	Vapor (in.)
JHET**B18B**	47	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
JHET**B24C**	49 5/8	17 1/2	10	16 1/2	16 1/2				
JHET**B30D**	49 5/8	17 1/2	10	16 1/2	16 1/2				
JHET**B36D**	49 5/8	17 1/2	10	16 1/2	16 1/2				
JHET**C36D**	51	21	11 1/2	20	20				
JHET**C42F**	57	21	17 1/2	20	20				7/8
JHET**C48G**	61 1/4	21	21 3/4	20	20				
JHET**D48G**	61 1/4	24 1/2	21 3/4	23 1/2	23 1/2				
JHET**C60H**	63	21	23 1/2	20	20				
JHET**D60H**	63	24 1/2	23 1/2	23 1/2	23 1/2				
JHET**D60J**	61 1/4	24 1/2	21 3/4	23 1/2	23 1/2				

1. All dimensions are in inches.
2. Actual size (conduit size).

Table 2: Coil technical data

Models	Application	Refrigeration connection type	Face Area (ft^2)	Rows	Fins per inch	Coil size (in.)	Tube geometry (in.)	Tube diameter (in.)	Fin type
B18B	Cooling /Heat Pump	Sweat	3.8	2	18	(2) 16 x 17	1 x 0.675	3/8	Lanced
B24C			4.7	2	18	(2) 20 x 17			
B30D			4.7	3	14	(2) 20 x 17			
B36D			4.7	3	14	(2) 20 x 17			
C36D			4.7	3	14	(2) 20 x 17			
C42F			5.7	3	12	(2) 24 x 17			
C48G			6.6	3	12	(2) 28 x 17			
D48G			6.6	3	12	(2) 28 x 17			
C60H			7.6	3	12	(2) 32 x 17			
D60H			7.6	3	12	(2) 32 x 17			
D60J			6.6	4	12	(2) 28 x 17			

Table 3: Cooling capacity[1]

Models	Rated CFM[2]	Entering Air Dry/Wet Bulb (°F)	MBH at evaporation temperature and corresponding R-410A pressure (°F/psig)			
			35/107.9	40/118.9	45/130.7	50/143.3
B18B	600	85/72	54.8	49.2	43.0	35.8
		80/67	44.7	39.0	32.3	25.2
		75/62	35.4	29.5	23.0	15.5
		70/57	27.0	20.9	14.2	10.9
B24C	800	85/72	62.3	56.9	49.8	42.3
		80/67	51.9	45.7	38.4	30.5
		75/62	41.7	34.6	27.9	18.4
		70/57	32.1	25.3	18.0	13.9
B30D	1000	85/72	80.2	72.1	62.8	52.0
		80/67	65.5	57.2	47.4	36.5
		75/62	52.0	43.5	33.4	22.2
		70/57	39.9	30.9	22.1	16.8
B36D	1200	85/72	80.2	72.1	62.8	52.0
		80/67	65.5	57.2	47.4	36.5
		75/62	52.0	43.5	33.4	22.2
		70/57	39.9	30.9	22.1	16.8
C36D	1200	85/72	80.2	72.1	62.8	52.0
		80/67	65.5	57.2	47.4	36.5
		75/62	52.0	43.5	33.4	22.2
		70/57	39.9	30.9	22.1	16.8
C42F	1400	85/72	89.7	81.6	72.4	61.9
		80/67	74.4	65.8	56.2	45.0
		75/62	60.1	50.9	40.9	27.1
		70/57	46.7	37.3	26.7	20.8
C48G	1600	85/72	102.4	91.9	79.8	66.3
		80/67	83.7	72.6	60.3	47.3
		75/62	66.4	54.9	43.1	29.0
		70/57	50.5	39.3	27.5	20.7
D48G	1600	85/72	109.1	98.2	85.3	71.0
		80/67	89.0	77.6	64.7	50.6
		75/62	71.1	58.9	46.2	30.4
		70/57	54.1	42.2	29.8	22.5
C60H	1600	85/72	107.0	97.1	85.4	72.2
		80/67	88.2	77.8	65.0	51.9
		75/62	70.9	59.4	47.1	31.8
		70/57	54.5	43.1	30.6	23.4

Continued on next page

Table 3: Cooling capacity[1] (continued)

Models	Rated CFM[2]	Entering Air Dry/Wet Bulb (°F)	MBH at evaporation temperature and corresponding R-410A pressure (°F/psig)			
			35/107.9	40/118.9	45/130.7	50/143.3
D60H	1800	85/72	107.0	97.1	85.4	72.2
		80/67	88.2	77.8	65.0	51.9
		75/62	70.9	59.4	47.1	31.8
		70/57	54.5	43.1	30.6	23.4
D60J	1800	85/72	112.1	101.6	89.2	75.4
		80/67	92.5	88.1	68.5	54.6
		75/62	74.2	62.3	49.7	33.6
		70/57	57.1	45.7	32.5	24.8

1. Actual capacity varies with the outdoor AC or HP that is used with the system.
2. Airflow is calculated for each system tonnage.

Table 4: Physical and electrical data - cooling only

Models		B18B	B24C	B30D	B36D	C36D	C42F
Blower - diameter x width (in.)		11 x 8	11 x 8	11 x 8	11 x 8	11 x 10	11 x 10
Motor	HP	1/3 HP	1/3 HP	1/2 HP	1/2 HP	1/2 HP	1/2 HP
	Nominal RPM	1050	1050	1050	1050	1050	1050
Voltage (V)		208/230	208/230	208/230	208/230	208/230	208/230
Full load amps at 230 V (A)		2.6	2.6	3.8	3.8	3.8	3.8
Filter[1]	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	20 x 20 x 1
Shipping/operating weight (lb)		101/93	107/99	108/100	108/100	124/114	135/125
Models		C48G	D48G	C60H	D60H	D60J	
Blower - diameter x width (in.)		11 x 10	11 x 11	11 x 10	11 x 11	11 x 11	
Motor	HP	3/4 HP	3/4 HP	3/4 HP	3/4 HP	3/4 HP	
	Nominal RPM	1050	1050	1050	1050	1050	
Voltage (V)		208/230	208/230	208/230	208/230	208/230	
Full load amps at 230 V (A)		5.4	5.4	5.4	5.4	5.4	
Filter[1]	Type	Disposable or cleanable					
	Size	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)		140/129	152/140	153/141	158/146	162/150	

1. Field supplied.

Table 5: Electrical data - cooling only

Models	Motor FLA[1]	Minimum Circuit Ampacity (A)	MOP[2]
B18B/B24C	2.6	3.3	15
B30D/B36D/C36D/C42F	3.8	4.8	15
C48G/D48G/C60H/D60H/D60J	5.4	6.8	15

1. FLA = Full Load Amps
2. 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.

Table 6: Electrical heat - minimum fan speed

Heater kit models[1,2]	Nominal kW at 240 V	Air handler models										
		B18B	B24C	B30D	B36D	C36D	C42F	C48G	D48G	C60H	D60H	D60J
8HK(0,1)6500206	2.4	Medium Low (2)	Medium (3)	Medium High (4)	Medium (3)	Medium (3)	Medium (3)	Medium Low (2)	Medium Low (2)	Medium Low (2)	Medium Low (2)	Medium Low (2)
8HK(0,1)6500506	4.8	Medium (3)	Medium (3)	Medium High (4)	Medium (3)	Medium (3)	Medium (3)	Medium Low (2)	Medium Low (2)	Medium Low (2)	Medium Low (2)	Medium Low (2)
8HK(0,1)6500806	7.7	Medium High (4)	Medium High (4)	Medium High (4)	Medium High (4)	Medium High (4)	Medium High (4)	Medium (3)	Medium (3)	Medium (3)	Medium (3)	Medium Low (2)
8HK(0,1)6501006 8HK06501025	9.6	Medium High (4)	Medium High (4)	Medium High (4)	Medium High (4)	Medium High (4)	Medium High (4)	Medium (3)	Medium (3)	Medium High (4)	Medium (3)	Medium Low (2)
8HK(1,2)6501506 8HK06501525	14.4	—	Medium High (4)	High (5)	Medium High (4)	Medium High (4)	Medium High (4)	Medium (3)	Medium (3)	Medium High (4)	Medium High (4)	Medium (3)
8HK(1,2)6502006 8HK16502025	19.2	—	—	High (5)	Medium High (4)	High (5)	High (5)	Medium High (4)	Medium (3)	Medium High (4)	Medium High (4)	Medium (3)
8HK(1,2)6502506 8HK16502525	24	—	—	—	—	—	—	—	—	—	Medium High (4)	Medium (3)

1. (0,1) - 0 = no service disconnect or 1 = with service disconnect.
2. (1,2) - 1 = with service disconnect, no breaker jumper bar or 2 = with service disconnect and breaker jumper bar.

Table 7: kW and MBH conversions - for total power input requirement

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 the following table.

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

Table 8: Application factors - rated CFM vs actual CFM

% of rated airflow (CFM)	80	90	100	110	120
Capacity factor	0.96	0.98	1.00	1.02	1.03

Table 9: Electric heat performance data: 208/230-1-60 and 208/230-3-60

Heater models[1,2]		Nominal kW at 240 V	Total heat [3]				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

1. (0,1) - 0 = no service disconnect or 1 = with service disconnect.
2. (1,2) - 1 = with service disconnect, no breaker jumper bar or 2 = with service disconnect and breaker jumper bar.
3. For different power distributions, see Table 6.

Table 10: Electrical data for single source power supply: 208/230-1-60

Air handler models	Heater models[1,2]	Heater amps (A) at 240 V	Field wiring			
			Minimum circuit ampacity (A)		MOP[3] (A)	
			208 V	230 V	208 V	230 V
B18B	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
B24C	8HK(0,1)6500206	10	15.6	16.7	15	23
	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
B30D	8HK(0,1)6500206	10	15.6	16.7	15	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
B36D	8HK(0,1)6500206	10	15.6	16.7	15	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
C36D	8HK(0,1)6500206	10	15.6	16.7	15	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
C42F	8HK(0,1)6500206	10	15.6	16.7	15	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
C48G	8HK(0,1)6500206	10	17.6	18.7	20	20
	8HK(0,1)6500506	20	28.4	30.7	25	30
	8HK(0,1)6500806	32	41.6	45.3	45	45
	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
D48G	8HK(0,1)6500206	10	17.6	18.7	20	20
	8HK(0,1)6500506	20	28.4	30.7	25	30
	8HK(0,1)6500806	32	41.6	45.3	45	45
	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
C60H	8HK(0,1)6500206	10	17.6	18.7	20	20
	8HK(0,1)6500506	20	28.4	30.7	25	30
	8HK(0,1)6500806	32	41.6	45.3	45	45
	8HK(0,1)6501006	40	50.0	54.6	50	60
	8HK(1,2)6501506	60	71.7	78.5	80	80
	8HK(1,2)6502006	80	93.3	102.4	100	110

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Table 10: Electrical data for single source power supply: 208/230-1-60 (continued)

Air handler models	Heater models[1,2]	Heater amps (A) at 240 V	Field wiring			
			Minimum circuit ampacity (A)		MOP[3] (A)	
			208 V	230 V	208 V	230 V
D60H	8HK(0,1)6500206	10	17.6	18.7	20	20
	8HK(0,1)6500506	20	28.4	30.7	25	30
	8HK(0,1)6500806	32	41.6	45.3	45	45
	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
D60J	8HK(0,1)6500206	10	17.6	18.7	20	20
	8HK(0,1)6500506	20	28.4	30.7	25	30
	8HK(0,1)6500806	32	41.6	45.3	45	45
	8HK(0,1)6501006	40	50.0	54.6	50	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

1. (0,1) - 0 = no service disconnect or 1 = with service disconnect.
2. (1,2) - 1 = with service disconnect, no breaker jumper bar or 2 = with service disconnect and breaker jumper bar.
3. 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.

Table 11: Electrical data for multi-source power supply: 208/230-1-60

Air handlers models	Heater models[1]	Heater amps (A) at 240 V	Minimum circuit ampacity (A)						MOP[2] (A)					
			208 V			230 V			208 V			230 V		
			Circuit						Circuit					
			First[3]	Second	Third	First[3]	Second	Third	First[3]	Second	Third	First[3]	Second	Third
B24C	8HK16501506	60	24.7	43.5	—	26.9	48.1	—	25	45	—	30	50	—
B30D	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	—
B36D	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	—
C36D	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	—
C42F	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	—
C48G	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	—
D48G	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	—
C60H	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	—
D60H	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	50	45	25	60	50	25
D60J	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	50	45	25	60	50	25

1. (0,1) - 0 = no service disconnect or 1 = with service disconnect.
2. MOP = Maximum Overcurrent Protection device; must be HACR type circuit breaker or time delay fuse. The first circuit includes blower motor amps. 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.

Table 12: Electrical data for single source power supply: 208/230-3-60

Air handler models	Heater models[1]	Heater amps (A) at 240 V	Field wiring			
			Minimum circuit ampacity (A)		MOP[2] (A)	
			208 V	230 V	208 V	230 V
B18B	8HK06501025	23.1	46.5	51.1	50	60
B24C	8HK06501025	23.1	46.5	51.1	50	60
	8HK06501525	34.6	68.2	75.0	70	80
B30D	8HK06501025	23.1	48.0	52.6	50	60
	8HK06501525	34.6	69.7	76.5	70	80
	8HK06502025	46.2	91.3	100.4	100	110
B36D	8HK06501025	23.1	48.0	52.6	50	60
	8HK06501525	34.6	69.7	76.5	70	80
	8HK06502025	46.2	91.3	100.4	100	110
C36D	8HK06501025	23.1	48.0	52.6	50	60
	8HK06501525	34.6	69.7	76.5	70	80
	8HK0502025	46.2	91.3	100.4	100	110
C42F	8HK06501025	23.1	48.0	52.6	50	60
	8HK06501525	34.6	69.7	76.5	70	80
	8HK06502025	46.2	91.3	100.4	100	110
C48G	8HK06501025	23.1	50.0	54.6	60	60
	8HK06501525	34.6	71.7	78.5	80	80
	8HK06502025	46.2	93.3	102.4	100	110
D48G	8HK06501025	23.1	50.0	54.6	60	60
	8HK06501525	34.6	71.7	78.5	80	80
	8HK06502025	46.2	93.3	102.4	100	110
	8HK06502525	46.2	114.9	126.3	125	150
C60H	8HK06501025	23.1	50.0	54.6	60	60
	8HK06501525	34.6	71.7	78.5	80	80
	8HK06502025	46.2	93.3	102.4	100	110
D60H	8HK06501025	23.1	50.0	54.6	60	60
	8HK06501525	34.6	71.7	78.5	80	80
	8HK06502025	46.2	93.3	102.4	100	110
	8HK06502525	46.2	114.9	126.3	125	150
D60J	8HK06501025	23.1	50.0	54.6	60	60
	8HK06501525	34.6	71.7	78.5	80	80
	8HK06502025	46.2	93.3	102.4	100	110
	8HK06502525	46.2	114.9	126.3	125	150

1. The 20 kW and 25 kW heater models (8HK06502025 and 8HK06502525) 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.
2. MOP = Maximum overcurrent protection device; must be HACR type circuit breaker or time delay fuse. The first circuit includes blower motor amps. 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.

Table 13: Electrical data for multi-source power supply: 208/230-3-60

Air handlers models	Heater models[1]	Heater amps (A) at 240V	Minimum circuit ampacity (A)				MOP[2] (A)			
			208V		230V		208V		230V	
			Circuit				Circuit			
			First[2]	Second	First[2]	Second	First[2]	Second	First[2]	Second
B30D	8HK16502025	46.2	29.7	25.0	32.4	27.6	30.0	25.0	35.0	30.0
B36D	8HK16502025	46.2	29.7	25.0	32.4	27.6	30.0	25.0	35.0	30.0
C36D	8HK16502025	46.2	29.7	25.0	32.4	27.6	30.0	25.0	35.0	30.0
C42F	8HK16502025	46.2	29.7	25.0	32.4	27.6	30.0	25.0	35.0	30.0
C48G	8HK16502025	46.2	31.7	25.0	34.4	27.6	35.0	25.0	35.0	30.0
D48G	8HK16502025	46.2	31.7	25.0	34.4	27.6	35.0	25.0	35.0	30.0
C60H	8HK16502025	46.2	31.7	25.0	34.4	27.6	35.0	25.0	35.0	30.0
D60H	8HK16502025	46.2	31.7	25.0	34.4	27.6	35.0	25.0	35.0	30.0
	8HK16502525	57.7	38.0	31.2	41.3	34.5	40.0	35.0	45.0	35.0

Continued on next page

Table 13: Electrical data for multi-source power supply: 208/230-3-60

Air handlers models	Heater models[1]	Heater amps (A) at 240V	Minimum circuit ampacity (A)				MOP[2] (A)			
			208V		230V		208V		230V	
			Circuit				Circuit			
			First[2]	Second	First[2]	Second	First[2]	Second	First[2]	Second
D60J	8HK16502025	46.2	31.7	25.0	34.4	27.6	35.0	25.0	35.0	30.0
	8HK16502525	57.7	38.0	31.2	41.3	34.5	40.0	35.0	45.0	35.0

1. The 20 kW and 25 kW heater models (8HK06502025 and 8HK06502525) come with circuit breakers standard.
2. MOP = Maximum overcurrent protection device; must be HACR type circuit breaker or time delay fuse. The first circuit includes blower motor amps. 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.

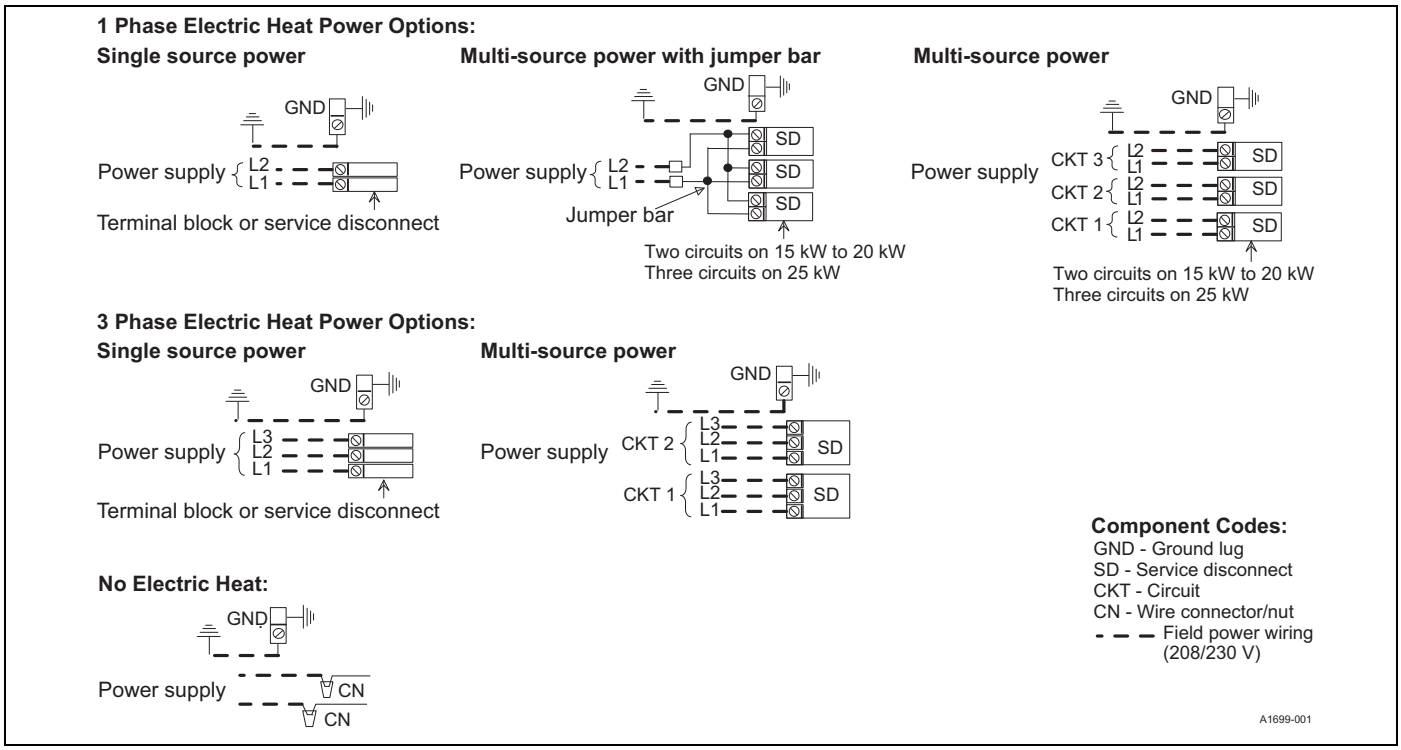

Figure 2: Power wiring - line connections

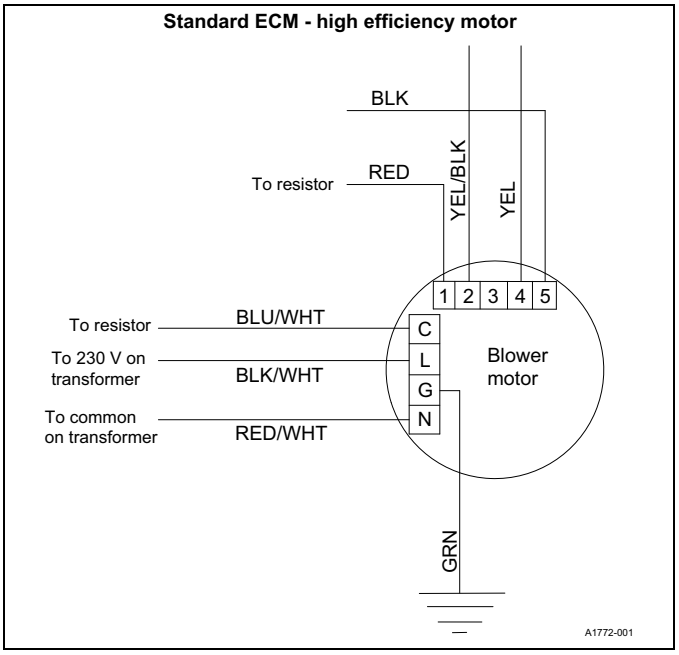

Figure 3: Blower speed connections

Accessories

Refer to Price Manual for specific model numbers where not shown.

TXV kits - Air handlers are shipped with Flex-coils without a factory-installed metering device. For added flexibility, an R-22 or R-410A TXV or piston can be field installed to meet your refrigerant choice. All TXV kits are chatleff style and require no brazing to install. Some models are available with a factory-installed TXV.

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

Single source power accessories (single-phase)	
S1-02435670000	For heat kits with 2 service disconnects.
S1-02435671000	For heat kits with 3 service disconnects.
Single source power accessory (three-phase)	
S1-32436041000	Contains a terminal block and wiring to connect service disconnects together.

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

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, Circuit Breaker, Cover Seal may be ordered.

Thermostat - Compatible thermostat controls are available through accessory sourcing. For optimum performance, these outdoor units are fully compatible with our YORK touch screen thermostat with proprietary (patent-pending) hexagon interface. For more information, see the thermostat section of the Product Equipment Catalog.

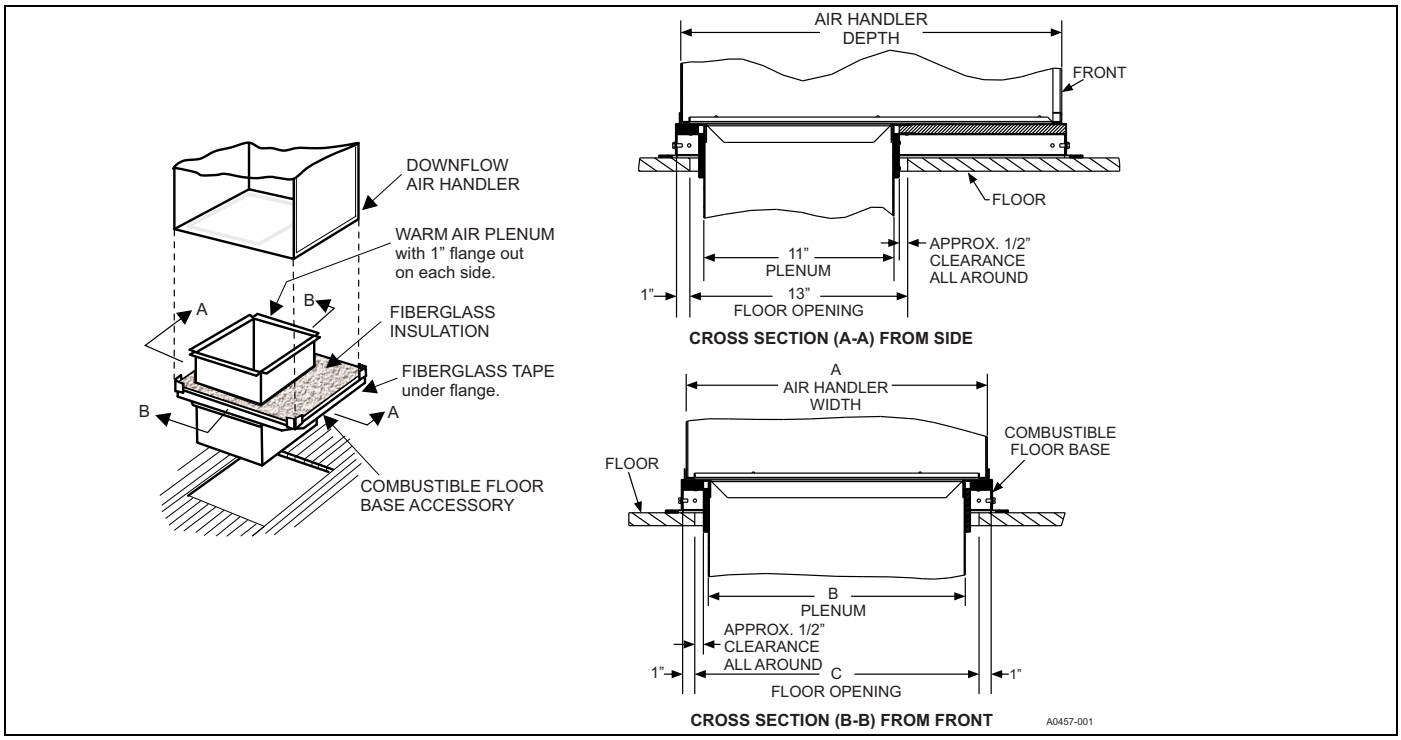

Figure 4: Combustible floor base accessory

Table 14: Combustible floor base accessory dimensions

Floor base models	Used with	Dimensions (in.)		
		A	B	C
1FB1917	B18B, B24C, B30D, B36D	17.5	14.0	16.0
1FB1921	C36D, C42F, C48G, C60H	21.0	17.5	19.5
1FB1924	D48G, D60H, D60J	24.5	21.0	23.0

Limitations

These units must be wired and installed in accordance with all national and local safety codes.

Voltage limits are as follows:

Air handler voltage	Voltage code	Normal operating voltage range[1]
208/230-1-60	06	187-253

1. Rated in accordance with ARI Standard 110, utilization range A.

Airflow must be within the minimum and maximum limits approved for electric heat, evaporator coils and outdoor units.

Typical applications

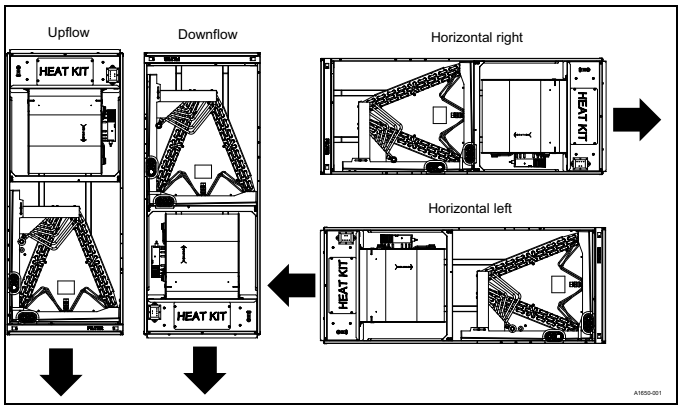

Figure 5: Typical applications

Control wiring

NOTICE

For Figure 6, Figure 7, Figure 8, and Figure 9:
Continuous fan (G) indoor blower speed tap must be set for a lower speed than first stage compressor speed. If the lowest blower speed tap must be used for first stage compressor speed, do not use the air handler Y1 connection. Allow the room thermostat to energize (G) for first stage compressor blower speed.

NOTICE

For Figure 6, Figure 9, and Figure 11:
Do not bond any of the outdoor unit **W** wires together.

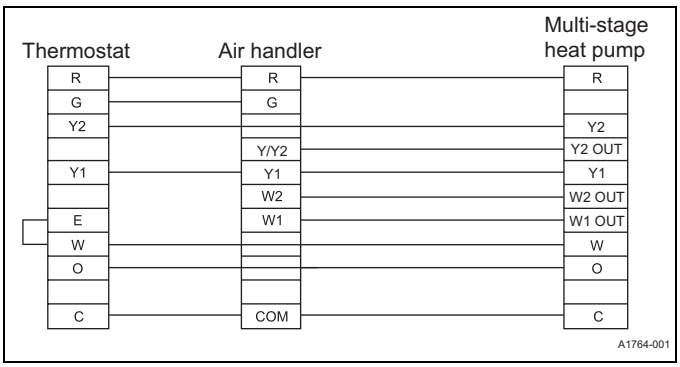

Figure 6: Standard ECM AH and premium multi-stage HP - conventional wiring

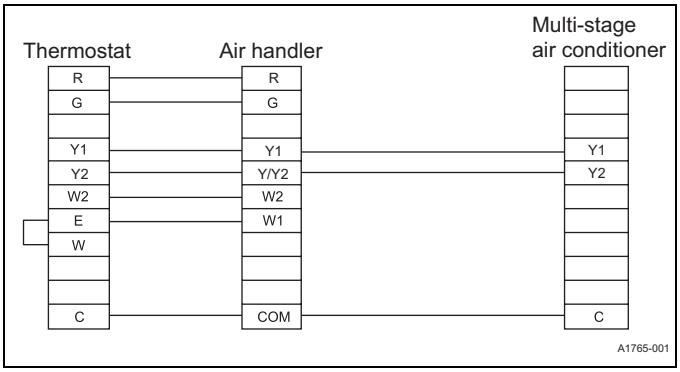

Figure 7: Standard ECM AH and standard multi-stage AC - conventional wiring

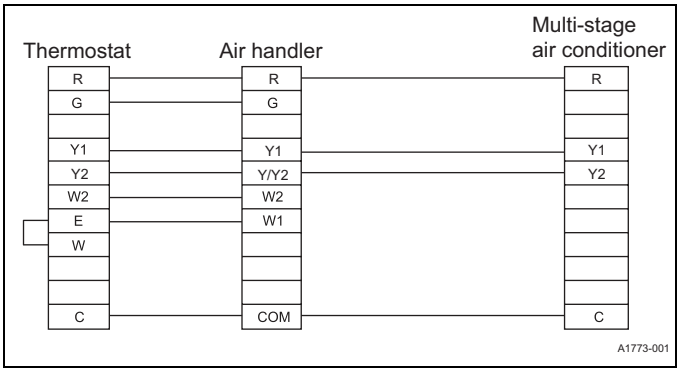

Figure 8: Standard ECM AH and premium multi-stage AC - conventional wiring

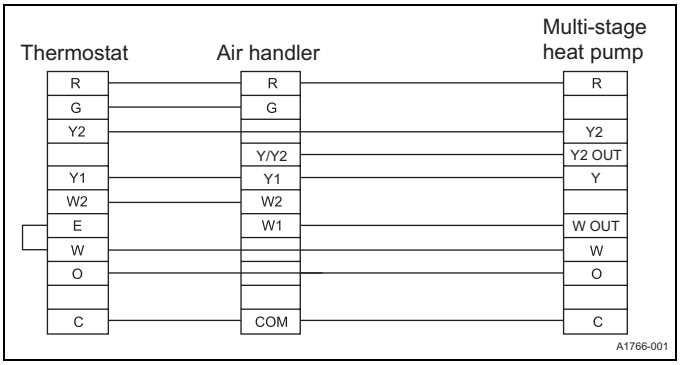

Figure 9: Standard ECM AH and standard multi-stage HP - conventional wiring

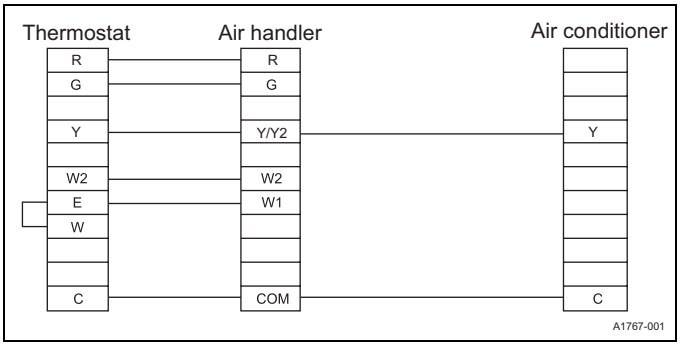

Figure 10: Standard ECM AH and single-stage AC - conventional wiring

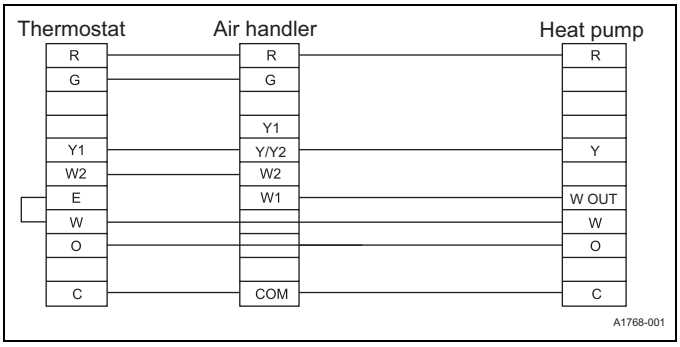

Figure 11: Standard ECM AH and single-stage HP - conventional wiring

Airflow data

Table 15: Airflow data (CFM per Watts)

Models	Blower motor speed	External static pressure (in. W.C.)										
		Unit	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
B18B	High (5)	CFM	975	925	875	825	800	750	700	650	600	550
		W	129	137	145	153	161	169	177	186	194	202
	Medium high (4)	CFM	900	850	800	775	725	675	625	575	525	500
		W	110	117	124	132	139	146	153	160	167	175
	Medium (3)	CFM	825	775	725	700	650	600	550	500	450	400
		W	94	101	107	114	120	127	134	140	147	154
	Medium low (2)	CFM	650	600	550	500	425	—	—	—	—	—
		W	58	63	68	73	78	—	—	—	—	—
	Low (1)	CFM	450	—	—	—	—	—	—	—	—	—
		W	31	—	—	—	—	—	—	—	—	—
B24C	High (5)	CFM	1150	1125	1100	1050	1025	975	950	900	875	850
		W	190	199	209	219	229	238	248	258	267	277
	Medium high (4)	CFM	1000	950	925	875	825	775	750	700	650	600
		W	130	138	147	155	163	171	180	188	196	204
	Medium (3)	CFM	775	725	675	625	575	525	450	400	—	—
		W	75	81	88	95	101	108	114	121	—	—
	Medium low (2)	CFM	675	600	550	500	425	—	—	—	—	—
		W	55	61	67	73	79	—	—	—	—	—
	Low (1)	CFM	525	450	—	—	—	—	—	—	—	—
		W	34	40	—	—	—	—	—	—	—	—
B30D	High (5)	CFM	1150	1125	1075	1050	1025	975	950	925	875	850
		W	221	228	235	243	252	262	273	285	297	311
	Medium high (4)	CFM	1000	950	900	875	825	800	750	700	675	625
		W	147	156	164	172	181	189	198	206	214	223
	Medium (3)	CFM	775	725	700	650	600	550	500	450	400	—
		W	87	93	100	106	113	120	126	133	139	—
	Medium low (2)	CFM	650	600	550	500	450	400	—	—	—	—
		W	62	67	72	78	83	89	—	—	—	—
	Low (1)	CFM	575	525	475	400	—	—	—	—	—	—
		W	49	54	59	65	—	—	—	—	—	—
B36D	High (5)	CFM	1500	1475	1450	1425	1425	1400	1375	1350	1325	—
		W	482	493	504	516	527	539	550	562	573	—
	Medium high (4)	CFM	1325	1300	1275	1250	1225	1200	1175	1150	1125	1100
		W	332	339	347	357	367	379	391	405	420	435
	Medium (3)	CFM	975	950	900	875	825	800	750	700	675	625
		W	145	154	162	170	178	186	194	202	210	219
	Medium low (2)	CFM	925	875	825	800	750	700	675	625	575	550
		W	121	128	136	143	151	158	166	173	180	188
	Low (1)	CFM	650	600	550	500	450	400	—	—	—	—
		W	60	65	71	76	81	87	—	—	—	—
C36D	High (5)	CFM	1600	1575	1525	1500	1450	1425	1400	1350	1325	1275
		W	377	391	405	419	434	448	462	476	490	504
	Medium high (4)	CFM	1400	1375	1325	1275	1225	1200	1150	1100	1075	1025
		W	260	272	283	294	305	316	328	339	350	361
	Medium (3)	CFM	1100	1050	1000	950	900	850	800	725	675	625
		W	143	152	161	169	178	187	195	204	212	221
	Medium low (2)	CFM	950	900	825	775	725	650	600	550	475	425
		W	103	110	117	124	131	138	146	153	160	167
	Low (1)	CFM	725	650	575	525	450	375	—	—	—	—
		W	60	66	72	77	83	89	—	—	—	—
C42F	High (5)	CFM	1525	1500	1450	1425	1375	1350	1300	1275	1225	1200
		W	334	348	363	377	391	405	419	433	448	462
	Medium high (4)	CFM	1375	1325	1300	1250	1200	1150	1125	1075	1025	975
		W	247	259	270	282	293	305	317	328	340	352
	Medium (3)	CFM	1050	1000	950	900	850	775	725	675	625	575
		W	130	138	146	155	163	171	180	188	197	205
	Medium low (2)	CFM	925	875	800	750	700	625	575	525	450	400
		W	97	104	112	119	126	133	141	148	155	162
	Low (1)	CFM	700	625	575	500	425	—	—	—	—	—
		W	56	61	67	73	78	—	—	—	—	—

Continued on next page

Table 15: Airflow data (CFM per Watts) (continued)

Models	Blower motor speed	External static pressure (in. W.C.)										
		Unit	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
C48G	High (5)	CFM	1925	1900	1875	1850	1800	1775	1750	1725	1700	1675
		W	588	604	619	635	650	666	681	697	712	728
	Medium high (4)	CFM	1750	1700	1675	1650	1600	1575	1550	1500	1475	1450
		W	435	449	463	476	490	504	517	531	545	558
	Medium (3)	CFM	1400	1350	1300	1275	1225	1175	1125	1075	1050	1000
		W	235	245	256	266	277	287	298	308	319	329
	Medium low (2) (2)	CFM	1200	1150	1100	1050	1000	925	875	825	775	725
		W	157	166	176	185	194	203	212	221	230	239
	Low (1)	CFM	925	875	800	750	700	625	575	500	450	375
		W	93	100	107	114	121	128	135	142	149	156
D48G	High (5)	CFM	2050	2000	1975	1950	1900	1875	1850	1800	1775	1750
		W	579	597	615	632	650	668	686	704	722	739
	Medium high (4)	CFM	1850	1800	1775	1725	1700	1650	1625	1575	1550	1500
		W	431	446	461	476	492	507	522	537	552	568
	Medium (3)	CFM	1625	1600	1550	1500	1450	1425	1375	1325	1275	1250
		W	305	318	332	345	358	371	384	397	410	423
	Medium low (2)	CFM	1275	1200	1150	1100	1050	975	925	875	825	750
		W	159	169	179	189	199	208	218	228	238	248
	Low (1)	CFM	1000	925	875	800	750	675	600	550	475	400
		W	96	103	111	118	126	133	141	148	156	163
C60H	High (5)	CFM	1925	1900	1875	1850	1825	1775	1750	1725	1700	1675
		W	564	578	593	608	623	638	653	668	683	698
	Medium high (4)	CFM	1750	1725	1675	1650	1625	1575	1550	1525	1475	1450
		W	420	433	447	461	474	488	502	515	529	543
	Medium (3)	CFM	1375	1350	1300	1250	1225	1175	1125	1100	1050	1000
		W	222	233	244	255	266	277	288	299	310	321
	Medium low (2)	CFM	1200	1150	1100	1050	1000	950	900	850	800	750
		W	154	163	173	182	192	201	211	220	229	239
	Low (1)	CFM	950	900	825	775	725	650	600	550	475	425
		W	91	98	105	113	120	127	134	142	149	156
D60H	High (5)	CFM	1925	1900	1875	1825	1800	1775	1750	1700	1675	1650
		W	500	515	530	545	560	575	590	605	620	635
	Medium high (4)	CFM	1775	1750	1725	1675	1650	1600	1575	1525	1500	1450
		W	393	407	421	435	449	463	477	491	504	518
	Medium (3)	CFM	1450	1400	1325	1275	1225	1175	1125	1075	1025	975
		W	212	223	235	246	258	269	281	292	304	315
	Medium low (2)	CFM	1225	1175	1125	1050	1000	950	875	825	775	700
		W	146	156	166	176	185	195	205	215	225	235
	Low (1)	CFM	975	900	850	775	700	625	550	475	425	—
		W	87	95	102	110	118	125	133	141	148	—
D60J	High (5)	CFM	2100	2075	2050	2025	2000	1975	1925	1900	1875	1850
		W	691	707	724	740	757	773	790	806	823	839
	Medium high (4)	CFM	1925	1900	1875	1825	1800	1775	1725	1700	1675	1650
		W	516	533	550	566	583	600	617	633	650	667
	Medium (3)	CFM	1750	1725	1675	1650	1600	1575	1525	1500	1450	1425
		W	394	409	423	437	452	466	480	495	509	524
	Medium low (2)	CFM	1350	1275	1225	1175	1125	1075	1025	975	925	875
		W	188	199	210	221	232	242	253	264	275	286
	Low (1)	CFM	1200	1150	1100	1025	975	925	850	800	750	675
		W	145	155	165	174	184	193	203	212	222	232

Notes:

1. No electric heat installed
2. Air handler units are tested to UL60335-2-40 standards up to 0.6 in. W.C. external static pressure.
3. Dry coil conditions only; tested without filters
4. For optimal performance, external static pressures of 0.2 in. W.C. to 0.5 in. W.C. are recommended. Heating applications are tested at 0.5 in. W.C. external static pressure.
5. Airflow data shown is from testing performed at 230 V. JHET units use a standard ECM constant torque motor and there is minimal variation of airflow at other distribution voltage values. The above data can be used for airflow at other distribution voltages.

6144664-YTG-B-1122
Supersedes: 6144664-YTG-A-0222

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