

Air Conditioning & Heating

Product Features

- Variable-speed ECM blower motor
- ComfortNet™ Communicating System compatible
- Auto configuration of the airflow and tonnage in communicating mode
- Provides constant CFM over a wide range of static pressure conditions independent of duct system
- CFM indicator
- · Fault recall of six most recent faults
- Provides adjustable low CFM for efficient fan-only operation
- Improved humidity and comfort control
- Built-in compatibility with multi-stage heat pump and cooling applications
- 3 kW 21 kW electric heat kits
- Blower section usable as electric heater
- Horizontal or vertical configuration capabilities
- 21" depth for easier attic access
- Foil-faced insulation covers the internal casing to reduce cabinet condensation
- Galvanized, leather grainembossed finish
- · AHRI certified; ETL listed

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MBVC

Multi-Position
Variable-Speed ECM Based
ComfortNet[™] Compatible
Modular Blower
1½ to 5 tons









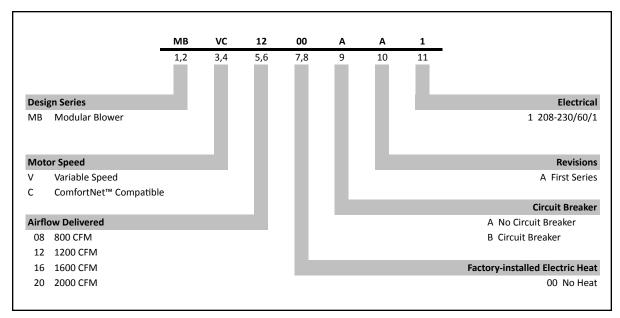


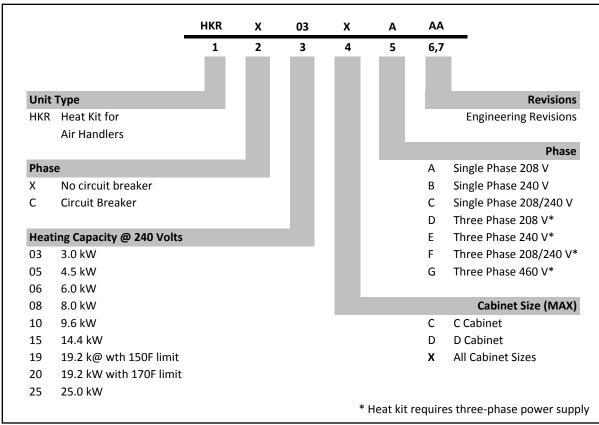






Nomenclature





HEATING KW CORRECTION FACTOR

SUPPLY VOLTAGE	240	230	220	210	208
CORRECTION FACTOR	1.00	0.92	0.84	0.77	0.75

Multiply the 240-volt heating capacity by correction factors.

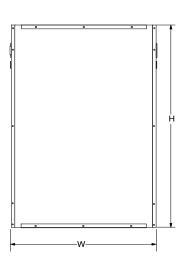
SPECIFICATIONS

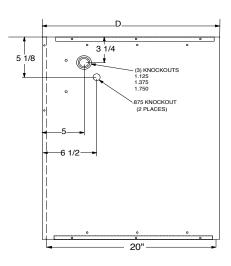
Model	MBVC1200AA-1	MBVC1600AA-1	MBVC2000AA-1	
BLOWER				
Diameter	10"	10"	11"	
Width	8"	8"	10"	
ELECTRICAL DATA				
Voltage	208 / 230	208 / 230	208 / 230	
Min Circuit Ampacity	4.3	6.3	5.8	
Max. Overcurrent Device (Amps)	15	15	15	
Blower Motor				
Horsepower (HP)	1/2	3/4	3/4	
SHIP WEIGHT (LBS.)	67	80	86	

Minimum Circuit Ampacity (MCA) and Maximum Overcurrent Protection (MOP) for blower without supplemental heat installed. Refer to unit nameplate for these specifications with approved accessory heaters installed.

DIMENSIONS

SIDE AND FRONT VIEWS

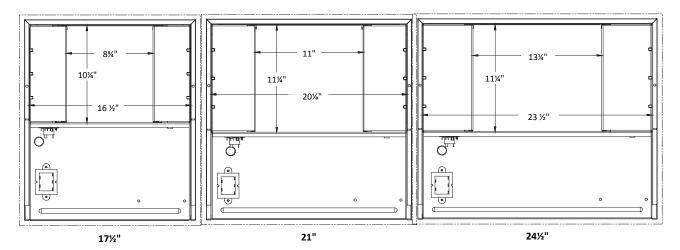




MODEL	DIMENSIONS			
INIODEL	WIDTH DEPTH		HEIGHT	
MBVC1200AA-1	17½"	21"	26"	
MBVC1600AA-1	21"	21"	30"	
MBVC2000AA-1	24½"	21"	30"	

Top View

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Cooling / HP Airflow

\$1	S2	SPEED TAP	MBVC1200 Airflow (SCFM)	MBVC1600 AIRFLOW (SCFM)	MBVC2000 AIRFLOW (SCFM)
off	off	Α	600	1000	1200
on	off	В	800	1200	1600
off	on	С	1000	1400	1800
on	on	D	1200	1600	2000

COOLING / HP / AUX TRIM			COOLING PROFILE			
S 3	S4	Trim Value	S5	S6		
off	off	0	off	off	Α	
on	off	10%	on	off	В	
off	on	-10%	off	on	С	
on	on	0	on	on	D	

Notes

- The chart is for information only. For satisfactory operation, external static pressure must not exceed value shown on rating plate.
- Use the CFM adjustment factors of .98 for horizontal left, .95 for horizontal right & .96 for downflow orientations.

HEAT KIT DATA

	Circuit 1			Circuit 2			Single-Point Kit	
Models	Heater Amps	MCA ¹	MOP ²	Heater Amps	MCA ¹	MOP ²	MCA ¹	MOP ²
MBVC1200AA-1A*	0/0	4.3 / 4.3	15 / 15					
HKR-03*	10.8 / 12.5	17.8 / 19.9	20 / 20					
HKR-05* / 05C*	17.2 / 19.8	25.7 / 29.0	30 / 30					
HKR-06*	21.7 / 25.0	31.3 / 35.5	35 / 40					
HKR-08* / -08C*	25.3 / 29.2	35.8 / 40.7	40 / 45					
HKR-10* / -10C*	34.3 / 39.6	47.1 / 53.7	50 / 60					
HKA-15C*	34.3 / 39.6	47.1 / 53.7	50 / 60	17.2 / 19.8	21.4 / 24.7	25 / 25	69/79	70 / 80
MBVC1600AA-1A*	0/0	6.3 / 6.3	15 / 15					
HKR-03*	10.8 / 12.5	19.8 / 21.9	20 / 25					
HKR-05* / 05C*	17.2 / 19.8	27.7 / 31.0	30 / 35					
HKR-06*	21.7 / 25.0	33.3 / 37.5	35 / 40					
HKR-08* / -08C*	25.3 / 29.2	37.8 / 42.7	40 / 45					
HKR-10* / -10C*	34.3 / 39.6	49.1 / 55.7	50 / 60					
HKA-15C*	34.3 / 39.6	49.1 / 55.7	50 / 60	17.2 / 19.8	21.4 / 24.7	25 / 25	71/81	80 / 90
MBVC2000AA-1A*	0/0	5.8 / 5.8	15 / 15					
HKR-03*	10.8 / 12.5	19.3 / 21.4	20 / 25					
HKR-05* / 05C*	17.2 / 19.8	27.2 / 30.5	30 / 35					
HKR-06*	21.7 / 25.0	32.8 / 37.0	35 / 40					
HKR-08* / -08C*	25.3 / 29.2	37.3 / 42.2	40 / 45					
HKR-10* / -10C*	34.3 / 39.6	48.6 / 55.2	50 / 60					
HKA-15C*	34.3 / 39.6	48.6 / 55.2	50 / 60	17.2 / 19.8	21.4 / 24.7	25 / 25	70/80	70 / 80
HKA-20C*	34.3 / 39.6	48.6 / 55.2	50 / 60	34.3 / 39.6	42.9 / 49.5	45 / 50	92/105	100 / 110

All ampacities noted above include air handler motor amps Circuit 1: Single-phase for Air Handlers / Circuit 2: Three-phase for HKR3 Heater Kits

--- indicates Not Required
HKA meets the new UL1995 requirements for 15 and 20KW heaters

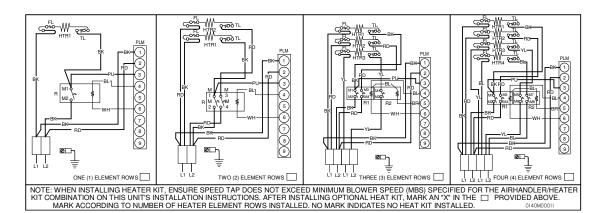
Only applicable when HKA kits are included in table

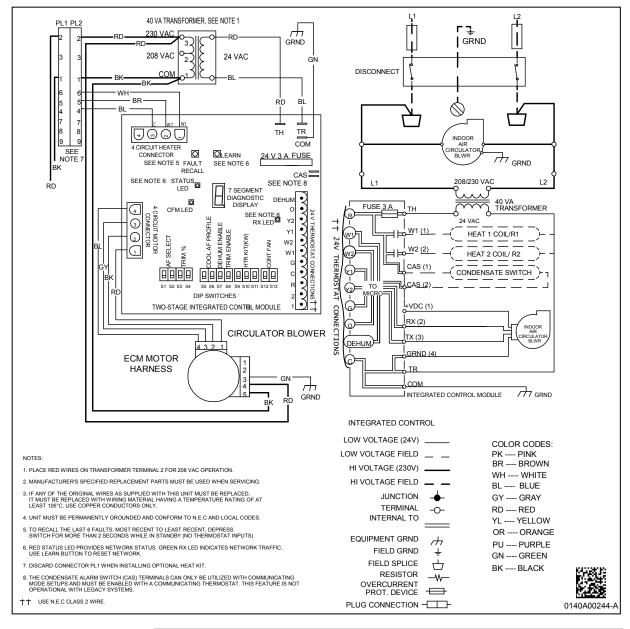
MBVC and MBR models

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

^{*} Revision level that may or may not be designated C = Circuit Breaker Option

WIRING DIAGRAM - AIR HANDLER



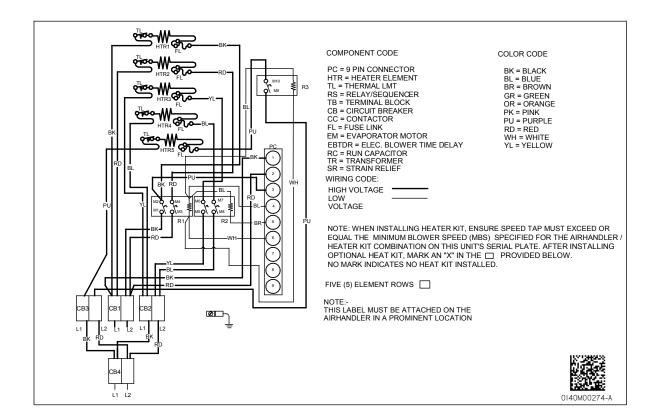


Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.



High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

WIRING DIAGRAM - 5 ELEMENT HEATER KIT



Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.



High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

