Goodman®

Air Conditioning & Heating

Product Specifications

Cooling Capacity:
18,000 - 60,000 BTU/h

MBE/MBR

Variable- and Multi-Speed Modular Blowers

The Goodman® brand MBE/ MBR Modular Blowers are tailor-made for exceptional energy efficiency. When matched with our cased coils for upflow, downflow, and horizontal applications, these two-piece blowers increase both installation and application flexibility.

Standard Features

- MBR is a multi-speed blower — motor speed is easily changed
- MBE has a variable-speed ECM™ blower motor
- Cooling or heat pump applications: upflow, downflow, and horizontal applications
- MBR control board includes a fan delay in cooling mode and is isolated from the air stream
- CAPF/CHPF coils are equipped with a check flowrater
- AHRI Certified
- ETL Listed

Cabinet Features

- Painted, galvanized steel cabinet
- Blower section usable as an electric furnace
- Intended for use with cased evaporator coils (CAPF/CHPF) and condensing units or heat pumps
- Foil-faced insulation is glued in place and covers the entire blower case to reduce operating sound and cabinet condensation
- Bottom flanges formed inwardly for additional strength and to provide a good mounting surface for a cased-coil section to form a two-piece blower coil

10 YEAR PARTS LIMITED WARRANTY*

GoodCare EXTENDED SERVICE PLAN

ETL LISTED

ARI PERFORMANCE CERTIFIED

ISO 9001

* To receive the 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec. Full warranty details available at www.goodmanmfg.com.

GUARANTEED QUALITY DARE TO COMPARE EXCEPTIONAL VALUE

NOMENCLATURE

MB	R	12	00	A	A	1
1,2	3	4,5	6,7	8	9	10

Design Series
MB Modular Blower

Motor Speed
E Variable Speed
R Constant Speed

Airflow Delivered
08 800 CFM
12 1200 CFM
16 1600 CFM
20 2000 CFM

Electrical
1 208-230/60/1

Revisions
A First Series

Circuit Breaker
A No Circuit Breaker
B Circuit Breaker

Factory-installed Electric Heat
00 No Heat

SPECIFICATIONS

Model	CFM @ 0.3" ESP (High-Med-Low)	Voltage-Phase	MCA[1]	MOD[1]	Blower		Motor HP	Ship Weight (lbs)
					Diam.	Width		
MBE1200AA-1	1,200 to 600	208/230-1	3.2	15	10"	8"	½	72
MBE1600AA-1	1,600 to 1,200	208/230-1	5.7	15	10"	8"	¾	82
MBE2000AA-1	2,000 to 1,200	208/230-1	4.4	15	11"	10"	¾	94
MBR0800AA-1	910-720-500	208/230-1	1.9	15	9"	6"	¼	72
MBR1200AA-1	1,100-1,060-940	208/230-1	3	15	9"	8"	⅓	72
MBR1600AA-1	1,580-1,380-1,000	208/230-1	3.8	15	10"	8"	⅓	82
MBR2000AA-1	1,860-1,510-1,320	208/230-1	4.9	15	10"	10"	½	94

[1] Minimum Circuit Ampacity and Maximum Overcurrent Protection Device (MOD) for blower without supplemental heat installed. Refer to unit nameplate for these specifications with approved accessory heaters installed.

ELETRIC HEAT KIT DATA

Blower	Electric Heat Kir									
	HKR-03*	HKR-05*/ -05C*	HKR-06*	HKR-08*/ -08C*	HKR-10*/ -10C*	HKR-15C*	HKR3-15*	HKR-20C*	HKR3-20*	HKR-21C*
MBE1200AA-1A*					X	X				
MBE1600AA-1A*					X	X				
MBE2000AA-1A*					X	X		X		
MBE1200AA-1B*	X	X	X	X	X	X				
MBE1600AA-1B*	X	X	X	X	X	X				
MBE2000AA-1B*	X	X	X	X	X	X		X		
MBR0800AA-1A*	X	X	X	X	X					
MBR1200AA-1A*	X	X	X	X	X	X	X	X	X	X
MBR1600AA-1A*	X	X	X	X	X	X	X	X	X	X
MBR2000AA-1A*	X	X	X	X	X	X	X	X	X	X

SINGLE POINT KIT **

Model	HKR-15C	HKR-20C	HKR-21C
SPW-01	X	X	X

** Must be installed along with any of the above compatible heat kits. This kit will fit any MBE-MBR blower as long as a compatible heat kit is installed in the unit.

MBE Blower Performance Data

Dipswitch Functions

Dipswitch Number	Function
1	Electric Heat
2	
3	N/A
4	Indoor Thermostat
5	Cooling & Heat Pump CFM
6	
7	CFM Trim Adjust
8	

Cooling/Heat Pump Operation

Model	Switch 5	Switch 6	CFM
MBE1200*	Off	Off	1,200
	On	Off	1,000
	Off	On	800
	On	On	600
MBE1600*	Off	Off	1,600
	On	Off	1,400
	Off	On	1,200
	On	On	1,000
MBE2000*	Off	Off	2,000
	On	Off	1,800
	Off	On	1,600
	On	On	1,200

Electric Heat Operation

Model	Switch 1	Switch 2	CFM
MBE1200*	Off	Off	1,200
	On	Off	1,000
	Off	On	800
	On	On	600
MBE1600*	Off	Off	1,600
	On	Off	1,400
	Off	On	1,200
	On	On	1,000
MBE2000*	Off	Off	2,000
	On	Off	1,800
	Off	On	1,600
	On	On	1,200

Thermostat "Fan Only" Mode*

CFM Trim Adjust	CFM	Switch 7	Switch 8
Minor adjustments can be made through the 7-8 dip switch combination.	+10%	On	Off
	-15%	Off	On

* During Fan-only operations, the CFM output is 30% of the cooling setting.

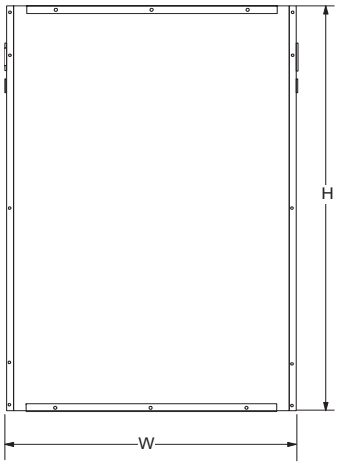
MBR Blower Performance Data

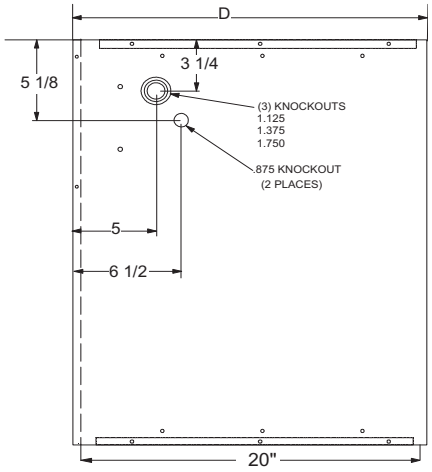
Speed	Static	MBR0800**-* SCFM	MBR1200**-* SCFM	MBR1600**-* SCFM	MBR2000**-* SCFM
High	0.1	1,240	1,500	1,800	2,160
	0.2	1,170	1,460	1,740	2,080
	0.3	1,120	1,360	1,680	1,990
	0.4	1,060	1,280	1,610	1,890
	0.5	980	1,200	1,520	1,790
	0.6	900	1,110	1,430	1,690
Medium	0.1	900	1,380	1,540	1,730
	0.2	850	1,320	1,490	1,670
	0.3	790	1,270	1,450	1,590
	0.4	740	1,200	1,400	1,520
	0.5	680	1,140	1,350	1,420
	0.6	605	1,040	1,280	1,320
Low	0.1	650	1,170	1,130	1,520
	0.2	590	1,130	1,100	1,450
	0.3	540	1,080	1,070	1,360
	0.4	500	1,020	1,030	1,290
	0.5	430	950	990	1,200
	0.6	330	830	930	1,090

External static is for blower @ 230 Volts, it does not include Coil, Air Filter or Electric heaters.

Dimensions

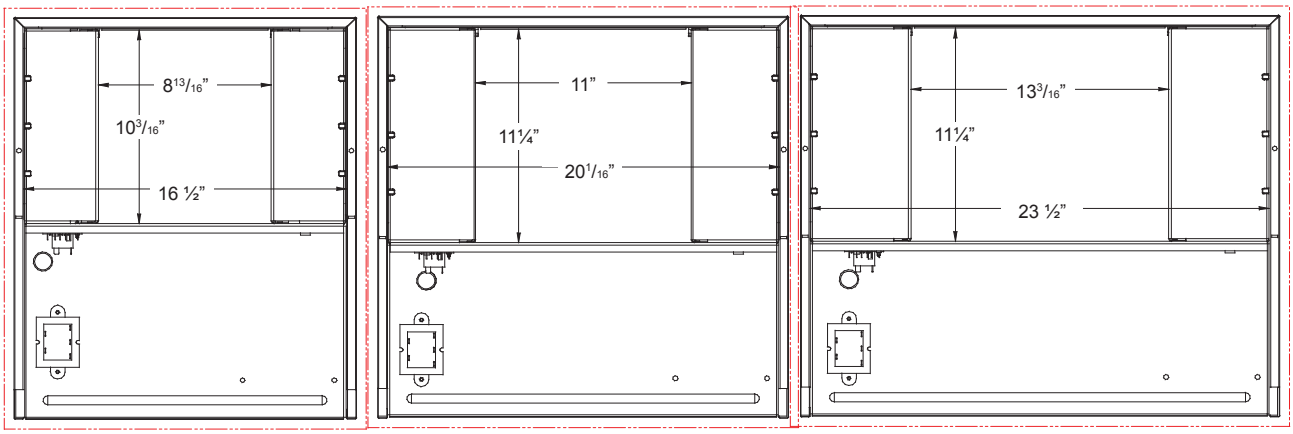
Side and Front Views





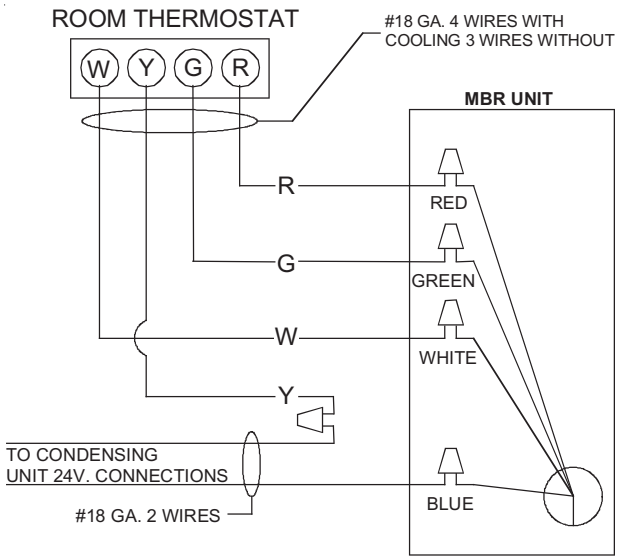
	W	H	D
MBE1200*	17½”	26”	21”
MBE1600*	21”	30”	21”
MBE2000*	24½”	30”	21”
MBR0800*	17½”	26”	21”
MBR1200*	17½”	26”	21”
MBR1600*	21”	30”	21”
MBR2000*	24½”	30”	21”

Top View

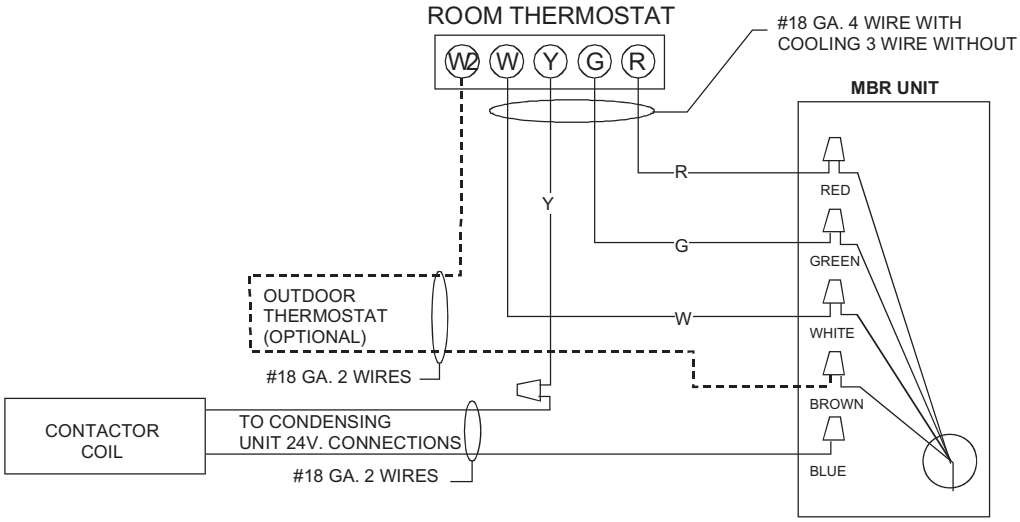


17½” 21” 24½”

WIRING DIAGRAMS



Low Voltage Wiring Diagram for Cooling Unit with optional heat kit 10KW and below

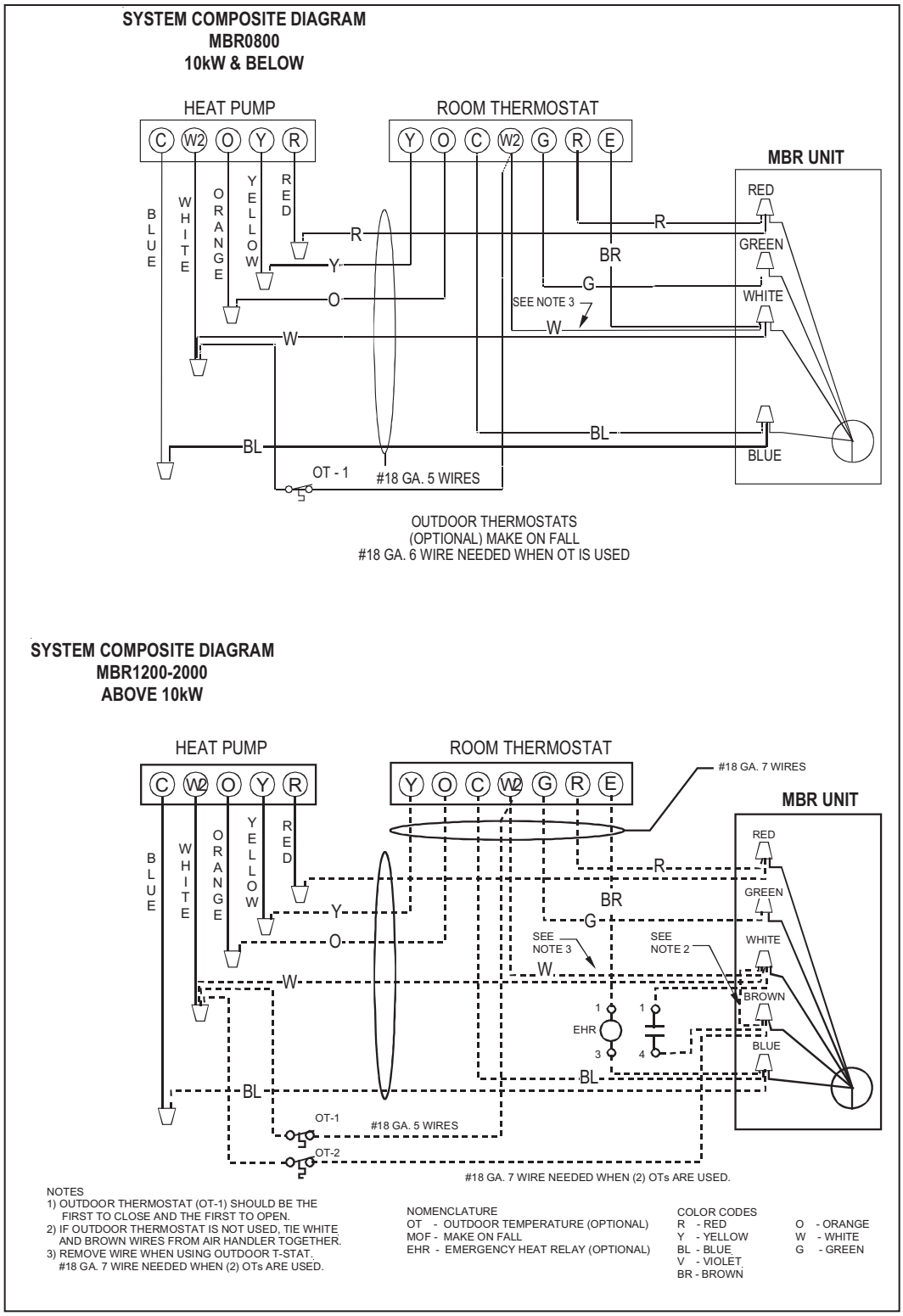


Low Voltage Wiring Diagram for Cooling Unit with optional heat kit 15KW and above

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

WARNING	**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 DIAGRAMS (CONT.)



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

WARNING	**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.

NOTES

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