

V8MSBB

Mode Selection Box for VRB Heat Recovery 60Hz

Bulletin No. 210888 October 2019 Supersedes May 2019

COMMERCIAL PRODUCT SPECIFICATIONS

FEATURES

- Allows simultaneous heating and cooling of multiple zones
- Used with VRB Heat Recovery outdoor units
- Comprised of a series of solenoid valves that control refrigerant flow through each indoor unit based on the operational mode selected for that indoor unit
- Linear Expansion Design Regulates the flow of refrigerant and reduces sound levels
- Braze Fittings For outdoor and indoor unit pipe connections

USAGE

- V8MSBB02 (18F50) 2 groups of 5, 10 indoor units maximum
- V8MSBB04 (18F51) 4 groups of 5, 20 indoor units maximum
- V8MSBB06 (18F52) 6 groups of 5, 30 indoor units maximum
- V8MSBB08 (17V25) 8 groups of 5, 40 indoor units maximum
- V8MSBB10 (17V26) 10 groups of 5, 41 indoor units maximum
- V8MSBB12 (17V27) 12 groups of 5, 41 indoor units maximum

NOTE - For indoor use only.

APPROVALS AND WARRANTY

APPROVALS

• ETL certified for the U.S. and Canada

WARRANTY

· Components - Limited one year

CONTENTS

Approvals and Warranty									1
Dimensions									5
Features									1
Installation Clearances.									9
Sound Data									4



V8MSBB02



V8MSBB04



V8MSBB06



V8MSBB08



V8MSBB10



SPECII	FICATIONS		V8MSBB02 - V8MSBB0				
General		Model Number	V8MSBB02	V8MSBB04	V8MSBB06		
Data	Maximu	ım Number of Indoor Unit Groups	2	4	6		
	Maximum Numb	per of Indoor Units in Each Group	5	5	5		
	Maximum Numb	er of all Downstream Indoor Units	10	20	30		
Valve Type			Solenoid	Solenoid	Solenoid		
Capacity	Maximum Capac	ity Each Indoor Unit Group (Btuh)	54,000 or less	54,000 or less	54,000 or less		
	Total Capacity of a	all Downstream Indoor Units (Btuh)	108,000	216,000	290,000		
Piping	Connection	I -	1/2, 3/8	5/8, 1/2, 3/8	5/8, 1/2, 3/8		
Connection	ons to Outdoor Unit	High Pressure Gas Pipe O.D in.	7/8, 3/4, 5/8	1-1/8, 7/8, 3/4	1-1/8, 7/8, 3/4		
		Low Pressure Gas Pipe O.D in.	1-1/8, 7/8, 3/4	1-3/8, 1-1/8, 7/8	1-3/8, 1-1/8, 7/8		
	Connection	Liquid Pipe O.D in.	1/4, 3/8	1/4, 3/8	1/4, 3/8		
	to Indoor Unit	Gas Pipe O.D in.	1/2, 5/8	1/2, 5/8	1/2, 5/8		
		¹ Drain connection O.D in.	1	1	1		
Unit ship	oing weight - lbs	5.	84	141	150		
Control W	/iring (AWG)		2-Core Shielded, Stranded, Polarity Sensitive, 18 AWG				
ELECT	RICAL DATA						
		Line voltage data - 60 hz - 1ph	208/230V	208/230V	208/230V		
		Input (W)	46	69	115		
	² Maximu	m Overcurrent Protection (amps)	15	15	15		
		³ Minimum Circuit Ampacity	0.26	0.38	0.63		

¹ 1 x 3/4 in. condensate drain adaptor furnished for field installation (if required).

³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

SPECIFIC	CATIONS		V8MSBB08 - V8MSBB				
General		Model Number	V8MSBB08	V8MSBB10	V8MSBB12		
Data	Maximu	ım Number of Indoor Unit Groups	8	10	12		
M	Maximum Number of Indoor Units in Each Group			5	5		
Maximum Number of all Downstream Indoor Units			40	41	41		
Valve Type			Solenoid	Solenoid	Solenoid		
Capacity Maximum Capacity Each Indoor Unit Group (Btuh)			54,000 or less	54,000 or less	54,000 or less		
Tota	al Capacity of	all Downstream Indoor Units (Btuh)	290,000	290,000	290,000		
Piping	Connection	·	3/4, 5/8, 1/2, 3/8	3/4, 5/8, 1/2, 3/8	3/4, 5/8, 1/2, 3/8		
Connections	to Outdoor Unit	I DIGIT FIESSULE GAS FIDE O.D III. 🗆	1-1/8, 7/8, 3/4	1-1/8, 7/8, 3/4	1-1/8, 7/8, 3/4		
	Unit	Low Pressure Gas Pipe O.D in.	1-3/8, 1-1/8, 7/8	1-3/8, 1-1/8, 7/8	1-3/8, 1-1/8, 7/8		
	Connection	Liquid Pipe O.D in.	1/4, 3/8	1/4, 3/8	1/4, 3/8		
	to Indoor Unit	Gas Pipe O.D in.	1/2, 5/8	1/2, 5/8	1/2, 5/8		
		¹ Drain connection O.D in.	1	1	1		
Unit shippin	g weight - lbs	5.	201	205	209		
Control Wiri	ng (AWG)		2-Core Shielded, Stranded, Polarity Sensitive, 18 AWG				
ELECTRI	CAL DATA						
		Line voltage data - 60 hz - 1ph	208/230V	208/230V	208/230V		
Input (W)			138	172.5	195.5		
	² Maximu	m Overcurrent Protection (amps)	15	15	15		
		³ Minimum Circuit Ampacity	0.8	0.9	1.1		

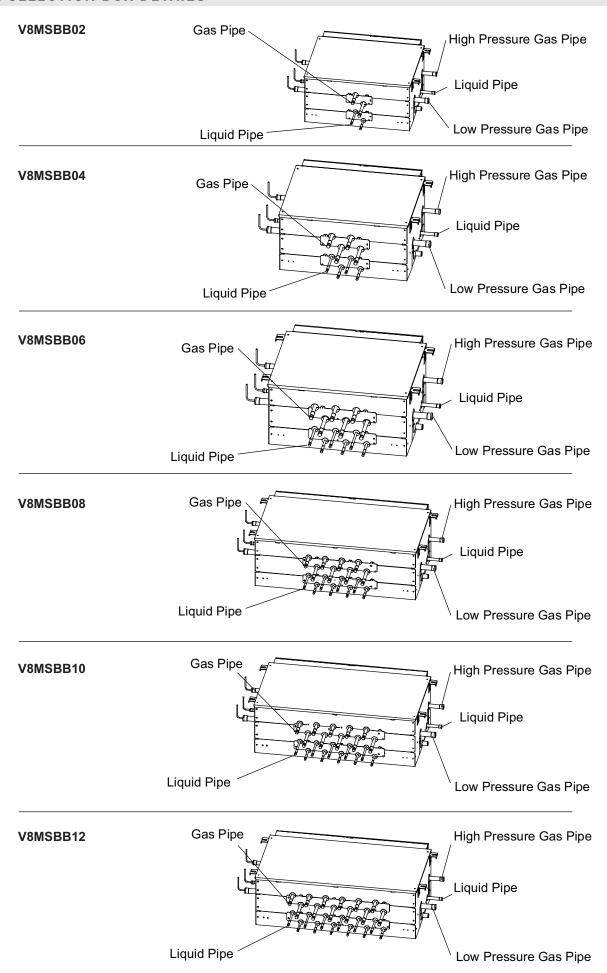
 $^{^{\}rm 1}$ 1 x 3/4 in. condensate drain adaptor furnished for field installation (if required).

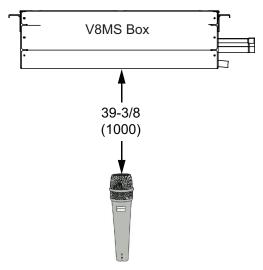
 $^{^{\}rm 2}$ HACR type circuit breaker or fuse.

² HACR type circuit breaker or fuse.

³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

MODE SELECTION BOX DETAILS





Measured from the bottom of the unit.

Model No.	V8MSBB02	V8MSBB04	V8MSBB06	V8MSBB08	V8MSBB10	V8MSBB12
Heating	38	39	40	42	42	42
Cooling	39	41	42	43	45	43
¹ Main Heating	39	42	41	44	43	43
¹ Main Cooling	44	44	43	46	45	43

¹ The majority of indoor units are operating in cooling or heating mode.

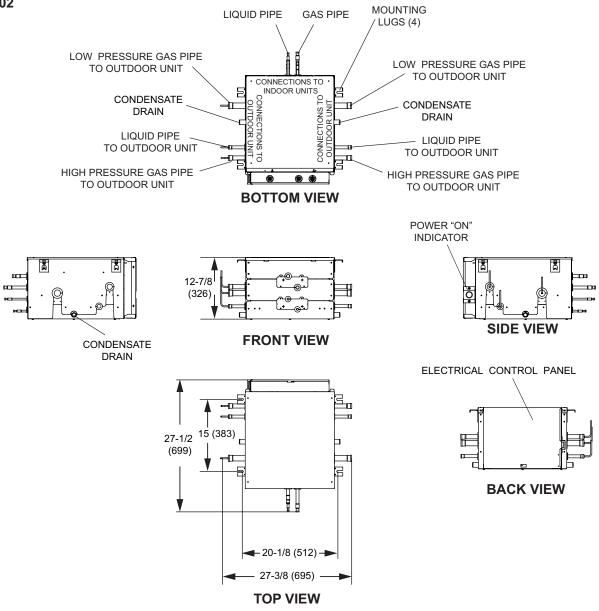
Model No.	V8MSBB02	V8MSBB04	V8MSBB06	V8MSBB08	V8MSBB10	V8MSBB12
² Minimum	24	24	24	22	21	21
² Maximum	58	59	59	58	56	60

² This data represents the instantaneous peak data during mode switching.

Sound measured at 68°F ambient temperature at MS Box.

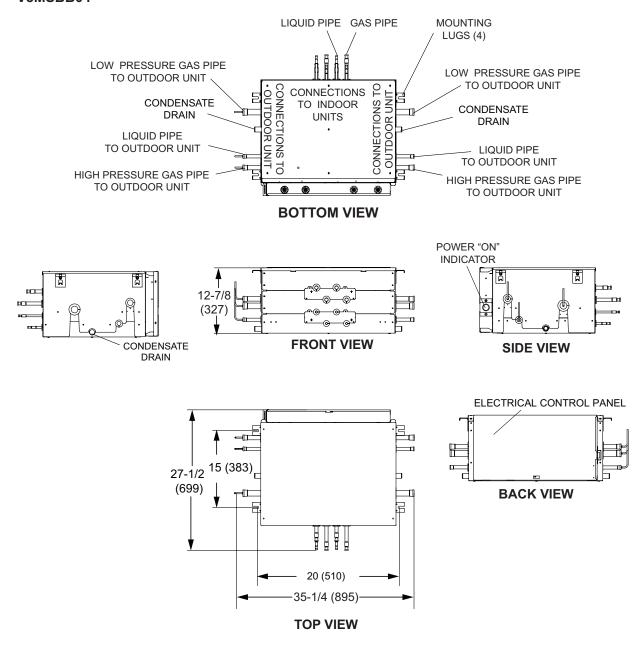
Tested in semi-anechoic room.

V8MSBB02



		Pipe Diameter - in.							
Model No.	Cor	nections to Outdoor	Connections to Indoor Unit						
	Low Pressure Gas Pipe	High Pressure Gas Pipe	Liquid Pipe	Liquid Pipe	Gas Pipe				
V8MSBB02	1-1/8, 7/8, 3/4	7/8, 3/4, 5/8	1/2, 3/8	1/4, 3/8	1/2, 5/8				

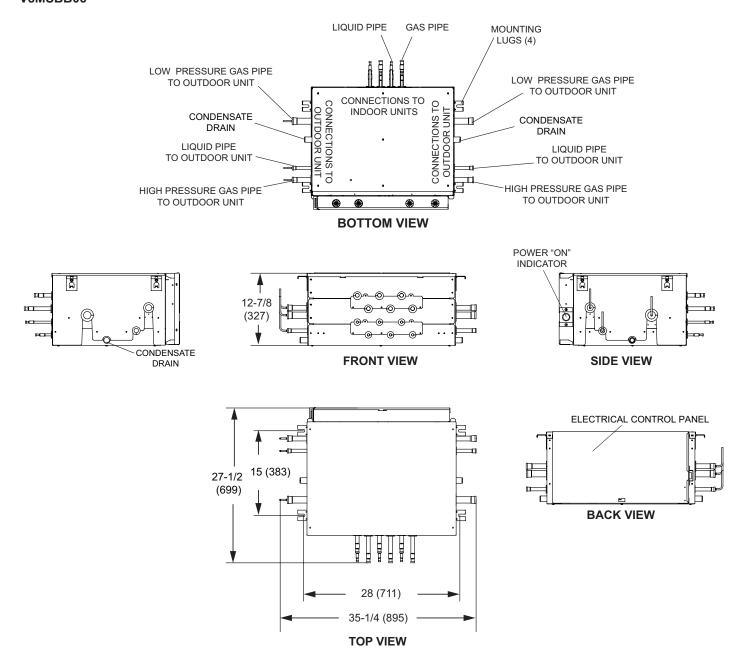
V8MSBB04



		Pipe Diameter - in.						
Madal No	Con	nections to Outdoor	Connections to Indoor Unit					
Model No.	Low Pressure	High Pressure	Liquid	Lieuid Dine	Can Dina			
	Gas Pipe	Gas Pipe	Pipe	Liquid Pipe	Gas Pipe			
V8MSBB04	1-3/8, 1-1/8, 7/8	1-1/8, 7/8, 3/4	5/8, 1/2, 3/8	1/4, 3/8	1/2, 5/8			

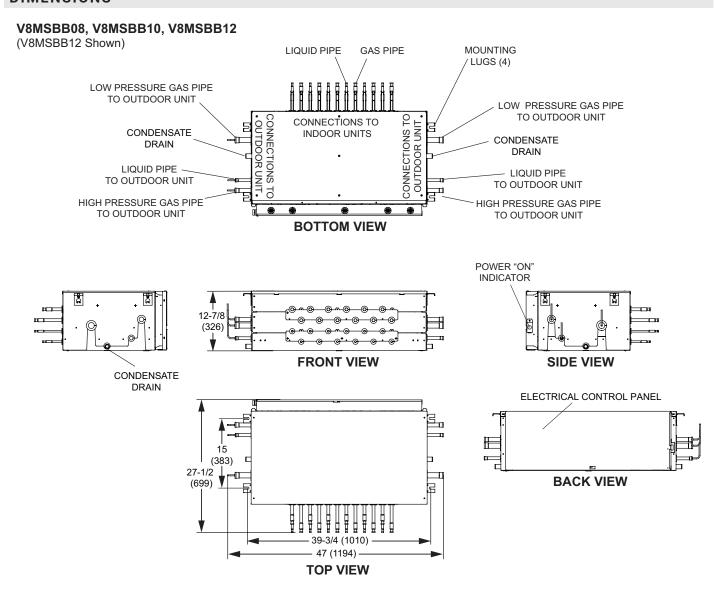
DIMENSIONS

V8MSBB06



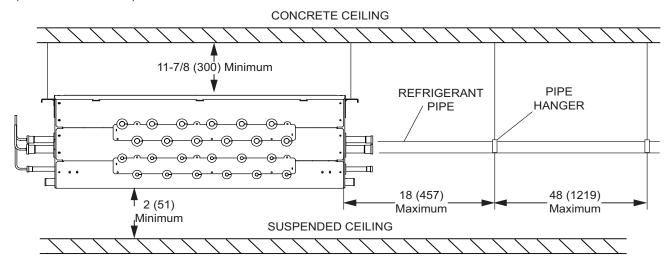
		Pipe Diameter - in.						
Model No.	Con	nections to Outdoor	Connections to Indoor Unit					
wiodei No.	Low Pressure	High Pressure	Liquid	Lieudd Dine	Can Dima			
	Gas Pipe	Gas Pipe	Pipe	Liquid Pipe	Gas Pipe			
V8MSBB06	1-3/8, 1-1/8, 7/8	1-1/8, 7/8, 3/4	5/8, 1/2, 3/8	1/4, 3/8	1/2, 5/8			

DIMENSIONS



		Pipe Diameter - in.							
Model No.	Con	nections to Outdoor	Connections to Indoor Unit						
	Low Pressure	High Pressure	Liquid	Linuid Dine	Gas Pipe				
	Gas Pipe	Gas Pipe	Pipe	Liquid Pipe					
V8MSBB08	1-3/8, 1-1/8, 7/8	1-1/8, 7/8, 3/4	3/4, 5/8, 1/2, 3/8	1/4, 3/8	1/2, 5/8				
V8MSBB10	1-3/8, 1-1/8, 7/8	1-1/8, 7/8, 3/4	3/4, 5/8, 1/2, 3/8	1/4, 3/8	1/2, 5/8				
V8MSBB12	1-3/8, 1-1/8, 7/8	1-1/8, 7/8, 3/4	3/4, 5/8, 1/2, 3/8	1/4, 3/8	1/2, 5/8				

(V8MSBB12 Shown)



FRONT VIEW

Required! Suitably sized access

panel required to provide full access to electrical panel 24 (610)**ELECTRICAL PANEL** CONNECTIONS TO OUTDOOR UNIT 38 38 (965)CONNECTIONS TO INDOOR UNITS (965)Minimum Minimum 38 (965)Minumum

Suitably sized access panel for gaining access to indoor unit connections or isolating ball valves if mounted above a solid ceiling

Access panels are a requirement for system start-up and future preventative maintenance.

TOP VIEW

REVISIONS				
Sections	Description of Change			
Installation Clearances	Added new models - V8MSBB02 and V8MSBB06.			







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