



V8MSBB

**Mode Selection Box for VRB Heat Recovery
60Hz**

**COMMERCIAL
PRODUCT SPECIFICATIONS**

Bulletin No. 210888
April 2020
Supersedes October 2019

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

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V8MSBB02



V8MSBB04



V8MSBB06



V8MSBB08



V8MSBB10



V8MSBB12

SPECIFICATIONS **V8MSBB02 - V8MSBB06**

General		Model Number	V8MSBB02	V8MSBB04	V8MSBB06
Data	Maximum Number of Indoor Unit Groups		2	4	6
	Maximum Number of Indoor Units in Each Group		5	5	5
	Maximum Number of all Downstream Indoor Units		10	20	30
	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
	Total Capacity of all Downstream Indoor Units (Btuh)		108,000	168,000	216,000
Piping Connections	Connection to Outdoor Unit	Liquid line O.D. - in.	1/2, 3/8	5/8, 1/2, 3/8	5/8, 1/2, 3/8
		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 to Indoor Unit	Liquid Pipe O.D. - in.	1/4, 3/8	1/4, 3/8	1/4, 3/8
		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 shipping weight - lbs.			84	141	150
Control Wiring (AWG)			2-Core Shielded, Stranded, Polarity Sensitive, 18 AWG		

ELECTRICAL DATA

Line voltage data - 60 hz - 1ph		208/230V	208/230V	208/230V
Input (W)		46	69	115
² Maximum 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).

² HACR type circuit breaker or fuse.

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

SPECIFICATIONS **V8MSBB08 - V8MSBB12**

General		Model Number	V8MSBB08	V8MSBB10	V8MSBB12
Data	Maximum Number of Indoor Unit Groups		8	10	12
	Maximum Number of Indoor Units in Each Group		5	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
	Total Capacity of all Downstream Indoor Units (Btuh)		290,000	290,000	290,000
Piping Connections	Connection to Outdoor Unit	Liquid line O.D. - in.	3/4, 5/8, 1/2, 3/8	3/4, 5/8, 1/2, 3/8	3/4, 5/8, 1/2, 3/8
		High Pressure Gas Pipe O.D. - in.	1-1/8, 7/8, 3/4	1-1/8, 7/8, 3/4	1-1/8, 7/8, 3/4
		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 to Indoor Unit	Liquid Pipe O.D. - in.	1/4, 3/8	1/4, 3/8	1/4, 3/8
		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 shipping weight - lbs.			201	205	209
Control Wiring (AWG)			2-Core Shielded, Stranded, Polarity Sensitive, 18 AWG		

ELECTRICAL DATA

Line voltage data - 60 hz - 1ph		208/230V	208/230V	208/230V
Input (W)		138	172.5	195.5
² Maximum Overcurrent Protection (amps)		15	15	15
³ Minimum Circuit Ampacity		0.8	0.9	1.1

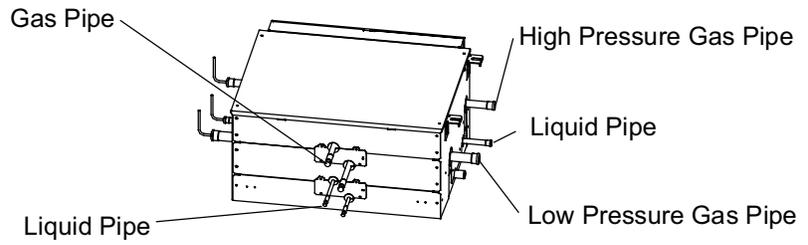
¹ 1 x 3/4 in. condensate drain adaptor furnished for field installation (if required).

² HACR type circuit breaker or fuse.

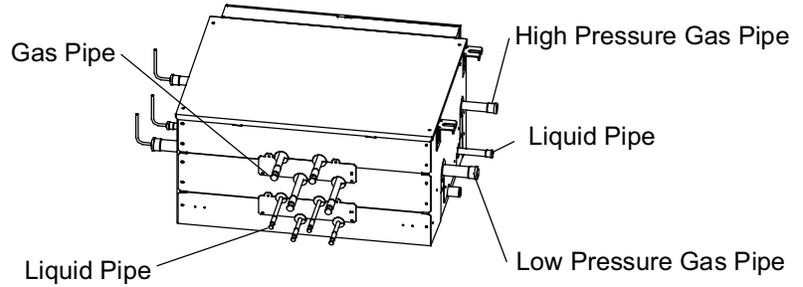
³ Refer to National or Canadian Electrical Code manual to determine wire, fuse and disconnect size requirements.

MODE SELECTION BOX DETAILS

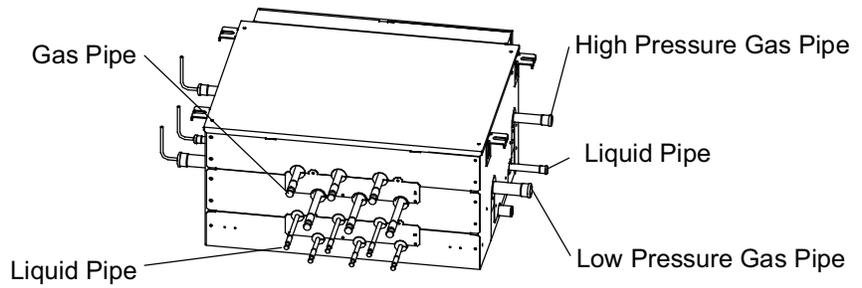
V8MSBB02



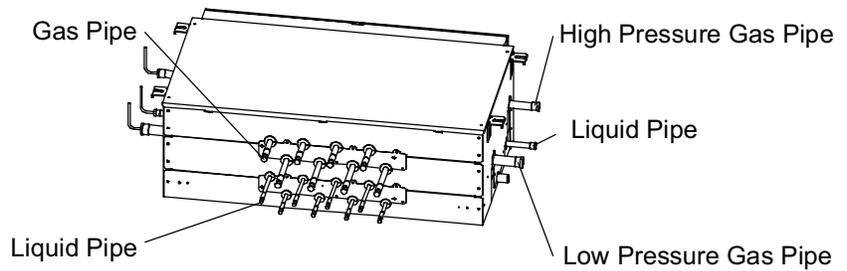
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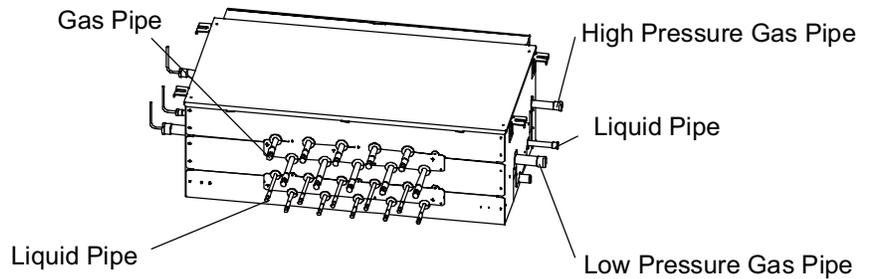
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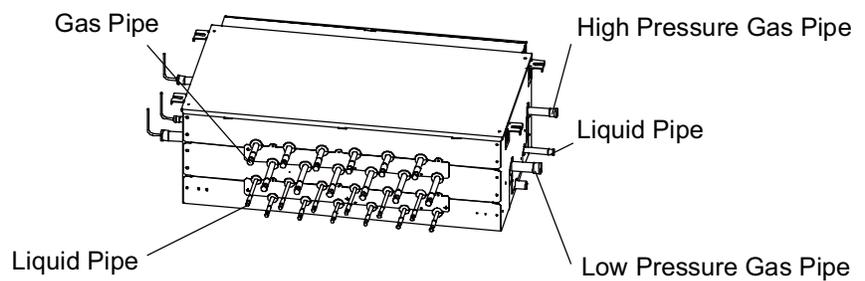
V8MSBB08



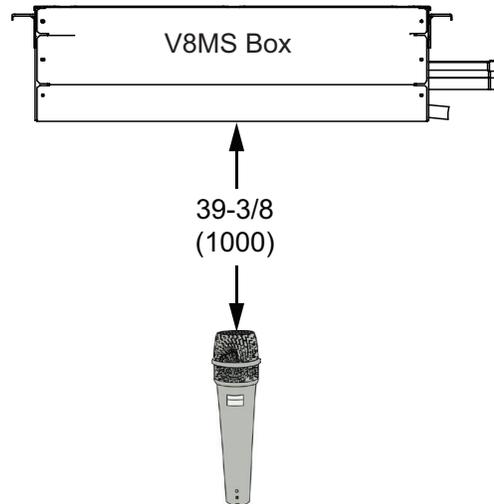
V8MSBB10



V8MSBB12



SOUND DATA



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.

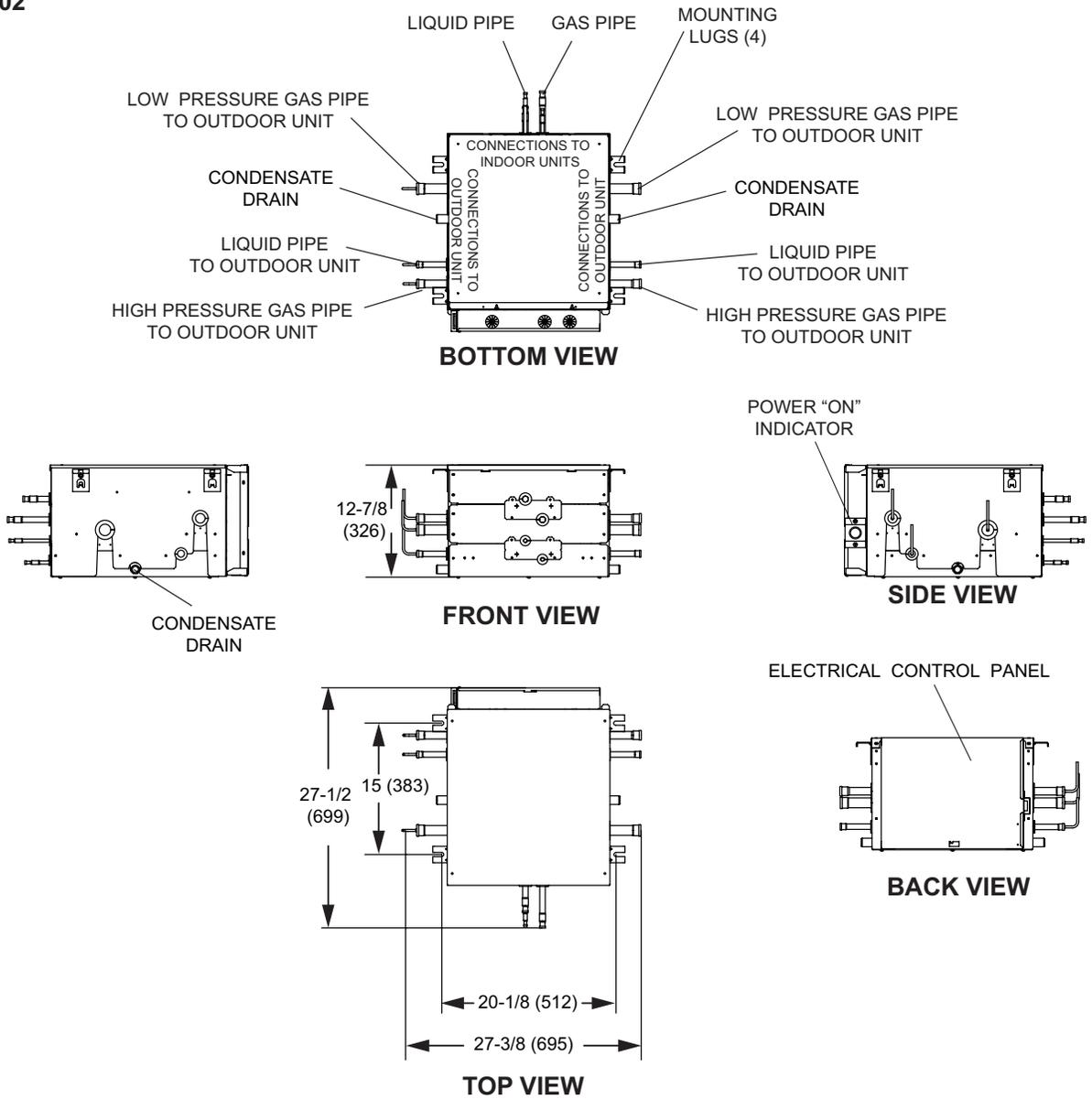
NOTES:

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

Tested in semi-anechoic room.

DIMENSIONS

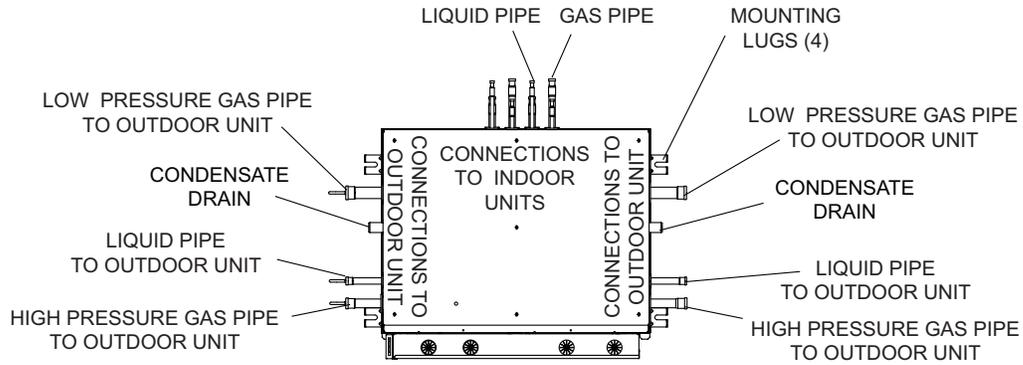
V8MSBB02



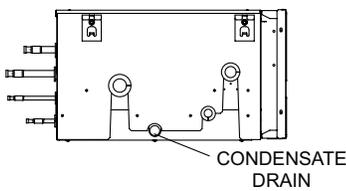
Model No.	Pipe Diameter - in.				
	Connections to Outdoor Unit			Connections to Indoor Unit	
	Low Pressure Gas Pipe	High Pressure Gas Pipe	Liquid Pipe	Liquid Pipe	Gas Pipe
V8MSBB02	1-1/8, 7/8, 3/4	7/8, 3/4, 5/8	1/2, 3/8	1/4, 3/8	1/2, 5/8

DIMENSIONS

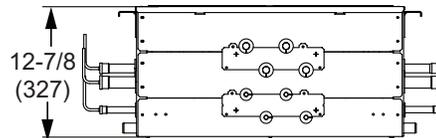
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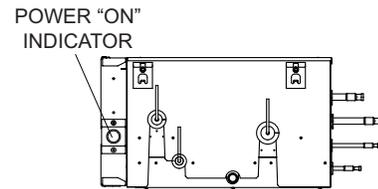
BOTTOM VIEW



CONDENSATE DRAIN

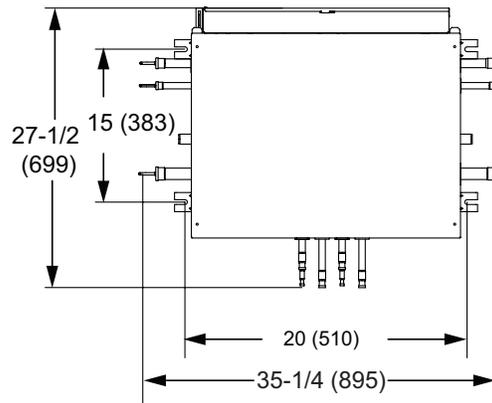


FRONT VIEW

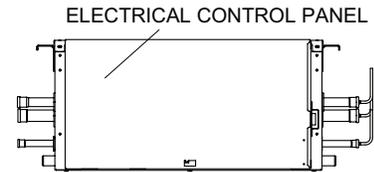


POWER "ON" INDICATOR

SIDE VIEW



TOP VIEW



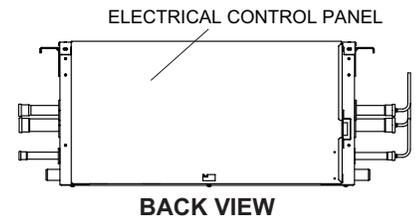
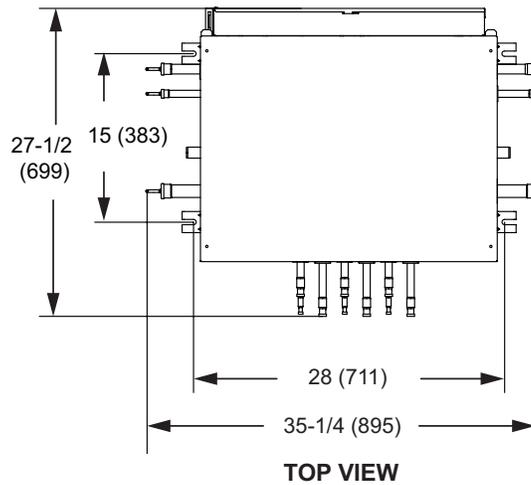
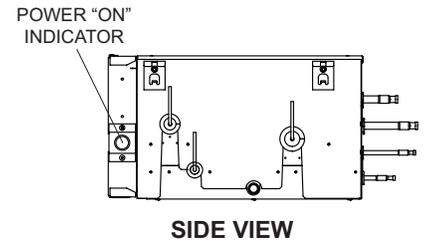
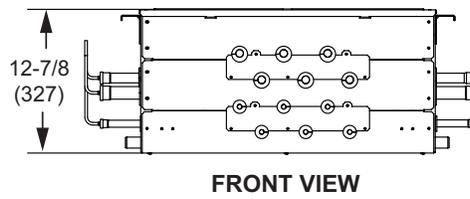
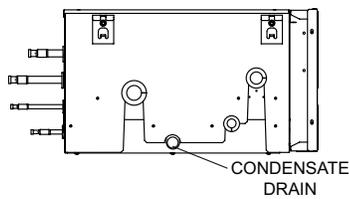
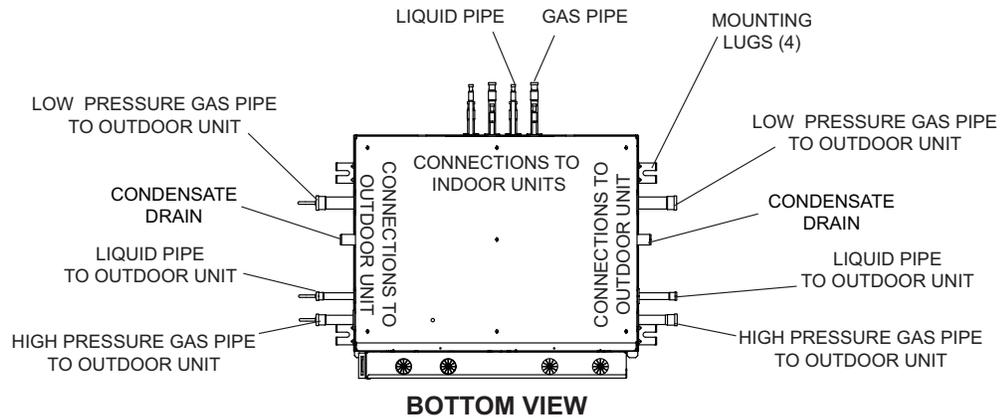
ELECTRICAL CONTROL PANEL

BACK VIEW

Model No.	Pipe Diameter - in.				
	Connections to Outdoor Unit			Connections to Indoor Unit	
	Low Pressure Gas Pipe	High Pressure Gas Pipe	Liquid 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

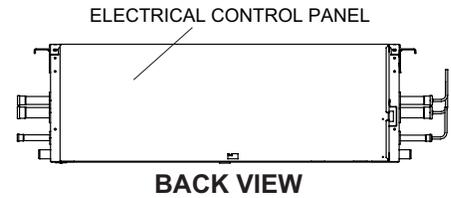
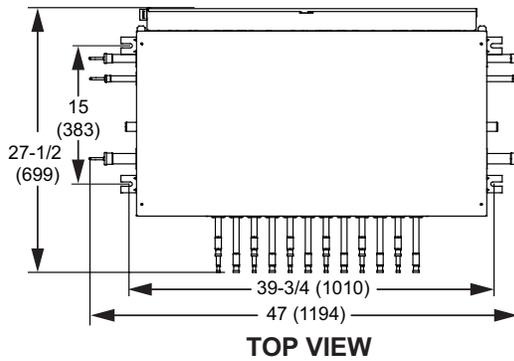
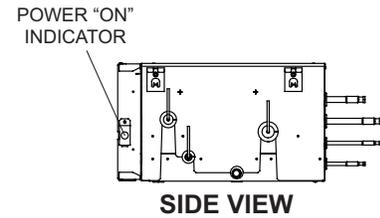
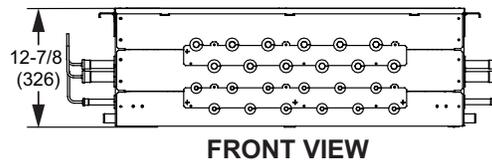
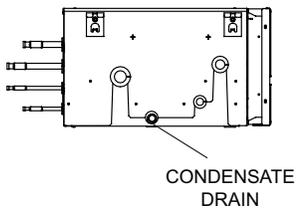
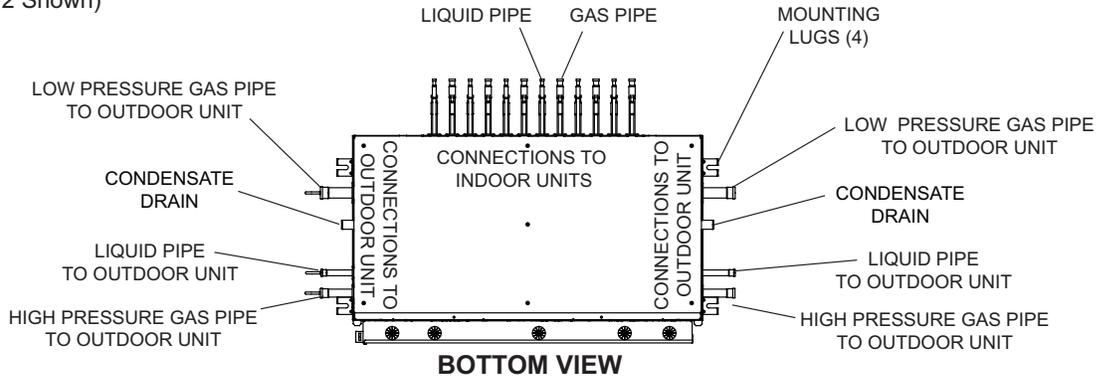
V8MSBB06



Model No.	Pipe Diameter - in.				
	Connections to Outdoor Unit			Connections to Indoor Unit	
	Low Pressure Gas Pipe	High Pressure Gas Pipe	Liquid 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

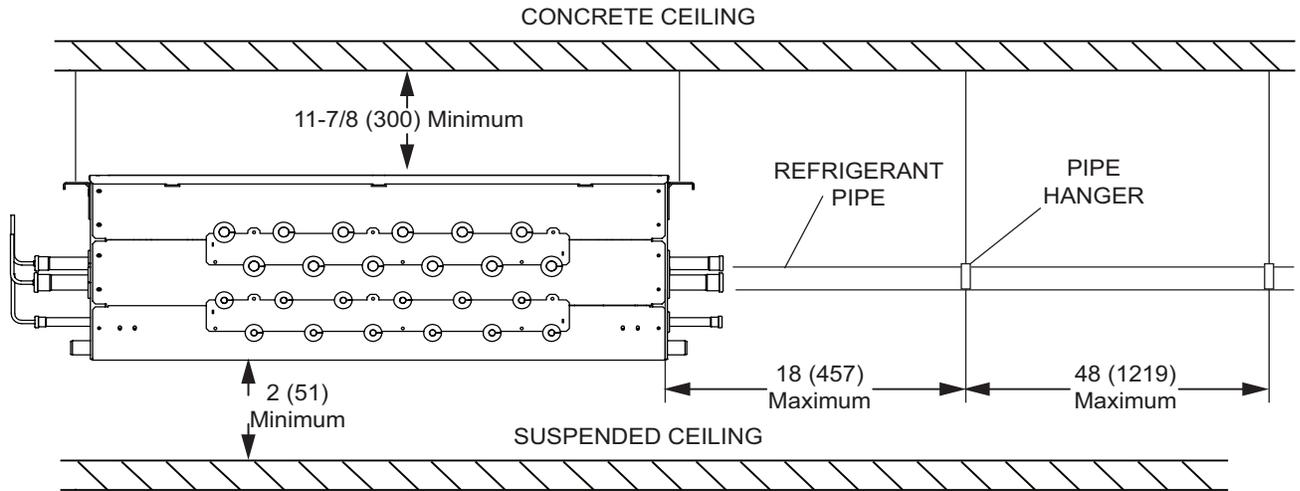
V8MSBB08, V8MSBB10, V8MSBB12 (V8MSBB12 Shown)



Model No.	Pipe Diameter - in.				
	Connections to Outdoor Unit			Connections to Indoor Unit	
	Low Pressure Gas Pipe	High Pressure Gas Pipe	Liquid Pipe	Liquid Pipe	Gas 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

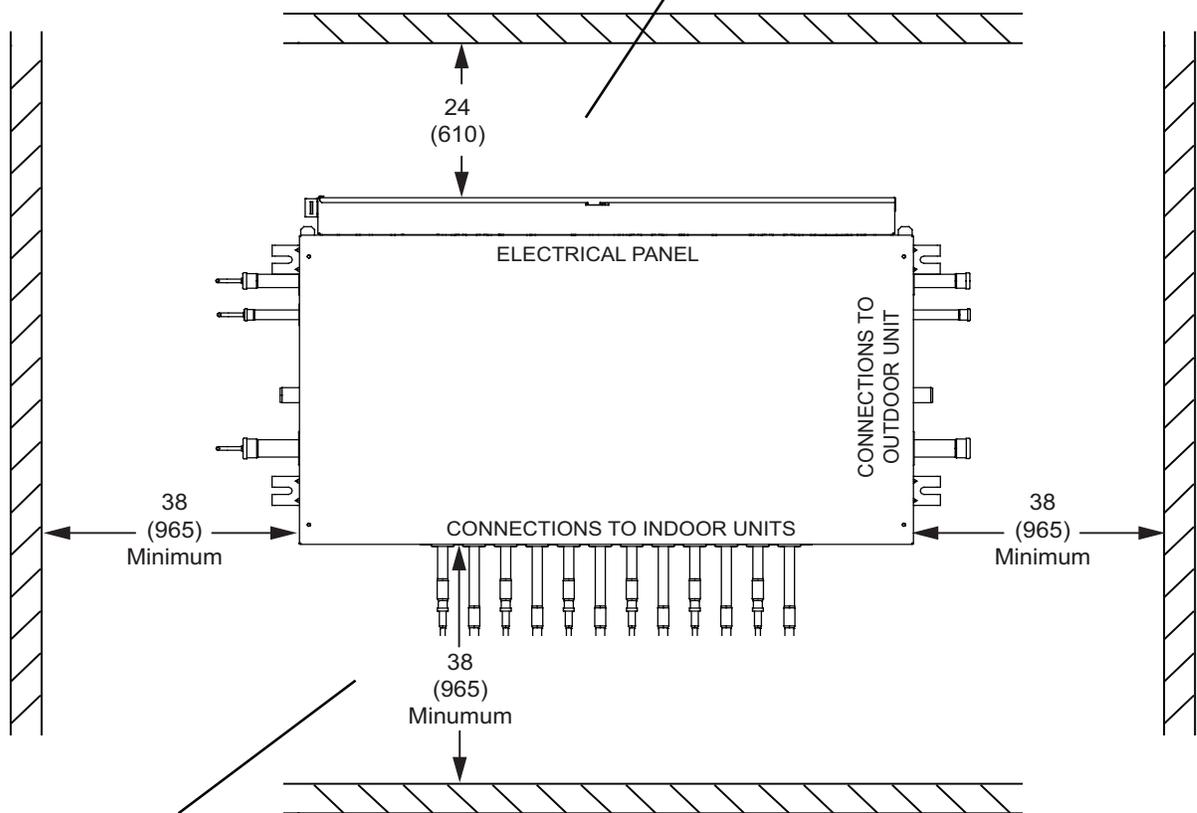
INSTALLATION CLEARANCES

(V8MSBB12 Shown)



FRONT VIEW

Required! Suitably sized access panel required to provide full access to electrical panel



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
Specifications	Updated Total Capacities for V8MSBB04 and V8MSBB06 models.



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NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.

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