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SAMSUNG

SUBMITTAL DATA

V2MSB04HR-MV

Mini-VRF HR Changer

Job Name: _____

Purchaser: _____

Submitted to: _____

Unit designation: _____

Location: _____

Engineer: _____

Reference: _____ Approval _____ Construction _____

Schedule #: _____



HR Changer are required for VRF Mini Heat Recovery systems, enabling simultaneous heating and cooling while supporting refrigerant leak mitigation.

Compatibility

- The HR Changer shall be compatible with R-32 VRF Mini Heat Recovery Outdoor Units.

Operation

- The unit shall allow for simultaneous heating and cooling on a single system.
- Using electronic expansion valves (EEV), the HR Changer shall control the path of refrigerant to the indoor unit(s) based on the mode of operation required.
- The HR Changer shall have pressure equalization valves (480 steps) to reduce refrigerant sounds during mode changing of connected indoor units.

Construction and Installation

- Cabinet shall be constructed of galvanized steel.
- Most internal components shall be accessible for service via a bottom access panel. The PCB and wiring shall be accessible from the rear.
- HR Changer shall be installed indoors, level, with refrigerant piping entering and exiting in a horizontal orientation.
- No condensate drain connection shall be required.

Refrigerant Leak Mitigation

- The HR Changer shall be equipped with:
- Factory built-in Refrigerant Detection Sensors (RDS) to continuously monitor and respond to potential refrigerant leaks within or in proximity to the unit.
- Shut-off valve at each outlet (outdoor side) port to enable isolation of the downstream refrigerant circuit upon leak detection.
- Exhaust and inlet air duct connections, with factory built-in motorized dampers, to ventilate the MCU enclosure as required based on project application and regulatory needs. Dampers and wiring can be relocated in the field, and block-off plates are included for unused openings.
- Contact output signal for external exhaust fan upon leak detection to create negative pressure at the HR Changer for ventilation.
- R-32 check terminals for optional integration with third-party devices. These terminals can be used to trigger alarms, activate external ventilation, or initiate other responses in the event of refrigerant leak detection. A2L leak management, including error code handling, is

managed natively by the DVM S Mini Heat Recovery system.

- Emergency power supply stores electrical charge in capacitors to ensure shutoff valves closes automatically in the event of power outage
- Release mitigation function that conducts individual port pump-down operation when leak is detected at a connected indoor unit, prior to closing off the shut-off valve for that port.
- All system components meet ETRS requirements, ensuring superior system integrity, leak prevention, and compliance with A2L safety standards.

Controls

- Control wiring shall be 16 AWG x 2 shielded wire.
- The unit shall be operated via a DDC type signal
- The unit shall support auto pairing
- Contains 1 X control PBA

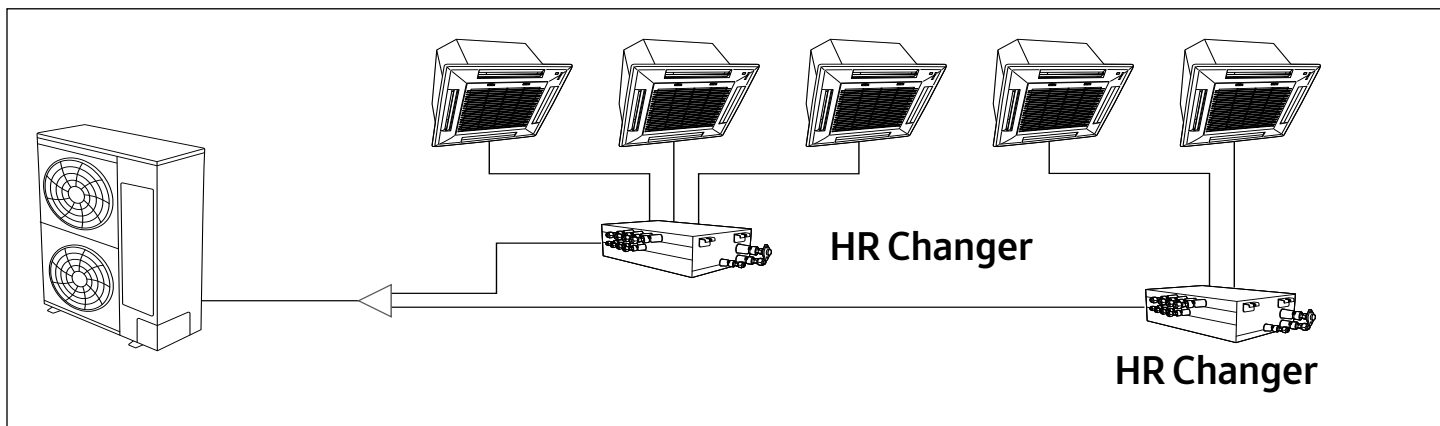
SPECIFICATIONS V2MSB04HR-MV

Model Name			V2MSB04HR-MV	
Power Supply			Φ, V, Hz	1/208~230/60
Mode			-	HEAT RECOVERY
Maximum number of connectable indoor units per port			EA	3
Number of ports			EA	4
Maximum capacity of connectable indoor units			Btu/h	216,000
Maximum capacity of connectable indoor units per port		Single Port	Btu/h	54,000
		Joined Ports	Btu/h	108,000
Electrical		MCA	A	0.5
		MOP	A	15
Sound Pressure		Stable cooling Operation	dB(A)	32
		Heating-to-Cooling Change over		45
Ventilation		Duct Connection	Φ, inch	4.0
Piping Connections	Outdoor unit	Liquid Pipe	Φ, inch	5/8
		Gas Pipe	Φ, inch	7/8
		Discharge gas	Φ, inch	7/8
	Indoor unit	Liquid Pipe	Φ, inch	3/8
		Gas Pipe	Φ, inch	5/8
External Dimension	Net Weight		lbs	90.4
	Dimensions (WxHxD)		inch	36-7/8 × 10-11/16 x 30-11/16

ACCESSORIES V2MSB04HR-MV

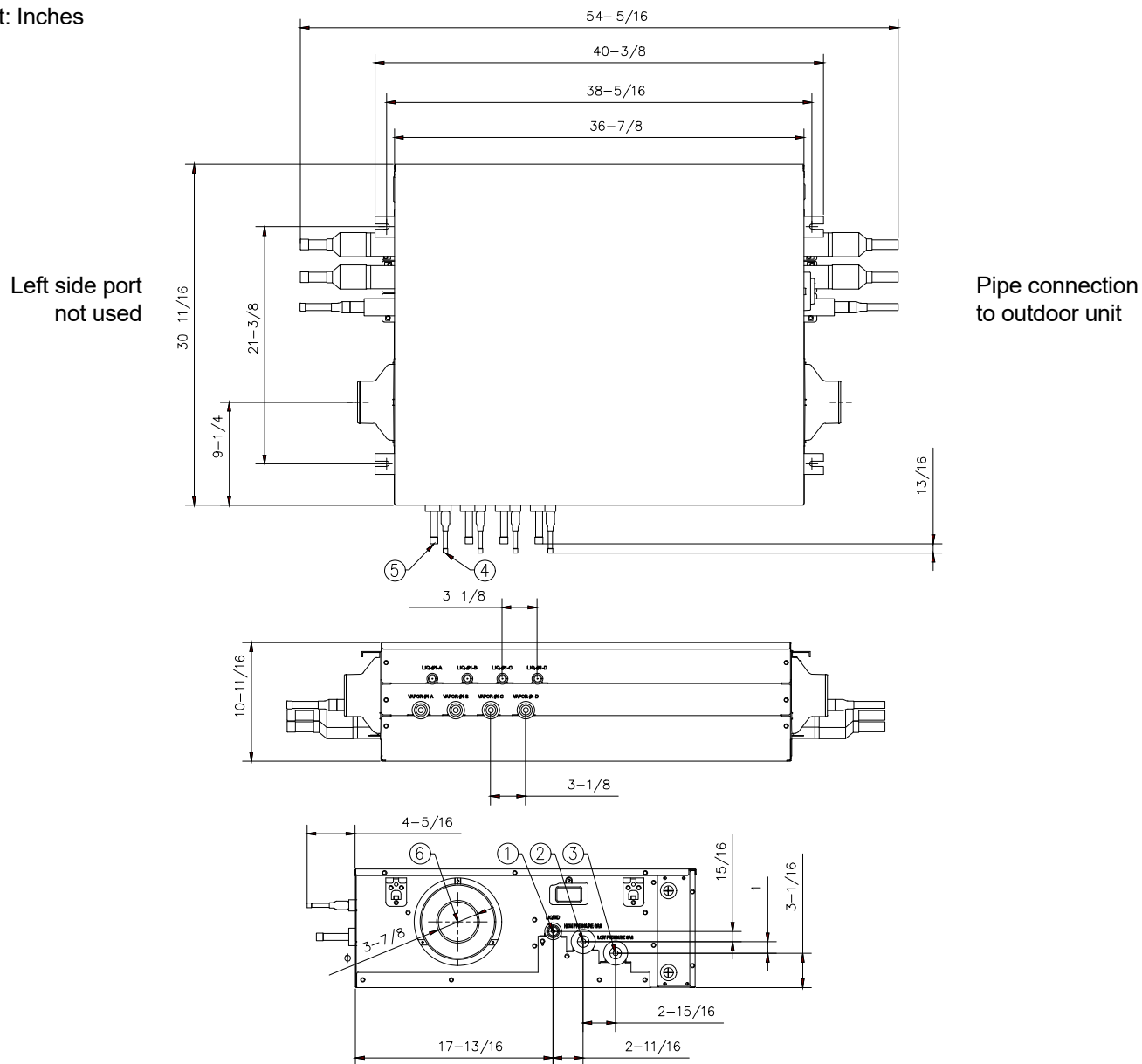
Y-Joint for twinning ports	V1MSBP01HR
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HR CHANGER CONNECTION



DIMENSIONAL DRAWING V2MSB04HR-MV

Unit: Inches



No	Name	Description
1	Refrigerant Liquid Pipe	-
2	Refrigerant High Pressure Gas Pipe	-
3	Refrigerant Low Pressure Gas Pipe	-
4	LIQ (Indoor)	-
5	VAPOR (Indoor)	-
6	Duct	φ4