

SUBMITTAL DATA – **Vertical AHU** **MMLD048S6S-1P – MMD048S6-1P**

SINGLE ZONE MINI-SPLIT HEAT PUMP

Job:

Location:

Schedule No.:

System Designation:

Engineer:

Architect:

Date:

For: ☐ Reference ☐ Approval ☐ Review ☐ Construction

GENERAL INFORMATION

- The system shall provide high heating capacity at -4°F (-20°C) with heating operation down to -13°F (-25°C).
- The outdoor unit shall have a base pan heater as standard for optimal defrost cycle water drainage.
- The system shall feature comfort humidity control. Utilizing an integral humidity sensor, the system optimizes the indoor unit coil temperature according to the dew point, maximizing energy savings while still providing space dehumidification and occupant comfort.
- The system shall have a built-in Wi-Fi adapter as standard to allow control and monitoring using the Samsung SmartThings app.
- Auto-restart after power loss
- Soft-start compressor minimizing current inrush
- The outdoor unit shall provide 208/230V power to the indoor unit via 14 AWG X 3 interconnect power cable.

Construction

- Outdoor unit: Galvanized steel with a baked-on powder coated finish for durability.
- Indoor unit: Insulated, galvanized steel.
- All heat exchangers shall be mechanically bonded aluminum fin to copper tube.
- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire (when accessory electric heat kits are not installed).

Refrigerant System

- The system shall utilize low-GWP R-32 refrigerant
- Refrigerant flow shall be controlled by electronic expansion valve at the outdoor unit
- The system shall include an R32 alarm output plug on the indoor unit and outdoor unit for notification of R32 leak detection (MIM-B14U accessory is required).

Indoor Fan

- Three fan speeds and auto setting

Controls

- Control wiring shall be 2 X 16 AWG wire.
- No additional interface modules/adapters are required when connecting to Samsung central control options.
- The unit shall be operated via a wireless or wired remote control with DDC type signal.
- Dual set temperature support when connected to supported controllers.
- Wired or wireless controllers must be purchased separately.

External Heat Control

- External heat control functionality allows for configuration of fan operation during auxiliary heat operation, defrost, and emergency heat (MIM-B14U accessory required).
- External heat control configuration settings include outside ambient external heat lockout, outside ambient compressor lockout, and time delay options (MIM-B14U accessory required).
- Emergency heat functionality allows the system to continue controlling the external heat source even when system errors prevent the heat pump from operating (MIM-B14U accessory required).
- External heat control functionality allows for configuration of fan operation during auxiliary heat operation, defrost, and emergency heat
- Emergency heat functionality allows the system to continue controlling the external heat source even when system errors prevent the heat pump from operating

Convenience

- The outdoor unit shall have snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- Night-time Quiet Mode: reduction of operational sound during evening hours (automatic or manual activation).

- Emergency Temperature Output (ETO) function: when indoor unit is in error status or when room temperature exceeds configurable temperature level, the system outputs a signal to an external source, e.g., backup system, building management system, alert device (ex: status light, warning lamp, buzzer).
- The system can be configured as heating/cooling, cooling only, or heating only via outdoor unit option setting.
- Maximum Current Control configurable from 50% - 100% via outdoor unit, wired controller or central control.



Outdoor Unit: MMLD048S6S-1P Indoor Unit: MMD048S6-1P

PRODUCT WARRANTY

Compressor – Twelve year limited warranty*

All other covered components - Twelve year limited warranty*

*Product registration required

ACCESSORIES

VSTAT02P-1 Touch Screen Wired Controller	37P79
VSTAT04P-1 Programmable Wired Controller	37Y74
VSTAT09P-1 24V Thermostat Adapter	37Y96
VCTRL10P-1 Wireless Signal Receiver	37Y76
VSTAT01P-1 Wireless Remote Controller	37Y73
VCTRL11P-1 External Room Temp. Sensor	37Y77
VSTAT10P-1 External Contact Control	37Y69
V1FBS03-4P VVC048-072 & MMD048 Filter Base	38B71

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SPECIFICATIONS

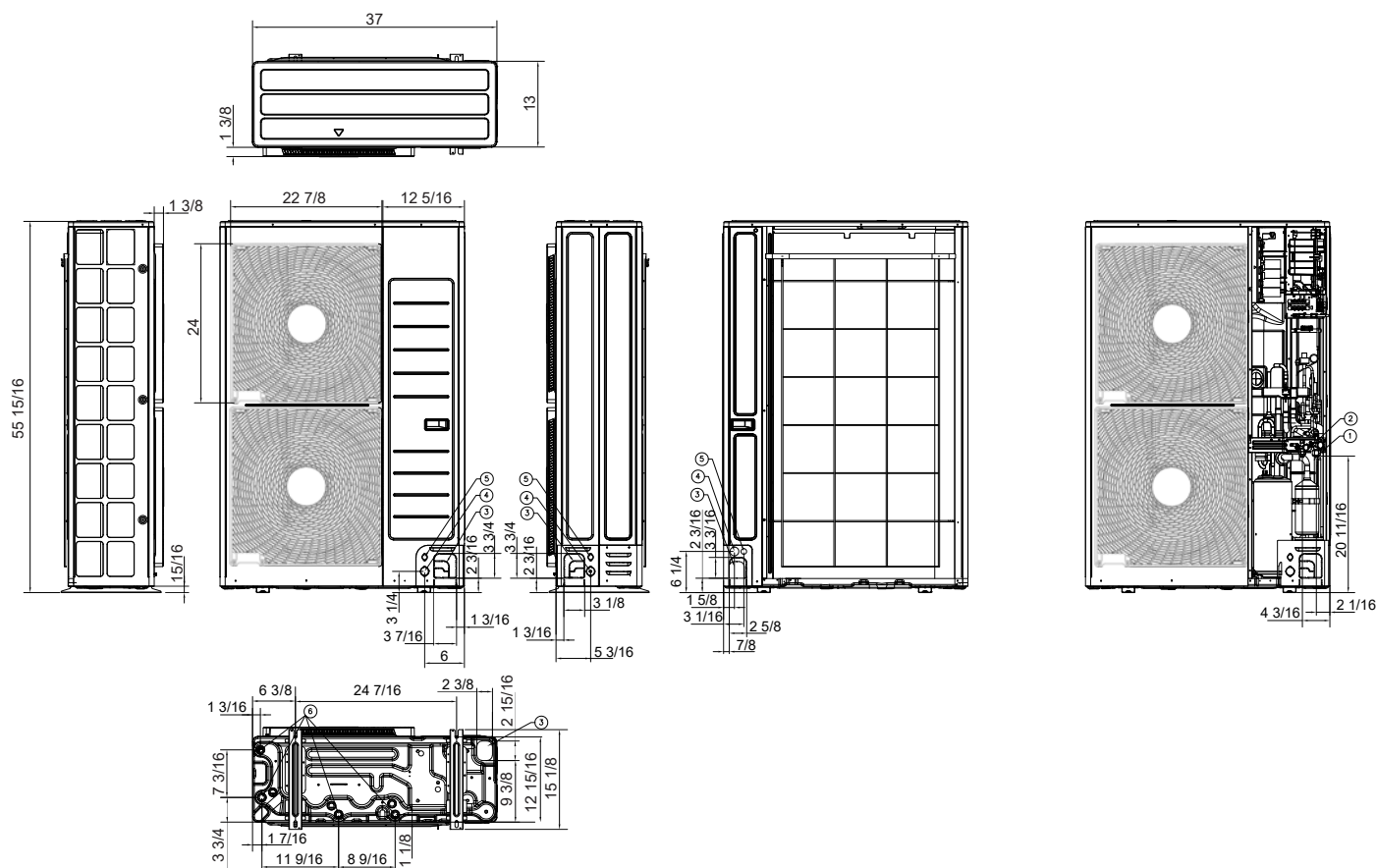
Performance	Nominal Capacity		Cooling / Heating (Btu/h)	48,000 / 54,000
	Capacity Range	Cooling (Btu/h)		12,500 - 56,000
		Heating (Btu/h)		11,000 - 68,000
	AHRI 210-240 2023	SEER2		18.00
		EER2		12.00
		HSPF2 (region IV)		9.50
		5°F COP		1.80
Power	Voltage		ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)			187 - 253
	Operating Current (min. / standard / max.)	Cooling (A)		4.9 / 17.9 / 30.6
		Heating (A)		4.1 / 22.8 / 32.0
	Max. Breaker		Amps	40.0
	Min. Circuit Ampacity		Amps	36.2
Dimensions	W X H X D (in.)	Indoor Unit		24 1/2 X 58 11/16 X 21
		Outdoor Unit		37 X 55 7/8 X 13
	Weight (lbs.)	Indoor Unit		166.40
		Outdoor Unit		211.60
	Duct Connections (W X H)	Supply (in.)		14 1/4 X 21 3/4
		Return (in.)		24 1/2 X 21 3/4
Sound Pressure Level	Indoor Unit dB(A)	L / M / H		43 / 45 / 47
	Outdoor Unit dB(A)	Cooling / Heating (high)		62 / 62
Operating Temperatures	Outdoor	Cooling		23 - 122°F (-5 - 50°C)
		Heating		-4 - 122°F (-20 - 50°C) W/Baffle
	Indoor	Cooling		-13 - 75°F (-25 - 24°C)
		Heating		64 - 90°F (16 ~ 32°C)
		Heating		T ≤ 86°F (30°C)
Pipe Connections	Indoor & Outdoor	High side (In.)		3/8
		Low side (In.)		5/8
	Maximum (ft.)			246
	Maximum Vertical Separation (ft.)			98
	Condensate Connection			3/4" FNPT
Refrigerant	Type			R-32
	A2L Leak Detection			Integral
	Factory Charge	oz.		123.5
	Charged for			24.6 ft.
Compressor	Type			Inverter Driven, Twin BLDC Rotary
	RLA	Amps		22.4
Evaporator Fan	Type			Constant Torque With Double-inlet, Forward Curve, Centrifugal Fan
	Output	Watts		590
	External Static Pressure	Standard (*WC)		0.58
		Min. / Max. (*WC)		0 / 1
Airflow	Air Volume (L/M/H)	Cooling (CFM)		1,257 / 1,388 / 1,494
		Heating (CFM)		1,257 / 1,388 / 1,494
Condenser Fan	Type			BLDC With Axial Type Fan (2)
	MOC / Watts / CFM (max.)			1.2A X 2 / 125W X 2 / 4,415

NOTE – Due to Lennox' ongoing commitment to quality, Specifications, Ratings, and Dimensions are 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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OUTDOOR DIMENSIONAL DRAWINGS - IN.



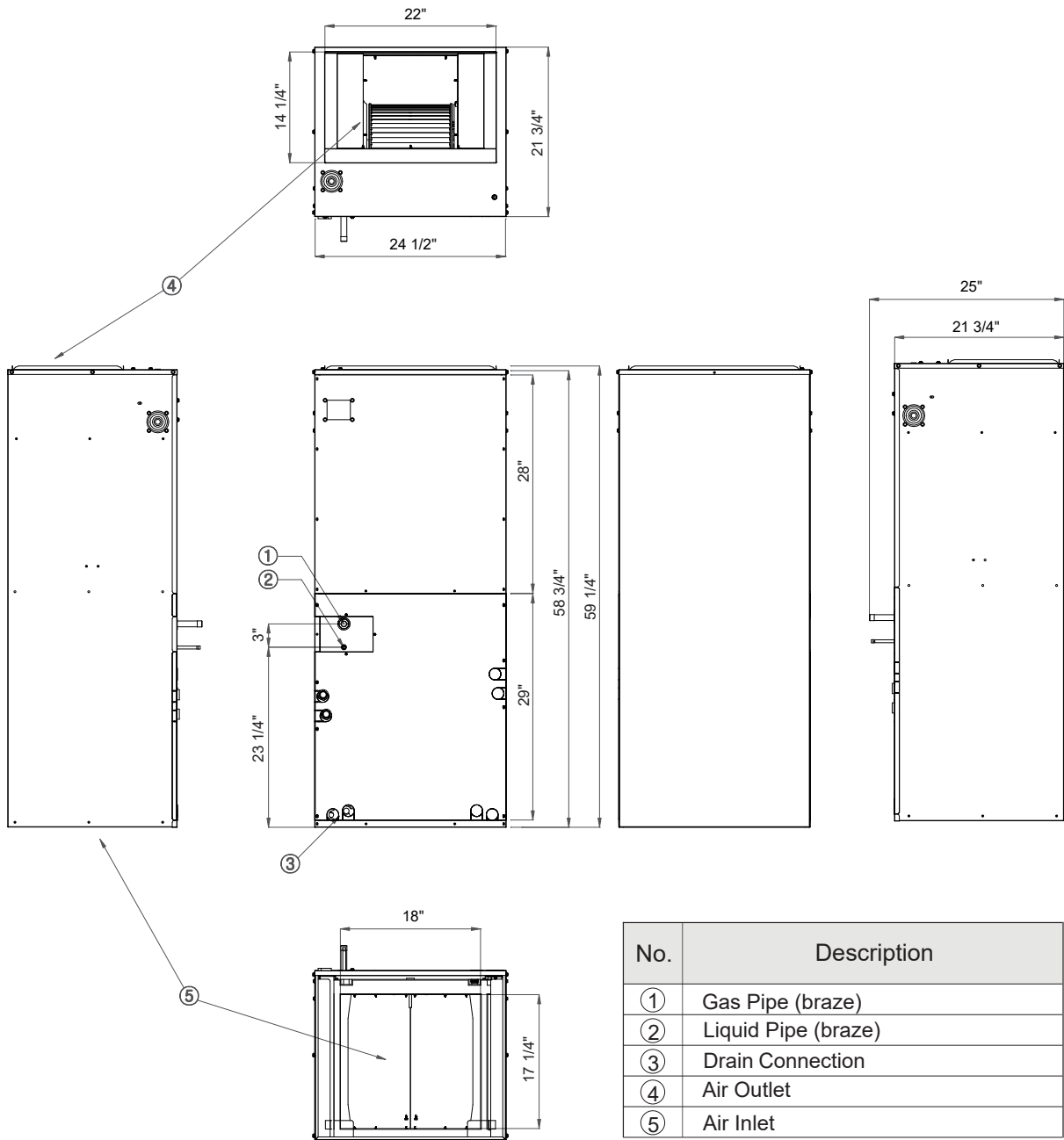
No.	Description
1	Liquid pipe connection
2	Gas pipe connection
3	Pipe intake knockout hole
4	Opening for power wire conduit (1 3/8")
5	Opening for communication conduit (7/8")
6	Drain hole

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INDOOR DIMENSIONAL DRAWINGS - IN.



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