NMSUNG

SUBMITTAL AM060MXMDCH/AA

Samsung DVM S Eco Series, Heat Pump Condensing Unit

Job Name	Location			
Purchaser	Engineer			
Submitted to	Reference	Approval	Construction	
Unit Designation	Schedule #			

	US Ton (nominal)	System Specifications	5
	0 11 (0 11)	Nominal Cooling	60,000
	Capacity (Btu/h)	Nominal Heating	66,000
Performance ¹	System Modulatio	n down to (Btu/h)	7,500
	SEER2	Ducted / Non-Ducted	16.5 / 19.0
	EER2	Ducted / Non-Ducted	9.9 / 11.2
	HSPF2	Ducted / Non-Ducted	9.5 / 9.8
	Voltage	(ø/V/Hz)	1 / 208-230 / 60
Power	Maximum Circuit Breaker (MCCB/ELB/ELCB)		50
	Minimum Circuit Ampacity (MCA)		32
Indoor Units	Total Capacity (%)		50 - 130% Of Outdoor Capacity
	Maximum Indoor Unit Quantity		10
	Туре		Flash Injected Scroll X 1
Compressor	RLA	A	24.5
	Туре		R410A
Refrigerant	Factory Charge	lbs.	8.2
Pipe Connections	Liquid X Suction (braze)		3/8 X 3/4
	Max. Distance - ODU to IDU (feet)		492 (574 equivalent)
Installation	Vertical Separation ODU to IDU ³		164 / 131
Limitation ²	(feet) Highest/Lowest IDU		49
	Total Refrigerant Pipe (feet)		984
	For.	Туре	Propeller X 2
Condenser Fan	Fan	Output (CFM)	4,767
Condenser Fan	Motor	Туре	BLDC
	IVIOLOI	Output (W) / FLA (A)	139 X 2 / 0.6
Dimensions	WXHXD	Inches	37 X 55 15/16 X 13
Dimensions	Weight	lbs.	275.6
Sound Level	dB (A)	Max. (cooling / heating)	58 / 60
Operating	Cooling ⁴	°F(°C)	0 ~ 118°F (-18 ~ 48°C)
Temperature Range	Heating	°F(°C)	-13 ~ 75°F (-25 ~ 24°C)
. turigo		Front	WBF-6M
	Wind Baffles	Back	WBB-8M
Accessories	Wi-Fi Adapter		MIM-H04UN
	Mode Selector Switch For HP Systems		MCM-C200U
	External contact control interface module (operation and error output, night silent mode manual activation)		MIM-B14
Safety Certifications			ETL (UL 1995)
Protection	Intelligent logic to operational param	within unit design limitations and	

Protection High pressure sensor, low pressure sensor, over-voltage protection, **Devices**

compressor over-current protection, current transformer, fan motor voltage protection, fan motor thermal protection, high voltage fuses 1 Certified in accordance with AHRI 210/240 (2023). Effective January 1st. 2023.

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit www.energystar.gov.



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Compatibility

Only compatible with Samsung DVM S indoor units (AM****N****H****).

The unit shall be galvanized steel with a baked on powder coated finish.

Heat Exchanger

The heat exchanger shall be mechanically bonded fin to copper tube.

The aluminum fins of the heat exchanger shall have a protective coating.

Salt spray test method: ASTM-B117-18 - the heat exchanger showed no unusual rust or corrosion development to 2,280 hours.

Controls

The unit shall be operated via NASA Protocol with controls provided by Samsung

The outdoor unit shall have a removable EEPROM that stores unit serial number, startup information, system settings, system tag/name, and other information.

Controls shall integrate with Samsung central controls without additional interface modules

Control wiring shall be 16 AWG X 2 shielded wire.

Refrigerant System

The compressors shall be Samsung hermetically sealed, inverter driven, direct flash injected, DC scroll type with soft-start capability.

Flash injected compressors provide advanced low ambient heating performance

Refrigerant flow shall be controlled by EEV (electronic expansion valve) throughout the system.

A flat plate subcooler device will improve capacity at extreme system refrigerant pipe lengths and reduce refrigerant noise.

Other Features

Advanced oil recovery cycle logic (maximum duration in cool mode: 3 minutes, maximum duration in heat mode: 6 minutes, defrost cycles lasting over 3 minutes are considered oil recovery cycles). Oil recovery operation shall not interrupt heating or cooling operation.

Optional night quiet modes to reduce outdoor unit sound (4 levels) with automatic activation or manual activation (with MIM-B14).

Advanced intelligent defrost logic to significantly reduce defrost cycle frequency by monitoring air resistance across the condenser coil during heating operation to determine defrost operation initiation to prevent unnecessary defrost cycles

Optional snow blowing logic to prevent snow accumulation on idle outdoor units

Continuous operation while outdoor unit(s) change between heating and cooling modes (conditions apply).

Maximum current control of outdoor unit(s) to limit current (50% - 100% of design current) adjustable at outdoor unit or central control devices: DMS 2 (MIM-D00AN), DMS 2.5 (MIM-D01AUN), BACnet Gateway (MIM-B17N, MIM-B17BUN), LON Gateway (MIM-B18N, MIM-B18BUN).

Energy savings options to reduce system energy consumption in heating mode when average indoor room temperatures are greater than average indoor set temperatures.





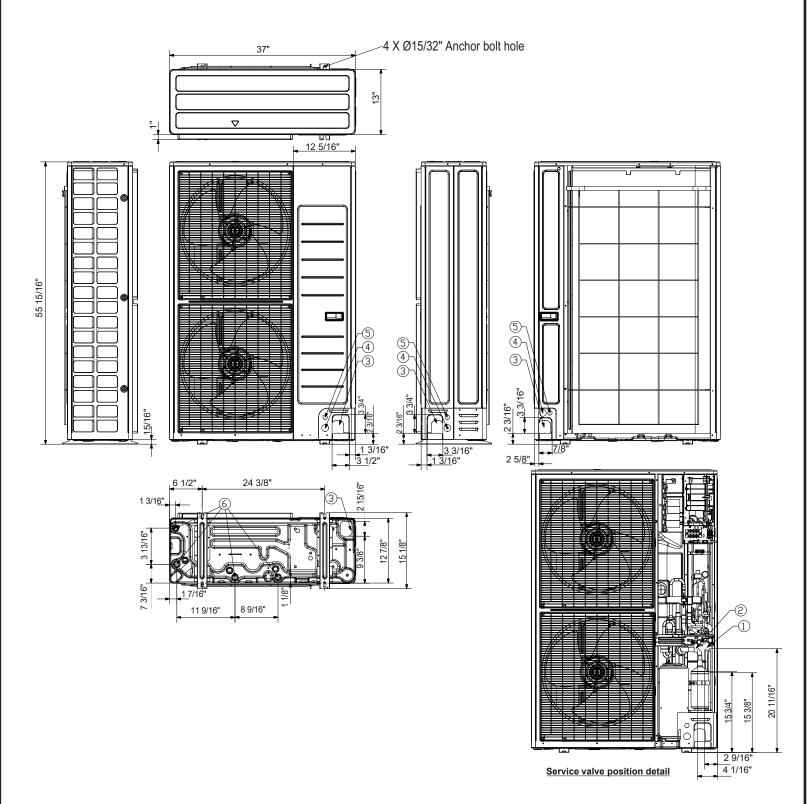


² Other pipe restrictions and requirements exist. Please consult installation manuals or technical data book

³ Vertical separation: 131' when outdoor unit is lower than the indoor units. 164' when the outdoor unit is higher than the indoor units.

 $^{^4}$ When cooling in outside temperatures between 0°F ~ 23°F, wind baffles are required. When outside temperature is between 0°F ~ 23°F, minimum 50% operating capacity should be maintained to ensure reliability while in cooling mode.

Samsung DVM S Eco Series, Heat Pump Condensing Unit AM060MXMDCH/AA Dimensional Drawing



NO	Name	Description
1	Refrigerant gas pipe	3/4"
2	Refrigerant liquid pipe	3/8"
3	Knockout hole for pipe intake	Front / Side / Rear / Bottom
4	Power wiring conduits	Front / Side / Rear, 1 3/8"
5	Communication wiring conduits	Front / Side / Rear, 7/8"
6	Drain holes	Connect with the provided drain plug