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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 #			

	110 T (: ::	System Specifications		
	US Ton (nominal)		5	
Performance	Capacity (Btu/h)	Nominal Cooling ¹	60,000	
	0 / 11 /	Nominal Heating ¹	66,000	
	System Modulation	, ,	7,500	
	SEER	Ducted / Non-Ducted	17.1 / 20.6	
	EER	Ducted / Non-Ducted	10.9 / 11.2	
	HSPF	Ducted / Non-Ducted	10.9 / 11.5	
	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	
Compressor	Туре		Flash Injected Scroll X 1	
	RLA	A	24.5	
Refrigerant	Туре		R410A	
rtemgerant	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	
	_	Туре	Propeller X 2	
Condenser Fan	Fan	Output (CFM)	4,767	
Condenser Fan	Motor	Туре	BLDC	
		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 Temperature	Cooling ⁴	°F(°C)	0 ~ 118°F (-18 ~ 48°C)	
Range	Heating	°F(°C)	-13 ~ 75°F (-25 ~ 24°C)	
		Front	WBF-6M	
	Wind Baffles	Back	WBB-8M	
Accessories	Wi-Fi Adapter		MIM-H03UN	
	Mode Selector Switch For HP Systems		MCM-C200	
	External contact control interface module (operation and error output, night silent mode manual activation)		MIM-B14	
Safety Certificati	ons		ETL (UL 1995)	
	Intelligent logic to operational param		within unit design limitations and	
Protection Devices	High pressure sensor, low pressure sensor, over-voltage protection,			
levices	nigh pressure sensor, low pressure sensor, over-voltage protection,			

Protection	operational parameters		
	High pressure sensor, low pressure sensor, over-voltage protection,		
	compressor over-current protection, current transformer, fan motor voltage		

protection, fan motor thermal protection, high voltage fuses Certified in accordance with the AHRI Unitary Small Air-Source Heat Pumps (USHP) Certification Program

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



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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.

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, ISO 21207- the heat exchanger showed no unusual rust or corrosion development to 1,000 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

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

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.





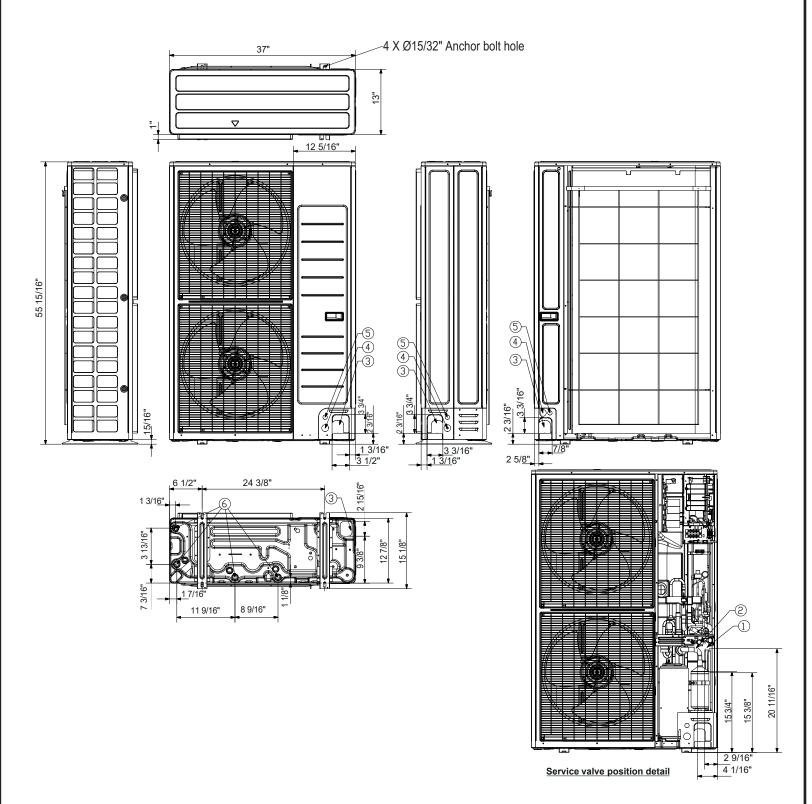
which is based on the latest edition of AHRI Standard 210/240.

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

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, 50% operating capacity should be maintained to ensure reliability while in

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