SAMSUNG

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 # _____

System Specifications

Performance	US Ton (nominal)		5
	Capacity (Btu/h)	Nominal Cooling[1]	60,000
		Nominal Heating[1]	66,000
	System Modulation down to (Btu/h)		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
Power	Voltage	(ø/V/Hz)	1 / 208-230 / 60
	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	Type		Flash Injected Scroll X 1
	RLA	A	24.5
Refrigerant	Type		R410A
	Factory Charge	lbs.	8.2
Pipe Connections	Liquid X Suction (braze)		3/8 X 3/4
Installation Limitation[2]	Max. Distance - ODU to IDU (feet)		492 (574 equivalent)
	Vertical Separation (feet)	ODU to IDU [3]	164 / 131
		Highest/Lowest IDU	49
	Total Refrigerant Pipe (feet)		984
Condenser Fan	Fan	Type	Propeller X 2
		Output (CFM)	4,767
	Motor	Type	BLDC
		Output (W) / FLA (A)	139 X 2 / 0.6
Dimensions	W X H X D	Inches	37 X 55 15/16 X 13
	Weight	lbs.	275.6
Sound Level	dB (A)	Max. (cooling / heating)	58 / 60
Operating Temperature Range	Cooling [4]	°F(°C)	0 ~ 118°F (-18 ~ 48°C)
	Heating	°F(°C)	-13 ~ 75°F (-25 ~ 24°C)
Accessories	Wind Baffles	Front	☐ WBF-6M
		Back	☐ WBB-8M
	Wi-Fi Adapter		☐ MIM-H03UN
	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 Devices	Intelligent logic to ensure proper operation within unit design limitations and 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		

[1] Certified in accordance with the AHRI Unitary Small Air-Source Heat Pumps (USHP) Certification Program 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 cooling mode.

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

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

Construction
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.

ETL LISTED C US Intertek

AHRI CERTIFIED™ www.ahridirectory.org
Unitary Small AC
AHRI Standard 210/240
Certification applies only when the complete system is listed with AHRI.

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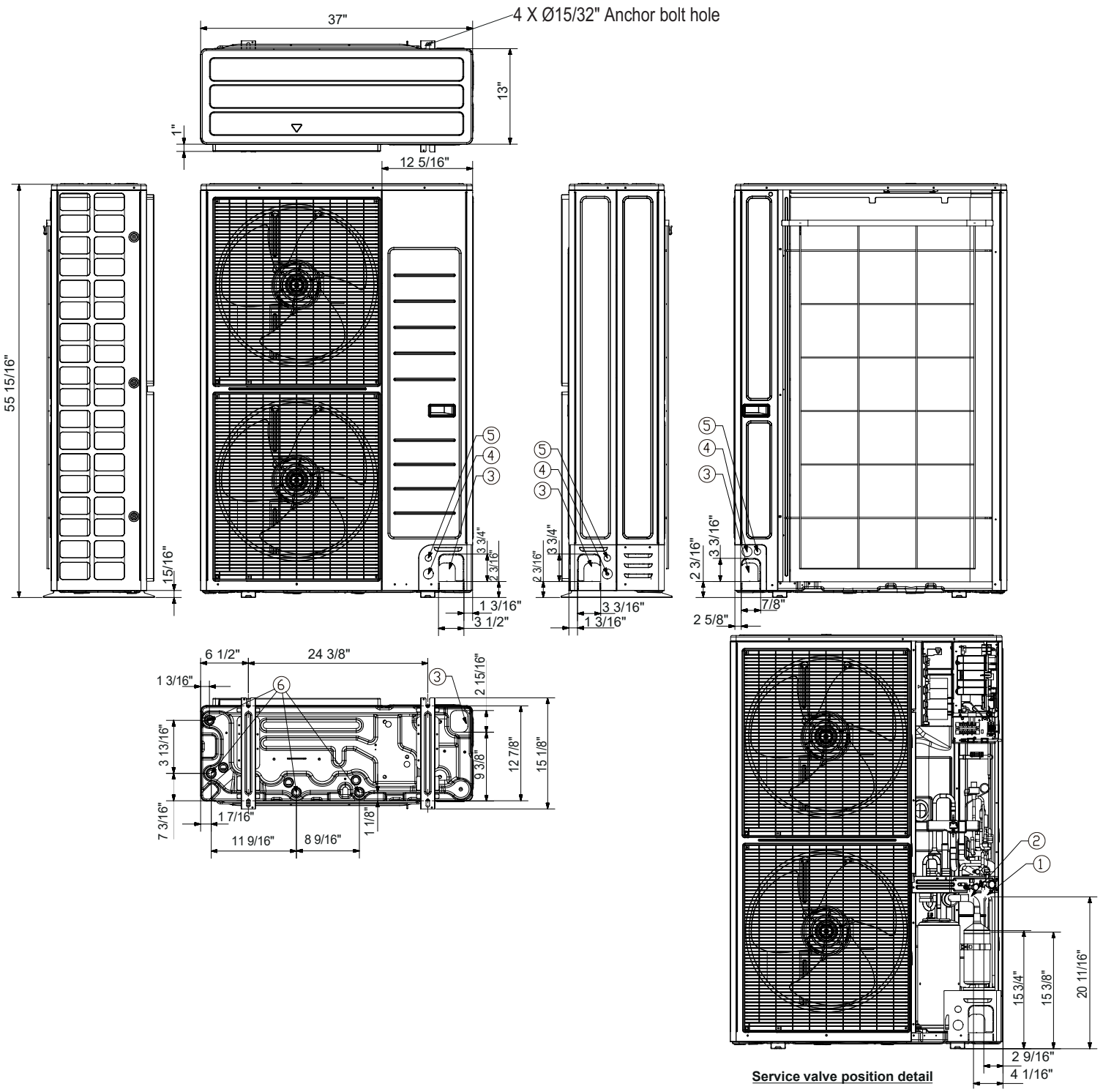
Samsung DVM S Eco Series, Heat Pump Condensing Unit

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