SUBMITTAL AM240JXVAJR/AA

Samsung DVM S Series, Heat Recovery Condensing Unit

Job Name _____ Location _____

Purchaser _____ Engineer _____

Submitted to _____ Reference ☐ Approval ☐ Construction ☐

Unit Designation _____ Schedule # _____

System Specifications

System	Modules Connected	Module 1	AM072FXVAJR/AA
		Module 2	AM168HXVAJR/AA
Performance	US Ton (nominal)		20
	Capacity (Btu/h)	Nominal / Rated Cooling[1]	240,000 / 228,000
		Nominal / Rated Heating[2]	270,000 / 258,000
	System Modulation Down to (Btu/h)		7,513
	EER	Ducted / Non-Ducted	10.6 / 10.6
	IEER	Ducted / Non-Ducted	20.1 / 22.0
	SCHE	Ducted / Non-Ducted	20.5 / 23.5
Power	Voltage	(ø/V/Hz)	3 / 460 / 60
Indoor Units	Total Capacity (%)		50 - 130% Of Outdoor Unit Capacity
	Maximum Indoor Unit Quantity		41
Refrigerant	R410A Factory Charge (lbs.)		36.38
Pipe Connections	Liquid X Suction X HP Gas (inches)		5/8 X 1 1/8 X 1 1/8
Installation Limitation[3]	Max. Distance - ODU to IDU (feet)		656 (722 equivalent)
	Vertical Separation (feet)	ODU to IDU	361 (ODU above) / 131 (ODU below)
		Highest/Lowest IDU	49
	Total Refrigerant Pipe (feet)		3,280
Operating Temperatures	Cooling [4]	°F	5 - 120
	Heating	°F	-13 - 75
System Sound Level	dB (A)	Max.	65
Required Accessories	Outdoor Module Connection Kit		1 X MXJ-TA3819M + 1 X MXJ-TA3100M
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, overheat protection, phase detection protection, high voltage fuses		
	Inverter PCB cooling done with liquid refrigerant to maintain optimal and safe operating temperatures		

Accessories

Qty.	Model Number	Description
1	MXJ-TA3819M	Outdoor module connection kit - liquid and suction
1	MXJ-TA3100M	Outdoor module connection kit -HP gas (HR)
	WHG-SL	Left wind/hail guard (1)
	WHG-SR	Right wind/hail guard (1)
	WHG-R1	Rear wind/hail guard for 6 ton outdoor unit (1)
	WHG-R2	Rear wind/hail guard for 8 - 16 ton outdoor unit (1)
	WHG-T1	Top wind/hail guard for 6 ton outdoor unit (1)
	WHG-T2	Top wind/hail guard for 8 - 16 ton outdoor unit (1)

[1] Nominal cooling capacities are based on: Indoor temperature: 80 ^{0}F DB, 67^{0}F WB. Outdoor temperature: 95 ^{0}F DB, 75^{0}F WB.

[2] Nominal heating capacities are based on: Indoor temperature: 70 ^{0}F DB, 60^{0}F WB. Outdoor temperature: 47 ^{0}F DB, 43^{0}F WB.

[3] Other pipe restrictions and requirements exist. Please consult technical data book or installation manuals for full details regarding limitations and other requirements for vertical separation over 163 feet (outdoor to lowest indoor).

[4] Cooling operating temperature range is 23°F - 120°F as standard. Cooling down to 5°F is possible with a modified pipe design. When the system is in MAIN-Heating (majority of indoor unit capacity is heating), indoor units can operate in cool mode down to -13 °F OA. Consult technical data books or Quietside, LLC for more details.

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

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

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.

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, and system tag/name.

Controls shall integrate with a BMS system 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 vapor injected, DC scroll type with soft-start capability.

Vapor injected compressors provide improved performance in cooling and heating modes.

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

Subcooling devices in system maintain capacity at extreme system refrigerant pipe lengths and minimize refrigerant noise.

Must use with Mode Change Unit(s) for proper operation (MCU).

Other Features
Optional rotational defrost function to provide heat while the system is in defrost operation (conditions apply, consult technical data books for more information).

Asymmetrical scroll design with rotating compressor operation/priority (where applicable).

Optional night quiet modes to reduce outdoor unit sound (4 levels)

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), BACnet Gateway (MIM-B17N), LON Gateway (MIM-B18N).

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

AHRI CERTIFIED® www.ahridirectory.org Variable Refrigerant Flow (VRF) Multi-Split AC and HP AHRI Standard 1230

INTERTEK ETL LISTED C US

SAMSUNG

SUBMITTAL AM240JXVAJR/AA

Samsung DVM S Series, Heat Recovery Condensing Unit

System Specifications

Module Model Number			AM072FXVAJR/AA	AM168HXVAJR/AA
Performance	US Ton (nominal)		6	14
	Capacity (Btu/h)	Nominal / Rated Cooling[1]	72,000 / 69,000	168,000 / 160,000
		Nominal / Rated Heating[2]	81,000 / 77,000	189,000 / 180,000
	System Modulation Down to	Btu/h	7,513	7,513
Power	Voltage	(ø/V/Hz)	3 / 460 / 60	3 / 460 / 60
	Maximum Circuit Breaker (MCCB/ELB/ELCB)		20	40
	Minimum Circuit Ampacity (MCA)		16.4	33.0
	SCCR	kA	5	5
Compressor	Type		SSC Scroll X 1	SSC Scroll X 2
	RLA	A	9.5	12.0
Refrigerant	R410A Factory Charge	lbs.	12.13	24.25
Pipe Connections	Liquid X Suction X HP Gas	inches	3/8 X 3/4 X 5/8	5/8 X 1 1/8 X 7/8
Condenser Fan	Fan	Type	Propeller X 1	Propeller X 2
		Output (CFM)	7,240	10,948
	Motor	Type	DC	DC
		Output (W)	630 X 1	620 X 2
		FLA (A)	2.0	1.5
	Max. External Static Pressure	"WC	0.31	0.31
Dimensions	W X H X D	Inches	34 5/8 X 66 3/4 x 30 1/8	51 X 66 3/4 X 30 1/8
	Weight	lbs.	445.33	734.14
Sound Level	dB (A)	Max.	60	63
Safety Certifications			ETL & ETLc	

[1] Nominal cooling capacities are based on: Indoor temperature: 80 ^{0}F DB, 67^{0}F WB. Outdoor temperature: 95^{0}F DB, 75^{0}F WB.

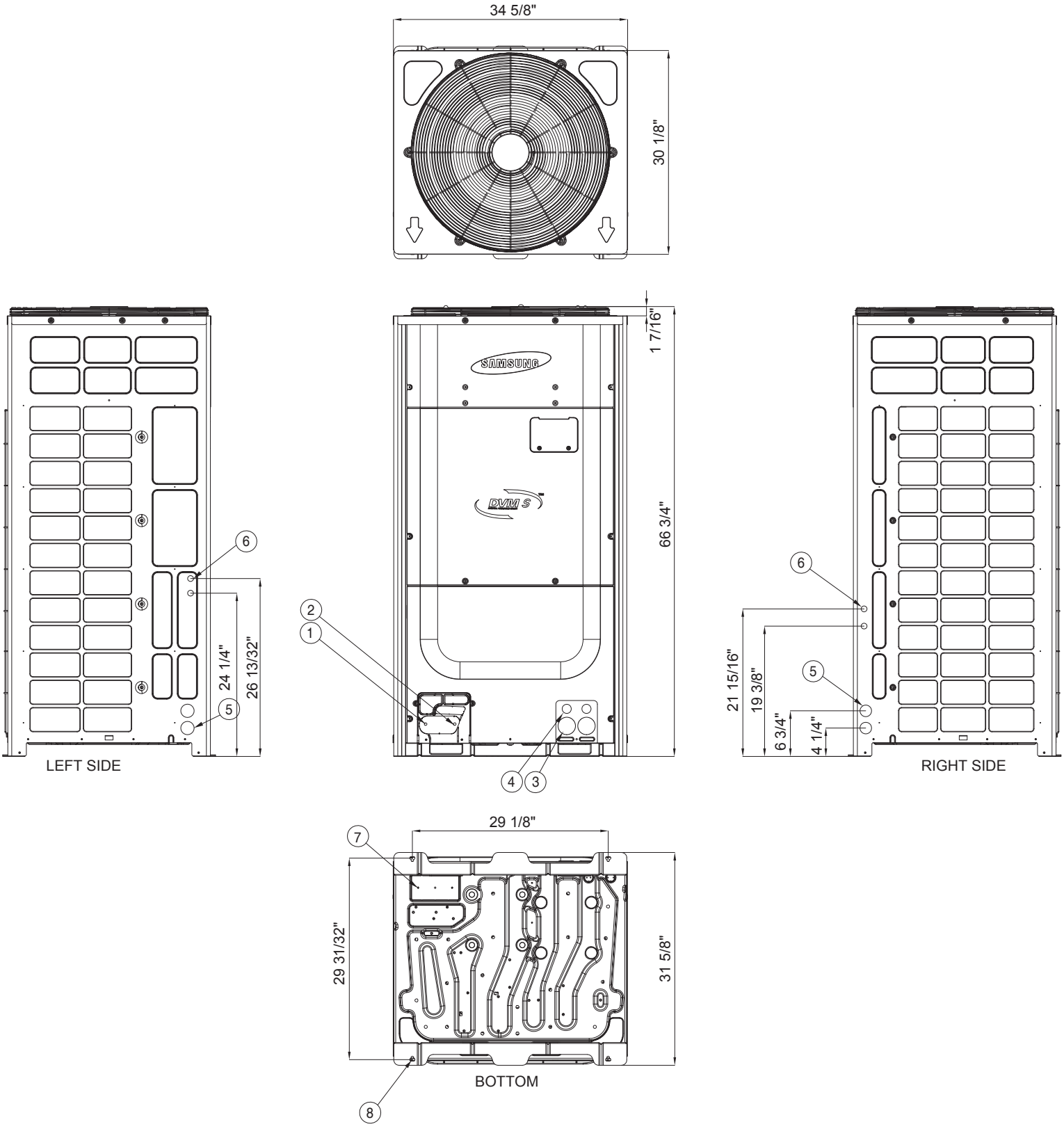
[2] Nominal heating capacities are based on: Indoor temperature: 70 ^{0}F DB, 60^{0}F WB. Outdoor temperature: 47^{0}F DB, 43^{0}F WB.

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

SUBMITTAL AM240JXVAJR/AA

Samsung DVM S Series, Heat Recovery Condensing Unit

AM072FXVAJR/AA Dimensional Drawing

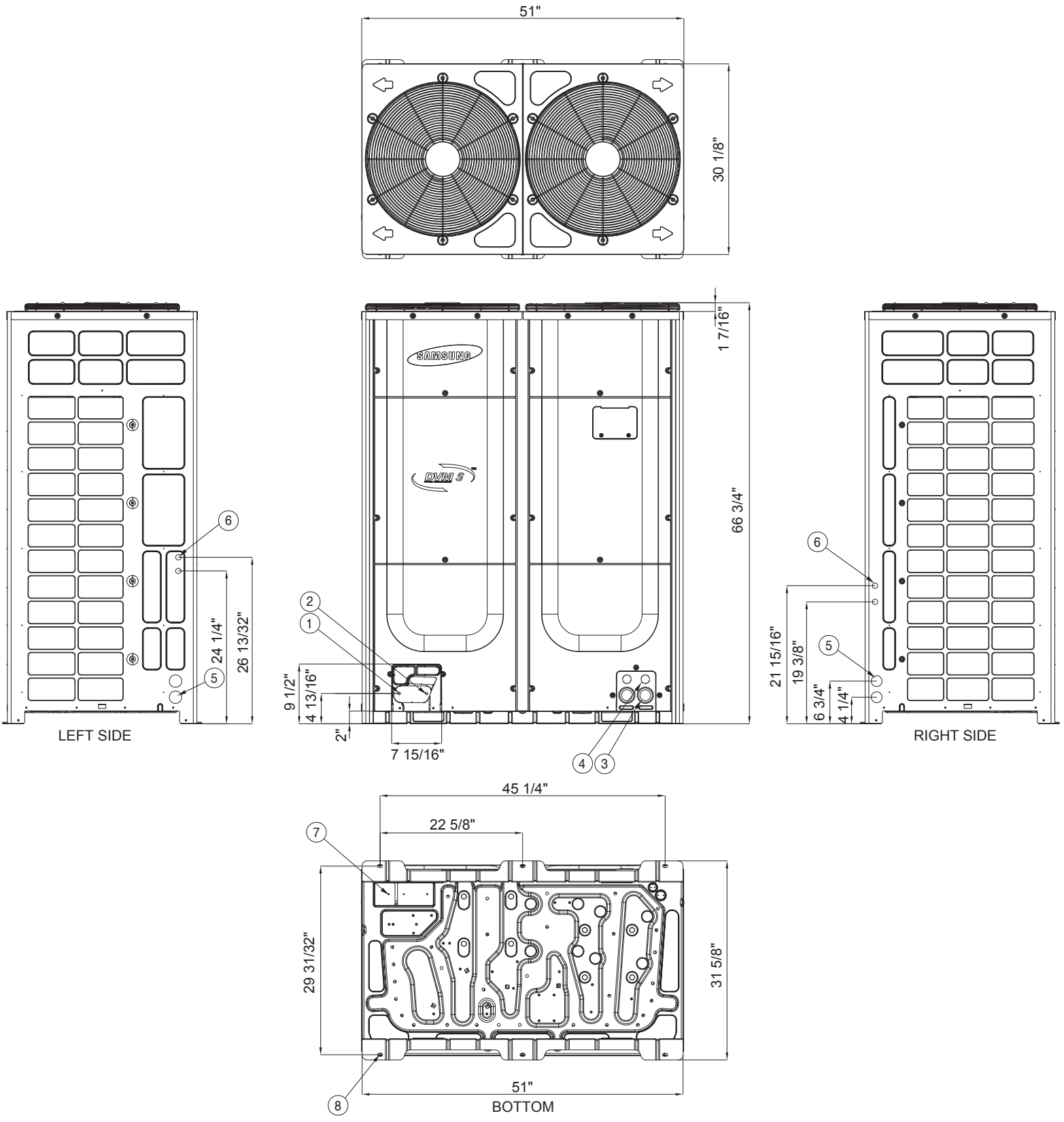


1. Gas refrigerant pipe opening
2. Liquid refrigerant pipe opening
3. Power conduit opening (2 X Ø1 3/4")
4. Communication conduit opening (2 X Ø1 3/8")
5. Power conduit opening (4 X Ø1 3/4")
6. Communication conduit opening (8 X Ø7/8")
7. Knock-out opening for refrigerant piping (7" X 3")
8. Anchor bolt hole (4 X Ø15/32")

SUBMITTAL AM240JXVAJR/AA

Samsung DVM S Series, Heat Recovery Condensing Unit

AM168HXVAJR/AA Dimensional Drawing



1. Gas refrigerant pipe opening
2. Liquid refrigerant pipe opening
3. Power conduit opening (2 X Ø1 3/4")
4. Communication conduit opening (2 X Ø1 3/8")
5. Power conduit opening (4 X Ø1 3/4")
6. Communication conduit opening (8 X Ø7/8")
7. Knock-out opening for refrigerant piping (7" X 3")
8. Anchor bolt hole (4 X Ø15/32")