

Job Name \_\_\_\_\_  
 Purchaser \_\_\_\_\_  
 Submitted to \_\_\_\_\_  
 Unit Designation \_\_\_\_\_

Location \_\_\_\_\_  
 Engineer \_\_\_\_\_  
 Reference \_\_\_\_\_ Approval \_\_\_\_\_ Construction \_\_\_\_\_  
 Schedule # \_\_\_\_\_

## System Specifications

Performance	US Ton (nominal)		5
	Capacity (Btu/h)	Nominal Cooling <sup>1</sup>	60,000
		Nominal Heating <sup>1</sup>	66,000
	System Modulation down to (Btu/h)		7,000
	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 X HP Gas (braze)		3/8 X 3/4 X 5/8
Installation Limitation <sup>2</sup>	Max. Distance - ODU to IDU (feet)		492 (574 equivalent)
	Vertical Separation (feet)	ODU to IDU <sup>3</sup>	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 / 59
Operating Temperature Range	Cooling <sup>4</sup>	°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
	Base Pan Heater Kit		MHC-015EE
	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		



## Compatibility

Only compatible with Samsung DVM S indoor units (AM\*\*\*\*N\*\*\*\*H\*\*\*\*) that are equal to or less than 76,000 Btu/h and MCM-D211UN Universal Communication Kit.

## 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, 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 controllers without additional interface modules.

## Refrigerant System

The compressor 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.

The condenser shall be able to provide simultaneous heating and cooling operation.

Installation of an HR Changer (MCU-R4NEK0N) is mandatory. If additional Mode Control Unit(s) are needed, the HR Changer must be installed between the outdoor unit and additional MCU's. Please refer to the installation manual for compatible MCU models.

Indoor units that will be used for cooling only year-around may be piped direct to the liquid and suction pipes after the HR Changer and bypassing MCU connection.

## Other Features

Advanced oil recovery cycle logic to ensure adequate oil level is maintained in the compressor. 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).

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

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.

<sup>1</sup> 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.

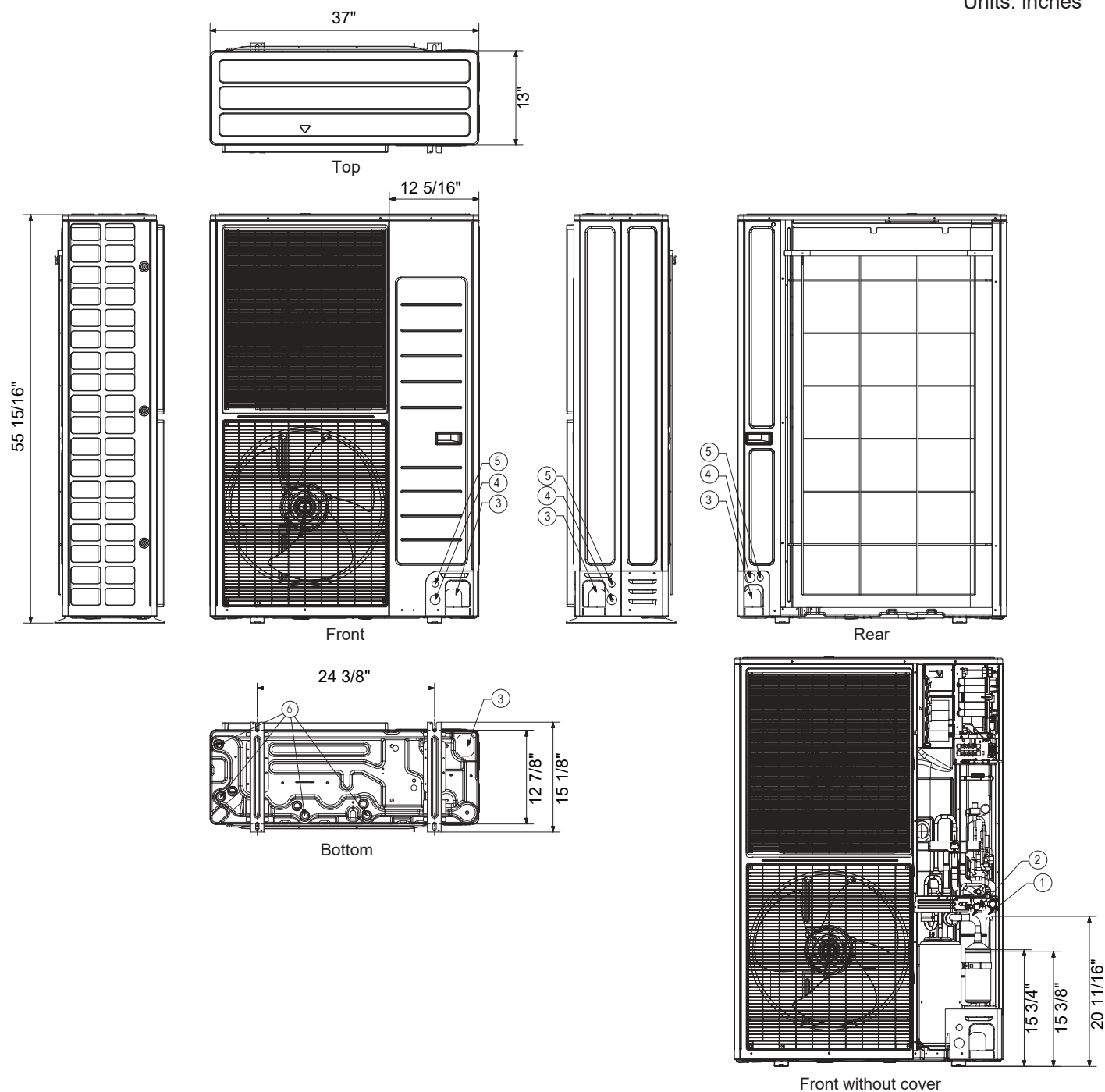
<sup>2</sup> Other pipe restrictions and requirements exist. Please consult installation manuals or technical data book for full details.

<sup>3</sup> Vertical separation: 131' when outdoor unit is lower than the indoor units, 164' when the outdoor unit is higher than the indoor units.

<sup>4</sup> 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.

Units: inches



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