

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

Reference

Schedule #

Approval

Construction

Specifications			
Model	Indoor Unit Model Number (US Code)		AC024BNADCH/AA (CNH24ADB)
	Outdoor Unit Model Number (US Code)		AC024BXADCH/AA (CXH24ADB)
Performance <sup>1</sup>	Nominal Capacity	Cooling / Heating (Btu/h)	24,000 / 27,000
	Capacity Range	Cooling (Btu/h)	8,000 - 27,000
		Heating (Btu/h)	7,000 - 40,000
	SEER / EER		18.9 / 10.3
	COP (nominal heating)		2.90
	HSPF		10.8
	AHRI Certification Number		207465454
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254 (max. 3% deviation from each)
	Operating Current (min. / std. / max.)	Cooling (A)	2.5 / 10.6 / 12.9
		Heating (A)	2.0 / 12.4 / 23.5
	Max. Breaker	Amps	30
	Min. Circuit Ampacity (A)	22.4	
Dimensions	W X H X D (in.)	Indoor Unit	41 9/16 X 8 7/16 X 11 3/4
		Outdoor Unit	37 X 39 5/16 X 13
	Weight (lbs.)	Indoor Unit	28.0
		Outdoor Unit	158.7
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	35 / 39 / 44
	Outdoor Unit dB(A)	Cooling / Heating (high)	50 / 52
Operating Temperatures	Outdoor	Cooling	23 ~122°F (-5~ 50°C) 0~122°F (-18~ 50°C) W/ Baffle
		Heating	-13~75°F (-25 ~ 24°C)
	Indoor	Cooling	61 ~90°F (16 ~32°C)
		Heating	T≤ 80°F (27°C)
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	5/8"
	Maximum (ft.)		164
	Maximum Vertical Separation (ft.)		98.4
	Condensate Connection		1 1/4 O.D X 1 I. D
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	lbs.	5.7
	Charged for		24.6 ft
	Additional Refrigerant		0.11 oz/ft over 24.6 ft
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	15.9
Evaporator Fan	Type		BLDC With Crossflow Fan (1)
	Air Volume	CFM (L/M/H)	466 / 537 / 629
	Output (W) / FLA (A)		27 W / 0.42 A
Condenser Fan	Motor		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		1.25 A / 125 W / 2,684 CFM
Safety	Certifications		ETL (UL 1995)
	Devices: PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing		



- General Information
- The indoor unit shall feature "WindFree™" mode\*. In cooling mode, as room temperature nears set temperature, the unit will close its louver and will disperse air into the space through thousands of micro-holes on the front of the indoor unit preventing cold air drafts on occupants
  - The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
  - High-voltage terminal block temperature sensor to disable unit in the event of power connection overheating
  - Auto-restart after power loss
  - Soft-start compressor minimizing current inrush
  - Base pan heater equipped as standard
  - All heat exchangers shall be mechanically bonded aluminum fin to copper tube
  - The condensing unit heat exchanger salt spray test method: ISO-9227 - the heat exchanger showed no unusual rust or corrosion development to 3,000 hours.
  - The system shall provide 100% heating capacity at -4°F (-20°C).

- Option settings
- The outdoor unit shall have snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
  - Night-time Quiet Mode: reduction of operational sound during (*automatic or manual activation*)
  - Emergency Temperature Output (ETO) function: when indoor unit is in error status or when room temperature exceeds configurable temperature level, the system outputs a signal to an external source, e.g., backup system, building management system, alert device (ex: status light, warning lamp, buzzer)
  - System can be configured as heating/cooling, cooling only, or heating only via outdoor unit option setting
  - Maximum Current Control configurable from 50% - 100% via outdoor unit, wired controller, or central controls

- Indoor Fan
- Indoor fan is a single crossflow type
  - Three fan speed settings and auto setting
  - Washable filter as standard
  - The WindFree™ function will close the supply air outlet louver while in cooling mode to gently disperse cool air into the space without blowing directly onto occupants. The WindFree™ feature is optional and can be enabled using central or local control options
  - The WindFree™ indoor unit has an integral humidity sensor that will open the louver for standard cool mode when space conditions could potentially cause condensation formation on the chassis surface

- Construction
- Outdoor unit: Galvanized steel with a baked-on powder coated finish for durability
  - Indoor unit: UL94 V0 with a galvanized steel mounting plate
  - The indoor unit shall have easy access to wire, pipe, and drain connections via access panel on the front of the unit for easier installation and service

- Controls
- Control wiring shall be 2 X 16 AWG
  - Wireless controller included as standard
  - Wired controllers must be purchased separately
  - Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller or central control options
  - No additional interface modules/adapters are required when connecting to Samsung central control options
  - The unit shall be operated via a wireless or wired remote control with DDC type signal

- Refrigerant System
- The compressor shall be hermetically sealed, inverter-controlled Twin BLDC rotary type
  - Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Warranty

10 years compressor, 10 years parts, 1-year limited labor (conditions apply)

<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

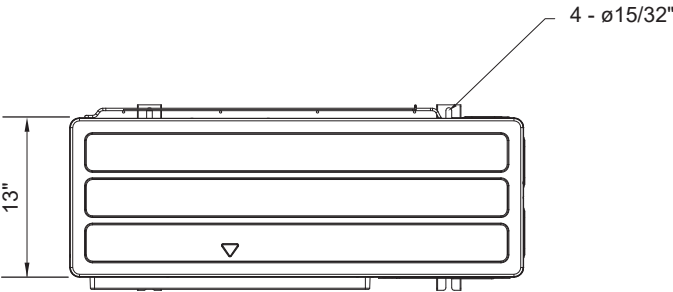
Samsung HVAC maintains a policy of ongoing development; specifications are subject to change without notice

\* The WindFree™ unit delivers an air current that is under 0.15 m/s while in WindFree™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers)

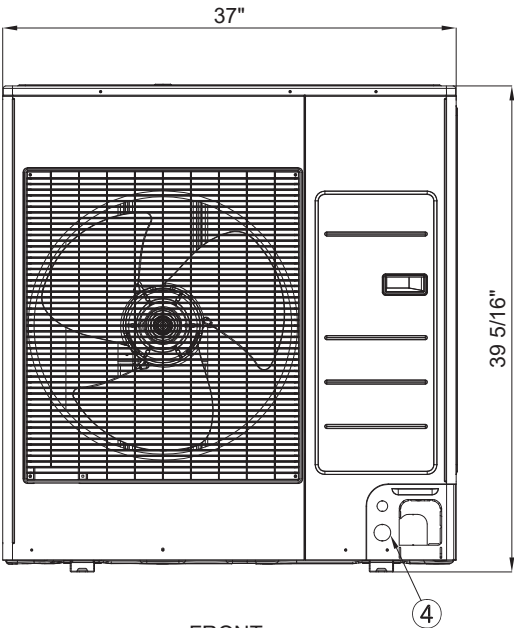
Optional Accessories

Wired Controller	Advanced	MWR-WG00UN
	Touchscreen	MWR-SH11UN
Thermostat Adaptor (for connection to a standard 24VAC thermostat)		MIM-A60UN
Wi-Fi adapter		MIM-H05UN
External Temperature Sensor		MRW-TA
External Contact Control		MIM-B14
Wall Bracket (for outdoor unit)		CKN-250
Wind Baffles	Front	WBF-2M-B
	Back	WBB-3M
Hail Guard Kit (includes back and side guards)		HGK-3
Line Sets - insulated and flared, interconnect cables included	25' - ILS-2509	
	50' - ILS-5009	

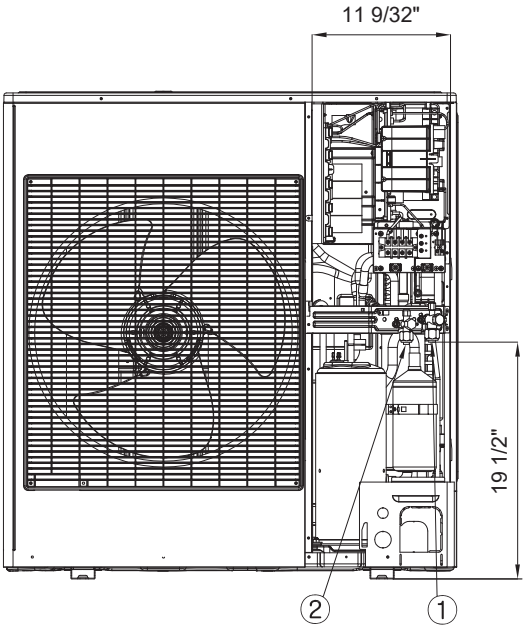




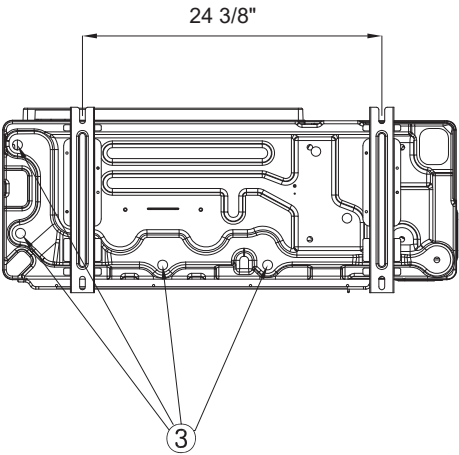
TOP



FRONT



FRONT WITHOUT SERVICE COVER



No.	Name	Description
1	Refrigerant liquid pipe	1/4
2	Refrigerant gas pipe	5/8
3	Drain hole	Connect with provided drain plug
4	Power and communication conduit openings	--