SAMSUNG

Submittal Data

AR12DXDABWKNCV (RNX12ABD) / AR12DXDACWKXCV (RXX12ACD)

WindFree™* Max Heat®, Wall Mounted Evaporator, Heat Pump Split System

Job Name: _____ Location: _____

Purchaser: _____ Engineer: _____

Submitted to: _____ Reference ☐ Approval ☐ Construction ☐

Unit designation: _____ Schedule #: _____

General Information

- The system shall provide 100% heating capacity at -4°F outdoor temperature and high heating capacity at -22°F outdoor temperature.
- The outdoor unit shall have a base pan heater as standard for optimal defrost cycle water drainage
- The indoor unit shall feature WindFree™* mode. When activated in cooling mode 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 system shall have a built-in Wi-Fi adapter as standard to allow control and monitoring using the Samsung SmartThings app.
- The outdoor unit shall provide 208/230V power to the indoor unit via 14 AWG X 3 interconnect power cable.

Construction

- Indoor unit chassis shall be UL94 V0 with a galvanized steel mounting bracket
- The indoor unit shall have easy access to wire, pipe, and drain connections via the access panel on the bottom of the unit for simple installation and service
- The outdoor unit shall be galvanized steel with a baked-on powder coated finish for durability

Heat Exchanger

- The heat exchangers shall be mechanically bonded fin to copper tube

Refrigerant System

- The system shall utilize low-GWP R-32 refrigerant
- The compressor shall be hermetically sealed, inverter controlled, BLDC Rotary
- Refrigerant flow shall be controlled by an electronic expansion valve at the outdoor unit

Indoor Fan

- The indoor fan shall be a single cross-flow type
- Three fan speed settings and auto settings
- Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

Controls

- The indoor unit shall ship with a rechargeable, solar-cell wireless controller. The wireless controller battery shall be charged with a USB C cable or the integral solar panel.
- The included wireless controller shall have a pixel display that is visible in low light conditions.
- Dual set temperature support when connected to supported wired controllers.
- The indoor unit shall include an integral humidity sensor for improved humidity control functions.
- The indoor unit shall have a simple connection for condensate overflow detection devices or any normally closed contact for simple unit shutdown.
- Samsung central control compatible (accessory required)
- Interconnect control wire between the outdoor and indoor unit shall be 16AWG X 2

External Heat Control

- External heat control functionality allows for configuration of fan operation during auxiliary heat operation, defrost, and emergency heat (MIM-B14U accessory required).



Note: Unit appearance may vary slightly

- External heat control configuration settings includes outside ambient external heat lockout, outside ambient compressor lockout, and time delay options (MIM-B14U accessory required).
- Emergency heat functionality allows the system to continue controlling the external heat source even when system errors prevent the heat pump from operating (MIM-B14U accessory required).

Convenience

- 7-segment digital display on the front of the unit to display temperature and unit status
- Washable main filter as standard accessible from the top of the unit
- System energy consumption can be viewed using the Samsung SmartThings mobile app or on the indoor unit display using the included wireless controller (conditions apply).
- AI (artificial intelligence) Auto Mode technology monitors factors such as indoor temperature, outdoor temperature, set temperature, and operating time to learn the patterns within your home to automatically adjust system operation to maximize occupant comfort and efficiency (Wi-Fi connection required).
- AI Energy mode technology enhances energy saving operation using advanced compressor control techniques
- Eco Mode to reduce energy consumption during low demand operation
- Smart install mode - Startup system diagnostics operation to ensure system readiness during initial operation
- Auto restart after power loss
- Other Features and functions: Auto changeover, Auto Clean Function, Freeze Wash Function, MAX mode to quickly reach set temperature, Good'sleep mode, Quiet mode, Dry mode, Simple ON/OFF time function (activated with wireless controller), Filter cleaning reminder

Intertek

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

ENERGY STAR ENERGY STAR COLD CLIMATE

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor or visit www.energystar.gov.

*The WindFree™ unit delivers an air current that is under 0.15 m/s while in WindFreeTM 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).

Samsung HVAC maintains a policy of ongoing development. Specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

System Specifications

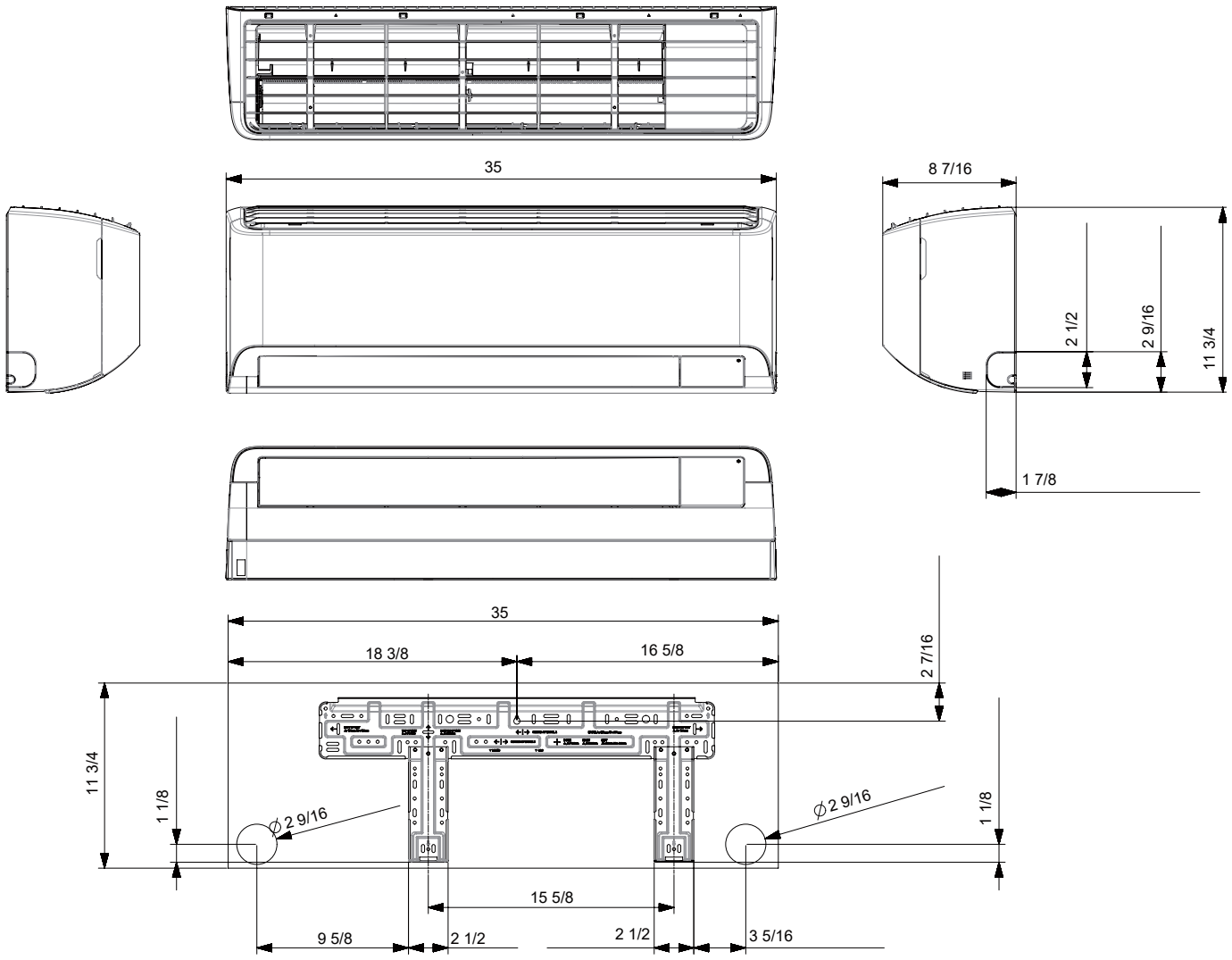
Model	Indoor Unit Model Number (US Code)		AR12DXDABWKNCV (RNX12ABD)
	Outdoor Unit Model Number (US Code)		AR12DXDACWKXCV (RXX12ACD)
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	12,000 / 12,000
	Capacity Range	Cooling (Btu/h)	3,000 - 16,000
		Heating (Btu/h)	2,600 - 24,000
	AHRI 210-240 2023	SEER2	24.00
		EER2	14.10
		HSPF2 (region IV)	10.50
		5°F COP	2.09
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		187 - 253
	Operating Current (min. / standard / max.)	Cooling (A)	1.2 / 4.2 / 6.3
		Heating (A)	1.1 / 3.8 / 10
	Max. Breaker	Amps	20.0
	Min. Circuit Ampacity	Amps	12.0
Dimensions	W X H X D (in.)	Indoor Unit	35 X 11 3/4 X 8 7/16
		Outdoor Unit	31 1/8 X 21 9/16 X 11 1/4
	Weight (lbs.)	Indoor Unit	23.10
		Outdoor Unit	71.00
Sound Pressure Level	Indoor Unit dB(A)	Silent / High	22 / 39
	Outdoor Unit dB(A)	Cooling (high)	46
Operating Temperatures	Outdoor	Cooling	0 - 115°F (-18 - 46°C)
		Heating	-22 - 75°F (-30 - 24°C)
	Indoor	Cooling	64 ~ 90°F (16 ~ 32°C)
		Heating	T ≤ 86°F (30°C)
Pipe Connections	Indoor & Outdoor	High side (In.)	1/4
		Low side (In.)	3/8
	Maximum (ft.)		66
	Maximum Vertical Separation (ft.)		49
	Condensate Connection		11/16” OD
Refrigerant	Type		R-32
	A2L Leak Detection		Not Included
	Factory Charge	oz.	34.0
	Charged for		24.6 ft.
Compressor	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	9.2
Evaporator Fan	Type		BLDC motor with cross-flow fan
	FLA	Amps	0.12
	Output	Watts	27.0
Airflow	Air Volume (L/M/H/Turbo)	Cooling (CFM)	251 / 321 / 374 / 427
		Heating (CFM)	286 / 357 / 410 / 463
Condenser Fan	Type		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		0.42 / 40 / 1,589
Corrosion Prevention	IS0-9227 - The condenser heat exchanger showed no unusual rust or corrosion development to 240 hours.		
Safety	Certifications	UL 60335-2-40	
	Devices	PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing	

Accessories

Condensate pump	Aspen Mini Orange	☐ ASP-MO-UNIV 110-250
	Blue Diamond MaxiBlue	☐ BD-BLUE-230
	Blue Diamond MicroBlue w/slim fascia kit	☐ X86-011
Wired controller (sub-PCB model MIM-A00UN is required)	Advanced	☐ MWR-WG01UN
	Touchscreen	☐ MWR-SH12UN
Wired controller sub-PCB		☐ MIM-A00UN
24 VAC Thermostat adapter (sub-PCB model MIM-A00UN is required)		☐ MIM-A60UN
External temperature sensor		☐ MRW-TAU
External contact control interface module (sub-PCB model MIM-A00UN is required)		☐ MIM-B14U
Central control interface module		☐ MIM-R10UN
Wall bracket (for outdoor unit)		☐ CKN-250
Wind baffles	Front	☐ WBF-3M-B
	Back	☐ WBB-5M
Hail guard kit (includes back and side guards)		☐ HGK-1
Line set - insulated and flared, interconnect cables included	25'	☐ ILS2506
	50'	☐ ILS5006

Dimensional Drawing
AR12DXDABWKNCV (RNX12ABD)

Unit: Inches



Dimensional Drawing
AR12DXDACWKXCV (RXX12ACD)

Unit: Inches

