

SAMSUNG

Submittal Data

AR18DXDABWKNCV (RNX18ABD) / AR18DXDACWKXCV (RXX18ACD)

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

Job Name: _____

Purchaser: _____

Submitted to: _____

Unit designation: _____

Location: _____

Engineer: _____

Reference _____ Approval _____ Construction _____

Schedule #: _____

General Information

- The system shall feature Comfort Humidity Control. Utilizing an integral humidity sensor, the system optimizes the indoor unit coil temperature according to the dew point, maximizing energy savings while. Unit also provides space dehumidification whenever the system is at or near set point. Comfort Humidity Control is only available when operating in Auto, AI Auto, Cooling with auto fan, or Dry modes.
- 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.
- Interconnecting control wiring between the outdoor to indoor shall be 2-conductor/stranded copper/shielded cable between 18-16 AWG.

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

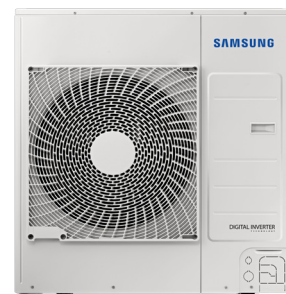
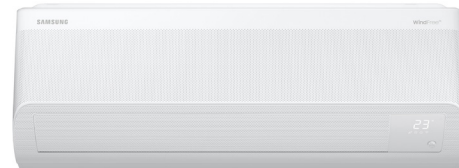
- The indoor fan shall be a single cross-flow type
- Three fan speed settings and auto settings
- Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

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 have a simple connection for condensate overflow detection devices or any normally closed contact for simple unit shutdown.
- Samsung central control compatible (accessory required)

External Heat Control

- External heat control functionality allows for configuration of fan operation during



Note: Unit appearance may vary slightly

auxiliary heat operation, defrost, and emergency heat (MIM-B14U accessory required).

- 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



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 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).

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)		AR18DXDABWKNCV (RNX18ABD)
	Outdoor Unit Model Number (US Code)		AR18DXDACWKXCV (RXX18ACD)
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	18,500 / 20,000
	Capacity Range	Cooling (Btu/h)	7,500 - 25,000
		Heating (Btu/h)	7,500 - 41,000
	AHRI 210-240 2023	SEER2	21.00
		EER2	13.20
		HSPF2 (region IV)	9.70
		5°F COP	2.05
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		187 - 253
	Operating Current (min. / standard / max.)	Cooling (A)	2.5 / 6.5 / 11.2
		Heating (A)	2.6 / 7 / 18
	Max. Breaker	Amps	30.0
	Min. Circuit Ampacity	Amps	21.0
Dimensions	W X H X D (in.)	Indoor Unit	41 9/16 X 11 3/4 X 8 7/16
		Outdoor Unit	37 X 39 5/16 X 13
	Weight (lbs.)	Indoor Unit	27.30
		Outdoor Unit	150.40
Sound Pressure Level	Indoor Unit dB(A)	Silent / High	25 / 42
	Outdoor Unit dB(A)	Cooling (high)	51
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.)	1/2
	Maximum (ft.)		98
	Maximum Vertical Separation (ft.)		66
	Condensate Connection		11/16" OD
Refrigerant	Type		R-32
	A2L Leak Detection		Not Included
	Factory Charge	oz.	70.6
	Charged for		24.6 ft.
Compressor	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	7.8
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)	399 / 466 / 533 / 579
		Heating (CFM)	424 / 491 / 554 / 600
Condenser Fan	Type		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		1.25 / 125 / 2,825
Corrosion Prevention	ISO-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	
	Battery Chemistry	(Remote Control only) Lithium Ion	

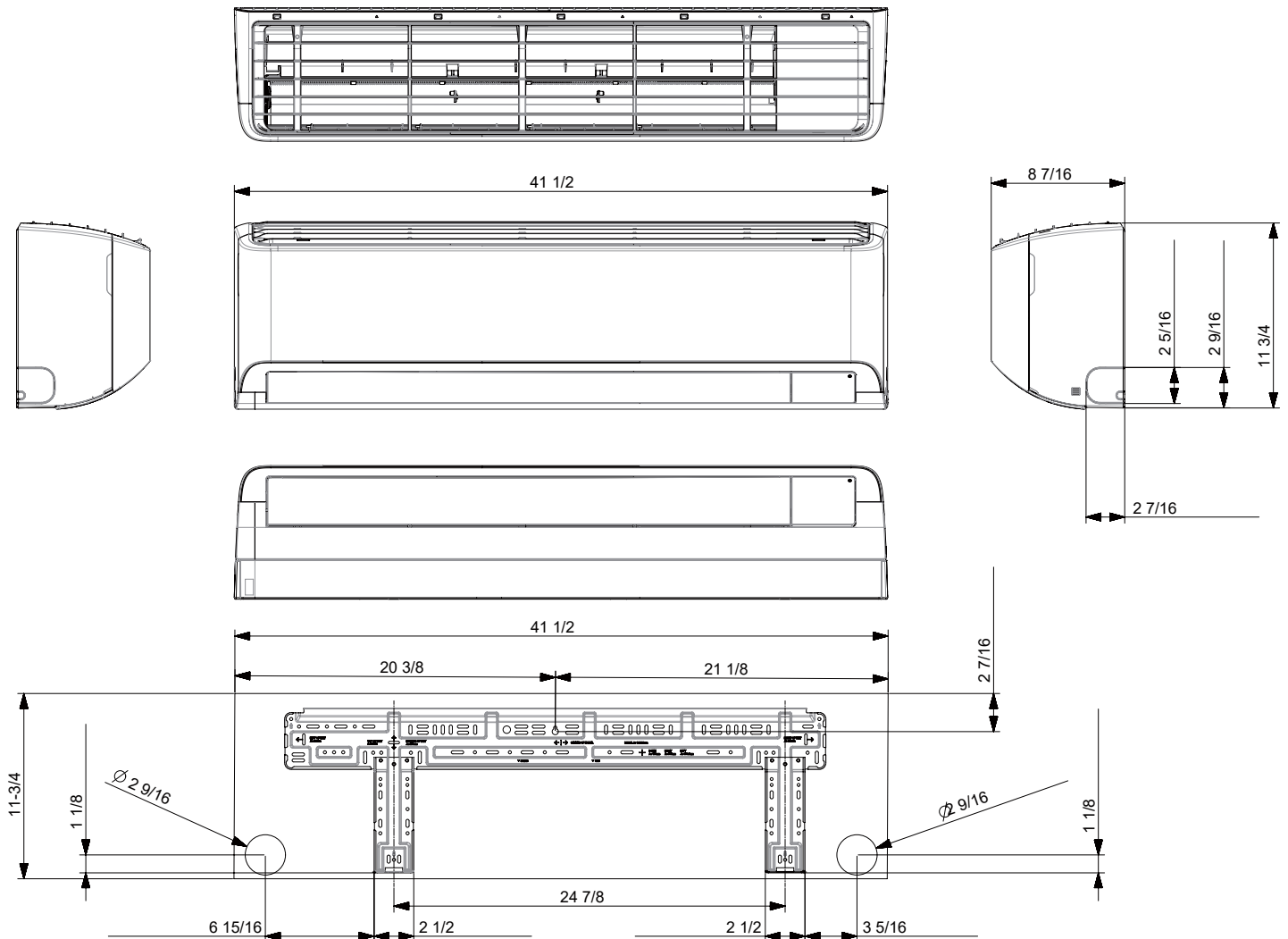
Accessories

Condensate pump	Aspen Mini Orange; 110-230V	ASP-MO-UNIV 110-250
	Ghost™ Remote Mount w/Reservoir; 100-240VAC	83909
	Blue Diamond MicroBlue w/Reservoir; 110-230V	X86-003
	Blue Diamond MicroBlue w/Reservoir and Slim Fascia kit; 110-230V	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-2M-B
	Back	WBB-3M
Hail guard kit (includes back and side guards)		HGK-3
Line set - insulated and flared, interconnect cables included	25'	ILS2507

Dimensional Drawing

AR18DXDABWKNCV (RN~~X~~18ABD)

Unit: Inches



Dimensional Drawing
AR18DXDACWKXCV (RXX18ACD)

Unit: Inches

