

Samsung Max Heat 3.0, wall mounted evaporator, split system

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

Reference

Approval

Construction

Schedule #

Specifications

Model	Indoor Unit Model Number (US Code)		AR18CSDABWKNCV (RNS18ABC)
	Outdoor Unit Model Number (US Code)		AR18CSDACWKXCV (RXS18ACC)
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,000
	Capacity Range	Cooling (Btu/h)	7,500 - 23,884
		Heating (Btu/h)	7,000 - 40,000
	SEER2 / EER2		21 / 13
	HSPF2		8.5
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		187 - 253
	Operating Current (min. / std. / max.)	Cooling (A)	2.5 / 6.2 / 11.2
		Heating (A)	2.3 / 7.0 / 17.1
	Max. Breaker	Amps	30
	Min. Circuit Ampacity (A)		21
Dimensions	W X H X D (in.)	Indoor Unit	41-9/16 x 11-3/4 x 8-7/16
		Outdoor Unit	34-5/8 x 31-7/16 x 12-3/16
	Weight (lbs.)	Indoor Unit	27.6
		Outdoor Unit	122.6
Sound Pressure Level	Indoor Unit dB(A)	H / Silent	42 / 25
	Outdoor Unit dB(A)	High	51
Operating Temperatures	Outdoor	Cooling	0 ~ 115°F (-18 ~ 46°C)
		Heating	-22 ~ 75°F (-30 ~ 24°C)
	Indoor	Cooling	61 ~ 90°F (16 ~ 32°C)
		Heating	50 ~ 86°F (27 ~ 30°C)
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	1/2"
	Maximum (ft.)		98
	Maximum Vertical Separation (ft.)		66
	Condensate Connection		11/16" OD
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	lbs.	3.97
	Charge for		25 ft.
	Additional Refrigerant Charge		0.16 oz. / ft. over 25 ft.
Compressor	Manufacturer		Samsung
	Type		BLDC Rotary
	RLA	Amps	15.2
Evaporator Fan	Type		BLDC motor with cross-flow fan
	Air Volume (L/M/H/Turbo)	Cooling (CFM)	399 / 466 / 533 / 579
		Heating (CFM)	424 / 491 / 554 / 600
	Output	Watts	27
	FLA	Watts	0.12
Condenser Fan	Motor		BLDC With Axial Type Fan (1)
	Output	Watts	125
	FLA	Amps	0.42
	Air Volume	CFM (max.)	2013
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	



(actual equipment appearance may vary)



General Information

- The Samsung Max Heat system shall provide 100% heating capacity at -4°F outdoor temperature and high heating capacity at -22°F outdoor temperature.
- The outdoor unit shall include a base pan heater as standard to ensure optimal defrost cycle water drainage.
- 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 indoor unit shall have Wi-Fi capability as standard.
- Outdoor unit shall provide 208/230V power to indoor unit via 14 AWG X 3 interconnect power cable.
- Built-in motion sensor for airflow direction control and energy saving operation.

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 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 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, antibacterial cross-flow type
- Three fan speed settings and auto setting
- Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

Controls

- The system shall have a built in Wi-Fi adapter as standard to allow control and monitoring using the Samsung SmartThings app (Android, iOS)
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller.
- The indoor unit shall have a simple connection for overflow detection devices or any other normally closed contact for simple unit shutdown
- The indoor unit shall ship with a wireless controller, holder, and batteries
- Wired controller options available
- Samsung central control compatible (MIM-R10UN accessory required)
- Interconnect control wire between outdoor and indoor unit shall be 16AWG X 2

Convenience

- System energy consumption can be viewed using the Samsung SmartThings mobile app or on the indoor unit display using the included wireless controller**
- 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)
- 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
- Auto Clean Function
- Freeze Wash Function
- 7-segment digital display on front of unit to display temperature and unit status
- "Fast" mode to quickly reach set temperature
- Auto changeover
- Good sleep mode
- Quiet mode
- Dry mode
- Simple ON/OFF time function – Using the wireless controller specify the ON and/or OFF times
- Electro-static, washable, main filter as standard accessible from the top of unit
- Filter cleaning reminder

¹Certified 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.

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.



Optional Accessories

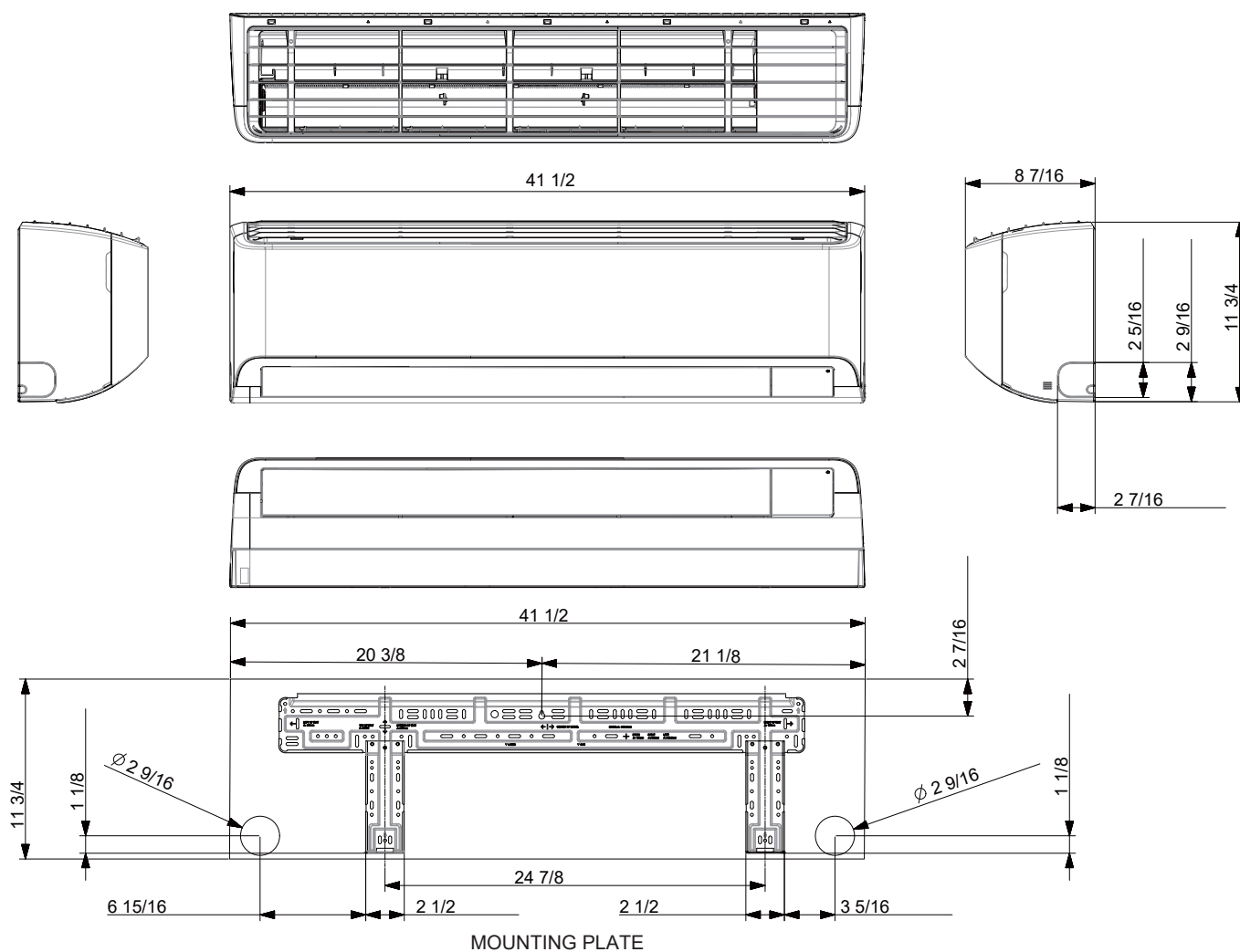
Condensate pump	Aspen Mini Orange	ASP-MO-UNIV 110-250
	Blue Diamond	BD-BLUE-230
Wired controller ¹	Advanced	MWR-WG00UN
	Simple Touch	MWR-SH11UN
Wired controller sub-PCB		MIM-A00UN
24 VAC thermostat adapter ¹		MIM-A60UN
External temperature sensor		MRW-TA
Central control interface module		MIM-R10UN
External contact control interface module ²		MIM-B14
Line sets - insulated and flared, interconnect cables included	25' - ILS2507	
	50' - ILS5007	
Wall bracket (for outdoor unit)		CKN-250
Wind Baffle / Guard	Front	WBF-7M
	Back	WBB-7M-B

¹ Sub-PCB model MIM-A00UN is required when connecting optional wired controllers or MIM-A60UN 24VAC thermostat adapter.

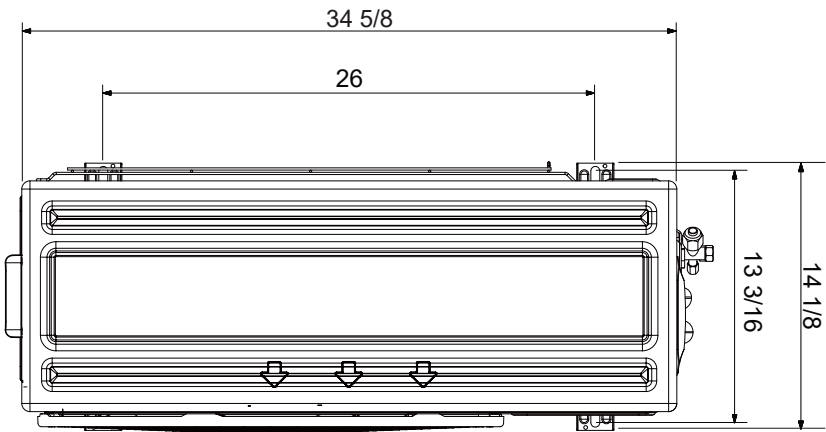
² When applying MIM-B14 external contact control interface module, MIM-A00UN wired controller sub-PCB is required.

Samsung Max Heat 3.0, wall mounted evaporator, split system
Indoor unit dimensional drawing

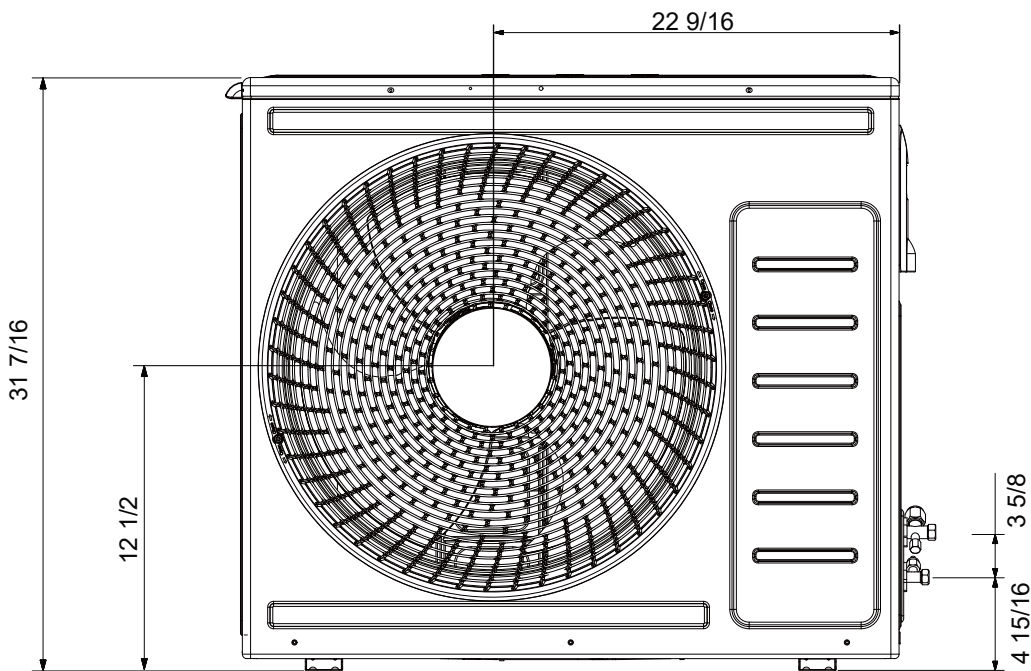
Unit: inches



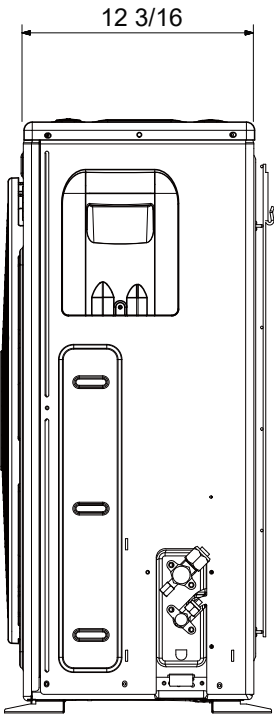
Unit: inches



(pictured without valve/wire cover on right side)

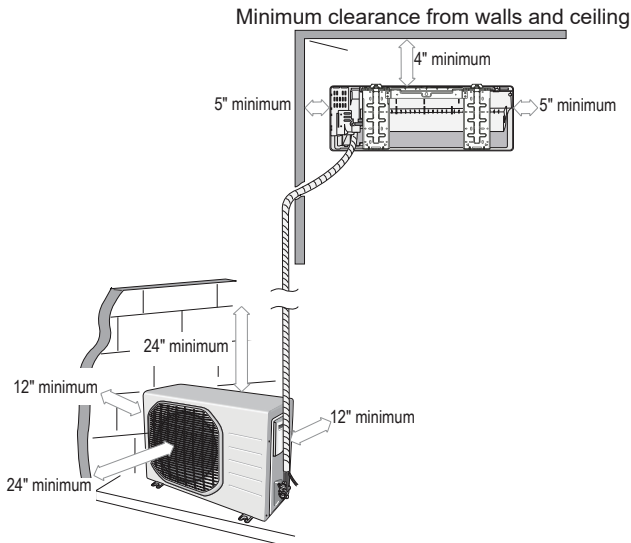


FRONT
(pictured without valve/wire cover on right side)



RIGHT
(pictured without valve/wire cover)

For reference only. Always refer to installation manual for complete details.



Minimum clearance from nearby obstructions
(See installation manual for full details. Be aware of national, state, and local codes)

Basic power and communication wiring between indoor and outdoor units

