

Samsung "Quantum 2.0", wall mounted evaporator, split system

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference _____ Approval _____ Construction _____
 Schedule # _____

Specifications

Model	US Code	Indoor Unit	RNS24YBT	
		Outdoor Unit	RXS24YBT	
	Model Number	Indoor Unit	AR24TSFYBWKNCV	
		Outdoor Unit	AR24TSFYBWKXCV	
Performance	Nominal Capacity ¹	Cooling / Heating (Btu/h)	22,000 / 24,000	
	Capacity Range	Cooling (Btu/h)	8,800 - 29,000	
		Heating (Btu/h)	7,500 - 40,000	
	SEER / EER		18 / 10.50	
	COP	Nominal Heating	3.07	
	HSPFF		9	
Power	AHRI Reference Number		205132670	
	Voltage	ø / V / Hz	1 / 208-230 / 60	
		Working Voltage Range (VAC)		176 - 254
	Operating Current (Min./Std./Max.)	Cooling (A)		2.7 / 9.8 / 13.5
		Heating (A)		2.6 / 10.5 / 18.9
	Max. Breaker	Amps		30
	Min. Circuit Ampacity (A)			20
	Dimensions	W X H X D (in.)	Indoor Unit	41 1/2 X 11 13/16 X 8 7/16
			Outdoor Unit	34 5/8 X 31 3/8 X 12 3/16
		Weight (lbs.)	Indoor Unit	
Outdoor Unit				122.6
Condensate Connection			1 1/16" OD	
Sound Pressure Level	Indoor Unit	Low / High (dB)	30 / 45	
	Outdoor Unit	High (dB)	56	
Operating Temperatures	Outdoor	Cooling	14° ~ 115°F (-10° ~ 46.1°C)	
		Heating	-5° ~ 75°F (-20.5° ~ 23.9°C)	
	Indoor	Cooling	61° ~ 90°F (16° ~ 32°C)	
		Heating	81°F (27°C) or less	
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"	
		Low side (flare)	5/8"	
	Maximum / Minimum Line Set Length (ft.)		98 / 9.8	
	Maximum Vertical Separation (ft.)		66	
Refrigerant	Type		R410A	
	Control Method		Electronic Expansion Valve	
	Factory Charge	oz.	63.5	
	Charged for		25 feet	
	Additional Refrigerant		0.16 oz. / ft. over 25 feet	
Compressor	Manufacturer		Samsung	
	Type		BLDC Rotary	
	RLA	A	15.2	
Evaporator Fan	Type		BLDC motor with cross-flow fan	
	Air Volume (L/M/H/Turbo)	Cooling (CFM)	459 / 533 / 607 / 657	
		Heating (CFM)	459 / 533 / 607 / 657	
	Consumption	Watts		27 X 1
	FLA	Amps		0.12
Condenser Fan	Motor		BLDC motor with axial fan (1)	
	Output	Watts	125	
	FLA	Amps	0.48	
	Air Volume	CFM (max.)		2,365
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	



(actual equipment appearance may vary)

General Information

- 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

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) louver and manual 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)

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
- 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

¹ 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. Refer to www.AHRIdirectory.org for current reference numbers.



Optional Accessories

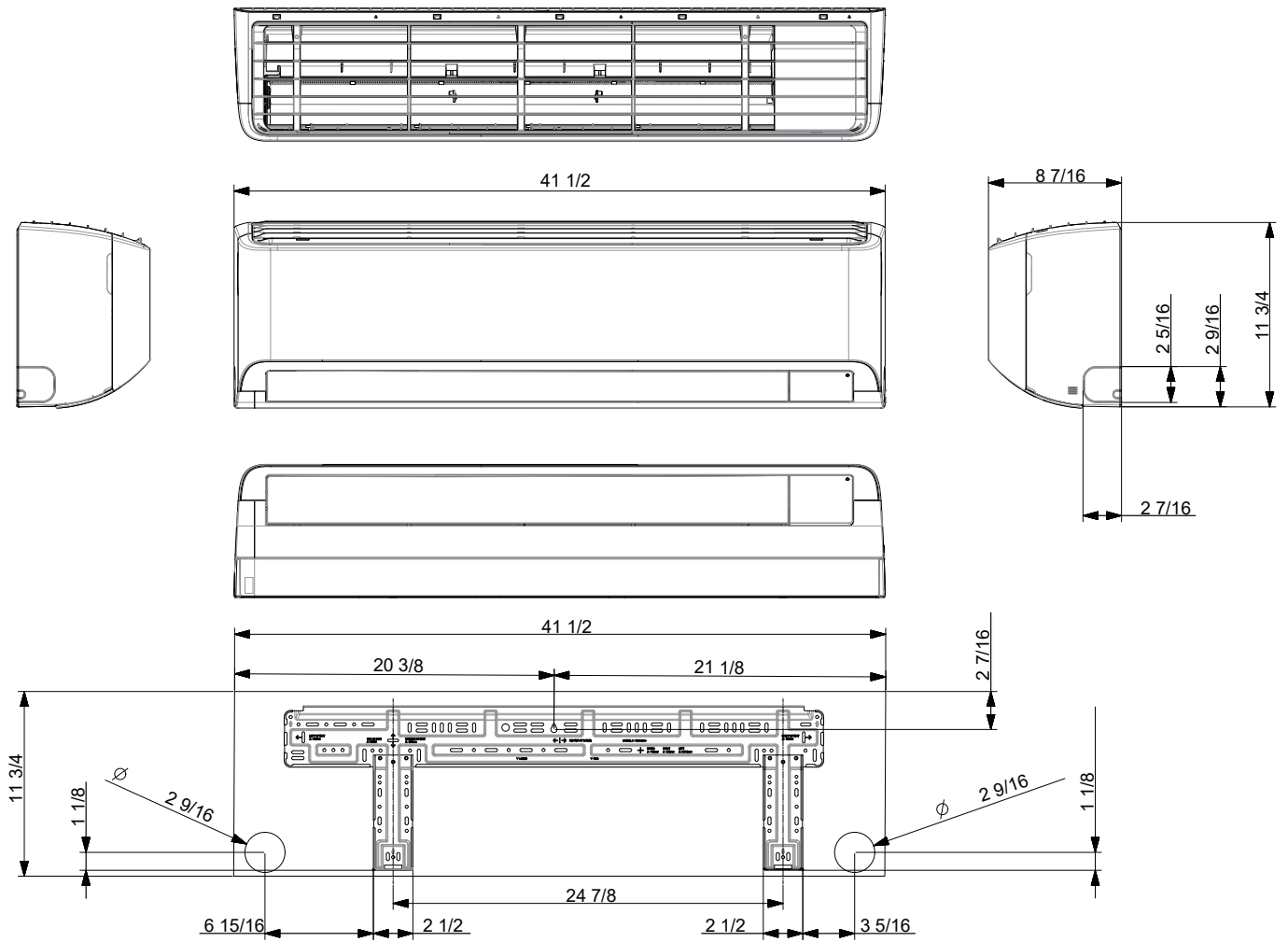
Condensate pump	Aspen Mini Orange	ASP-MO-UNIV 110-250
	Blue Diamond	BD-BLUE-230
Wired controller ¹	Advanced	MWR-WG00UN
	Simple Touch	MWR-SH11UN
Wired controller sub-PCB		MIM-A00UN
24 VAC thermostat adapter		MIM-A60UN
External temperature sensor		MRW-TA
Central control interface module		MIM-R10UN
External contact control interface module ²		MIM-B14
Line sets - insulated and flared, interconnect cables included	25' - ILS2509	
	50' - ILS5009	
Wall bracket (for outdoor unit)		CKN-250
Wind Baffle / Guard	Front	WBF-7M
	Back	WBB-7M-BB

¹ Sub-PCB model MIM-A00UN is required when connecting optional wired controllers

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

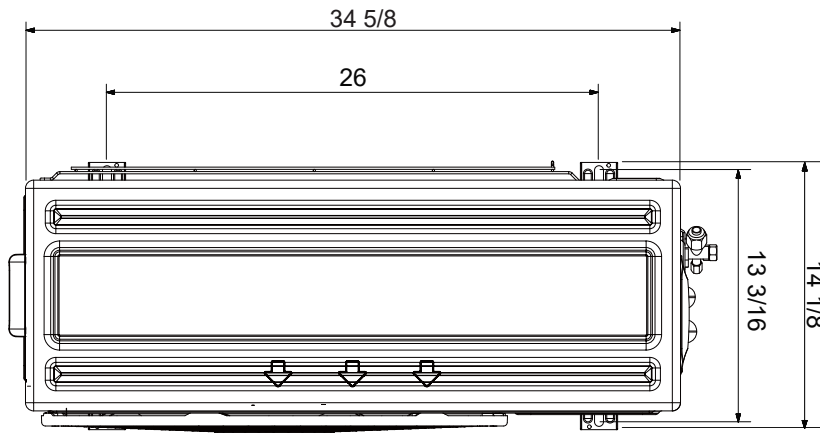
Samsung "Quantum 2.0", wall mounted evaporator, split system
Indoor unit dimensional drawing

Unit: inches



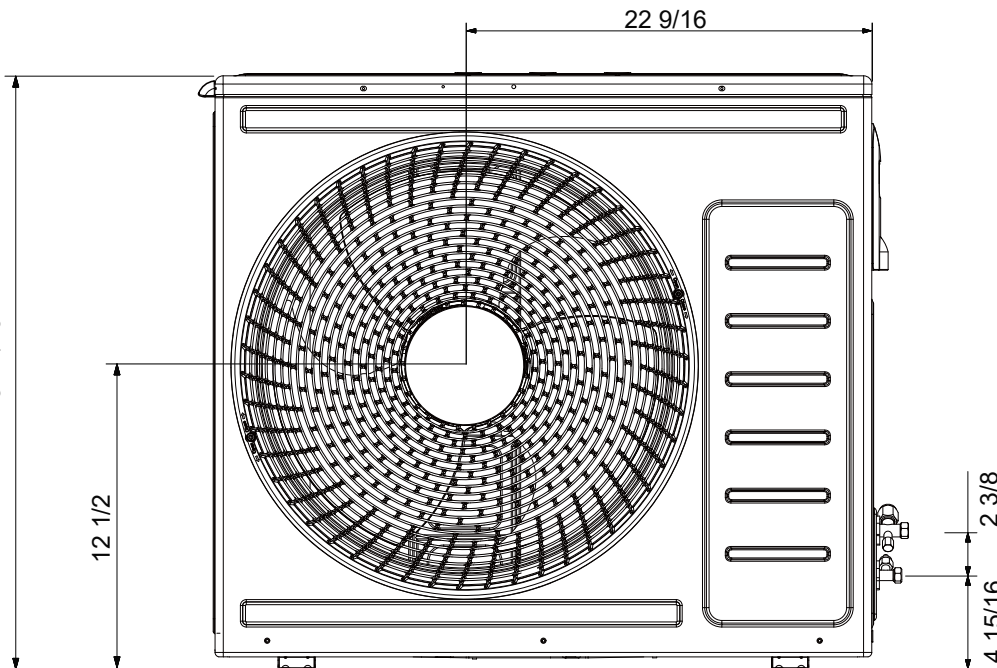
Samsung "Quantum 2.0", wall mounted evaporator, split system
Outdoor unit dimensional drawing

Unit: inches



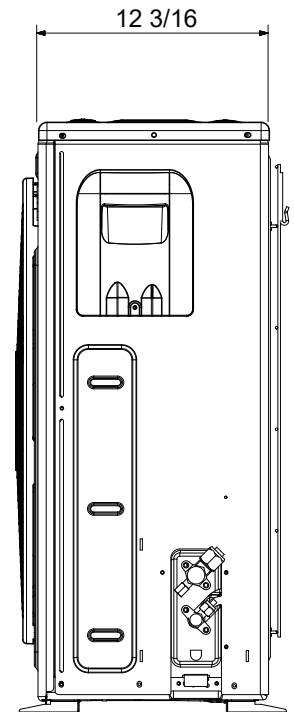
TOP

(pictured without valve/wire cover on right side)



FRONT

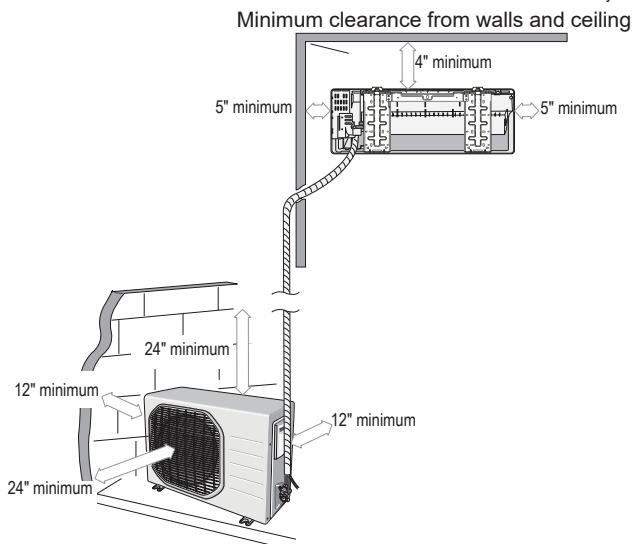
(pictured without valve/wire cover on right side)



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

