

Samsung "Smart Whisper", wall mounted evaporator, split system

Job Name

Purchaser

Submitted to

Unit Designation

Location

Engineer

Reference

Approval

Construction

Schedule #

Specifications

Model	System Model Number		AR24KSWSJWKCV
	Indoor Unit Model Number		AR24KSWSJWKNCV
	Outdoor Unit Model Number		AR24KSWSJWKXCV
Performance	Nominal Capacity*	Cooling / Heating (Btu/h)	21,000 / 27,000
	Capacity Range	Cooling (Btu/h)	8,871 - 31,732
		Heating (Btu/h)	7,506 - 39,238
	SEER / EER		21.6 / 12.5
	COP		3.14
	HSPF		10.7
	AHRI Reference Number		8677410
Condensate (pints/hour)		6.0	
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254
	Operating Current (Min./Std./Max.)	Cooling (A)	3.2 / 7.8 / 14.0
		Heating (A)	2.6 / 11.5 / 19.0
	Max. Breaker	Amps	30
	Min. Circuit Ampacity (A)		18.1
	Dimensions	W X H X D (inches)	Indoor Unit
		Outdoor Unit	34 5/8 X 38 1/16 X 12 5/8
Weight (lbs.)		Indoor Unit	30.86
		Outdoor Unit	144.4
Condensate Connection		11/16" OD	
Sound Pressure Level	Indoor Unit (dB)	High	50
	Outdoor Unit (dB)	High	60
Operating Temperatures (°F)	Outdoor	Cooling	14 ≤ T ≤ 115
		Heating <sup>1</sup>	5 ≤ T ≤ 115 W/Baffle -5 ≤ T ≤ 75
	Indoor	Cooling	61 ≤ T ≤ 90
		Heating	T ≤ 80
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	5/8"
	Maximum / Minimum Line Set Length (ft.)		98 / 10
	Maximum Vertical Separation (ft.)		50
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	oz.	56.4
	Charged for		25 feet
	Additional Refrigerant		0.16 oz./ft. over 25 ft.
Compressor	Manufacturer		Samsung
	Type		BLDC Rotary
	RLA	A	14.0
Evaporator Fan	Type		BLDC motor with cross-flow fan (1)
	Air Volume	CFM (L/M/H)	390 / 480 / 670
	Consumption	Watts	27
	FLA	Amps	0.12
Condenser Fan	Motor		BLDC motor with axial fan (1)
	Output	Watts	93
	FLA	Amps	0.43
	Air Volume	CFM (max.)	2,120
Optional Accessories	Wireless controller holder		DB61-06087A
	Condensate pump	Aspen Mini Orange	ASP-MO-UNIV 110-250
		Blue Diamond	BD-BLUE-230
	Wired controller	Standard	AR-WRS <sup>2</sup>
		Premium (w/scheduling)	AR-WRP <sup>3</sup>
	Wired controller sub-PCB		DB93-11412A
	Wired controller sub-PCB harness		DB93-11405A
	External contract control interface module (requires sub-PCB and sub-PCB harness)		MIM-B14
	Wall bracket (for outdoor unit)		CKN-250
	Line sets - insulated and flared, interconnect cables included		25' - ILS2509
			50' - ILS5009
	Wind Baffle / Guard	Front	WBMF-24/36
Back		WBMB-24	
Safety	Certifications	ETL & ETLc	
	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 for control and monitoring with the Samsung Smart Home app (Android, iOS)
- Outdoor unit shall provide 208/230V power to indoor unit via 14 AWG X 3 interconnect power cable
- Electro-static, washable, main filter as standard accessible from the front/top of unit
- Advanced air filtration

Construction

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

Heat Exchanger

- The indoor unit heat exchanger shall be mechanically bonded fin to copper tube
- The outdoor unit heat exchanger shall be aluminum, flat fin, micro channel

Refrigerant System

- The compressor shall be hermetically sealed, inverter controlled, BLDC Rotary
- Refrigerant flow shall be controlled by electronic expansion valve at 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 louver (up/down)

Controls

- The system shall have a built in Wi-Fi adapter as standard to allow control remotely (details on page 4)
- Control signal shall be DDC type signal
- Interconnect control wiring shall be 16 AWG X 2 shielded wire between outdoor and indoor units
- The indoor unit shall ship with a wireless controller and batteries as standard
- Optional wired control options available

Convenience

- Auto restart
- 7-segment digital display on front of unit to display temperature and unit status (hidden behind louver when off)
- "Fast Comfort" mode to quickly reach set temperature
- Auto changeover
- 24 hour, single event timer
- Good'sleep mode
- Quiet mode
- Dry mode
- Single event, ON/OFF timer
- Single User Mode to reduce energy consumption during low demand operation
- Air filter cleaning can be done easily without opening the indoor unit
- Smart install mode - startup system diagnostics operation to ensure system readiness during initial operation
- Display ON/OFF and beep ON/OFF with included wireless controller

IMPORTANT

This product has been designed and manufactured to meet ENERGY STAR criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow the manufacturers refrigerant charging and air flow instructions. Failure to confirm proper charge and airflow may reduce energy efficiency and shorten equipment life.

Quietside maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.



\* Nominal cooling capacities are based on: Indoor temperature: 80 °F DB, 67°F WB. Outdoor temperature: 95 °F DB, 70 °F WB. Outdoor temperature: 70 °F DB, 60°F WB. Outdoor temperature: 47 °F DB, 60°F WB.

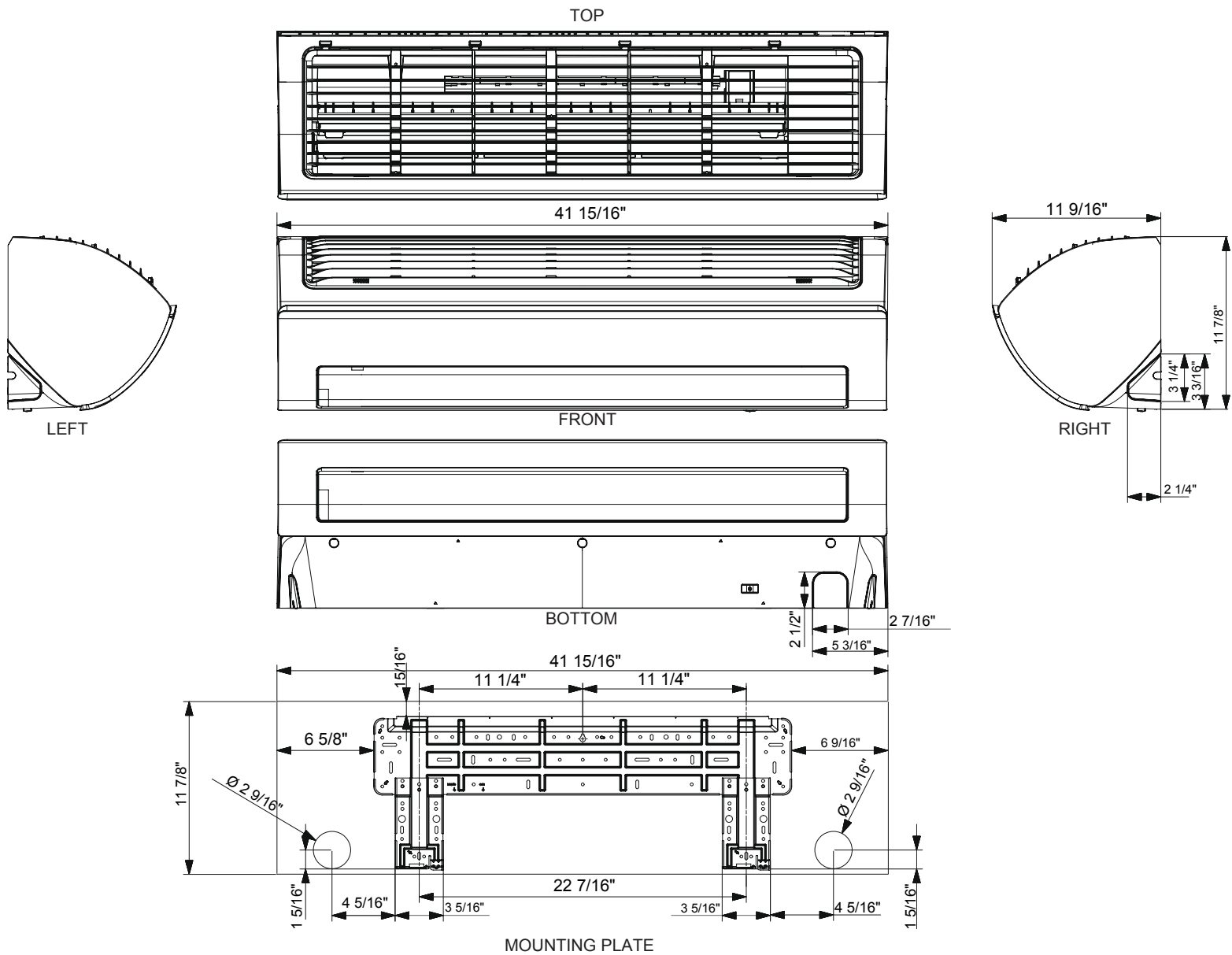
<sup>1</sup> When heating below 5°F, a field provided base pan heater may be required to prevent ice formation in bottom of unit (120W recommended).

<sup>2</sup> AR-WRS includes MWR-WH00 wired controller, sub-PCB (DB93-11412A), and sub-PCB harness (DB93-11405A)

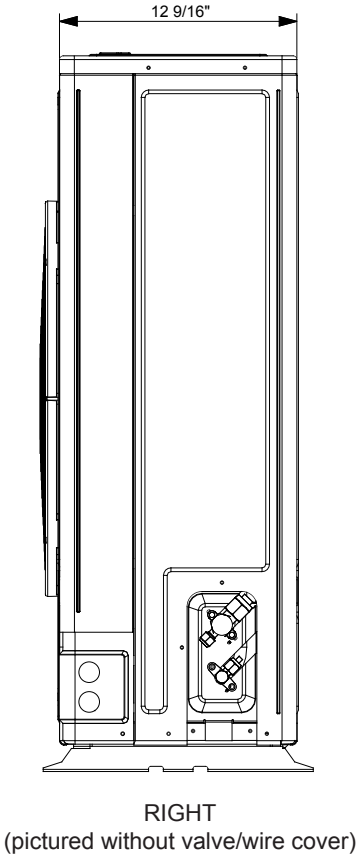
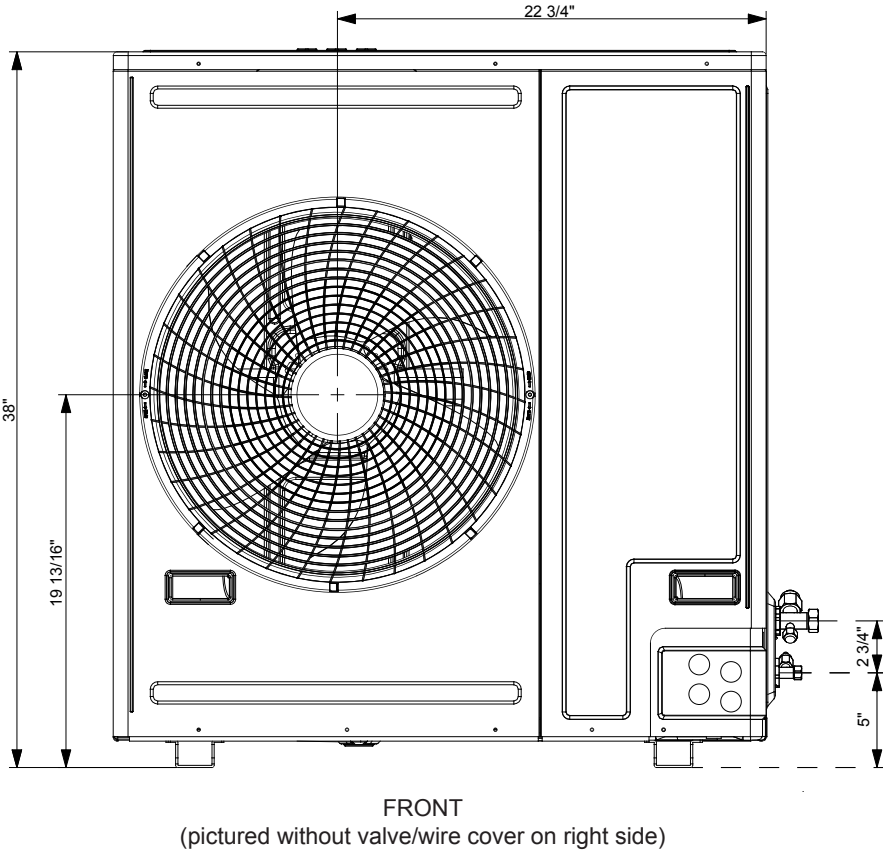
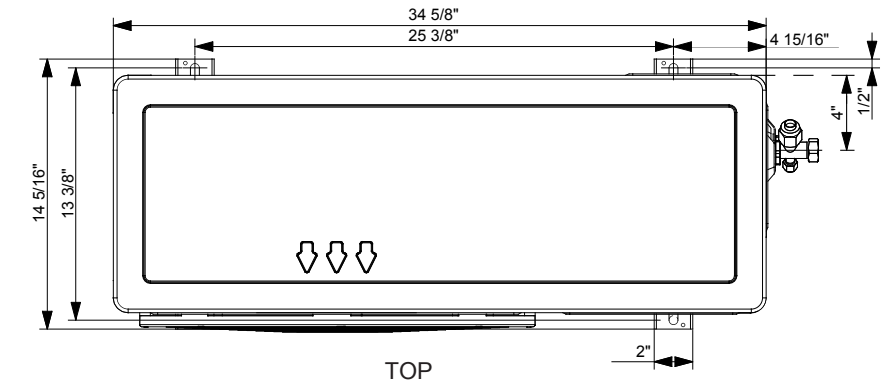
<sup>3</sup> AR-WRP includes MWR-WE10 wired controller, sub-PCB (DB93-11412A), and sub-PCB harness (DB93-11405A)

Samsung "Smart Whisper", wall mounted evaporator, split system  
Indoor unit dimensional drawing

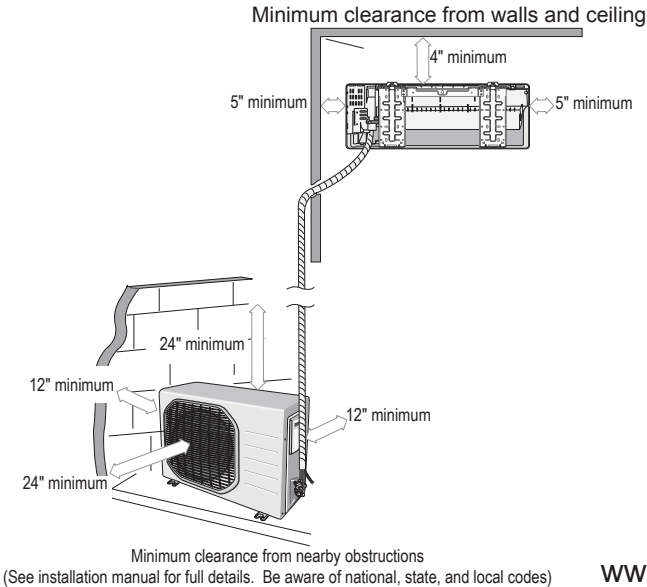
Unit: inches



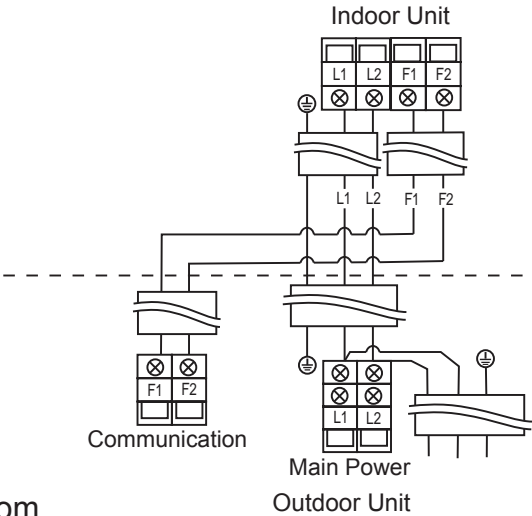
Unit: inches



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



Basic power and communication wiring between indoor and outdoor units



General Wi-Fi Control Information

• Allows control of system on a local network via Wi-Fi or through the internet when outside of home/office with Samsung's "Smart Home" app (available in Android and Apple app stores).

Wi-Fi Control Features

• Basic control and monitoring of: power, mode, set temperature, room temperature, fan speed, and louver swing.

• Timer ON and OFF feature allows scheduling of power ON and power OFF events on specific days at specific times.

• "My Wind" functions allows the user to save common air conditioner control configurations for quick and easy system operation (mode, set temperature, fan speed, and louver swing).

• Air filter reminder option will display hours of fan operation since last filter reminder reset.

• Optional filter reminder with four reminder intervals (180, 300, 500, and 700 hours of fan operation).

• Error notification

• System energy consumption history and adjustable threshold notification viewable with mobile app

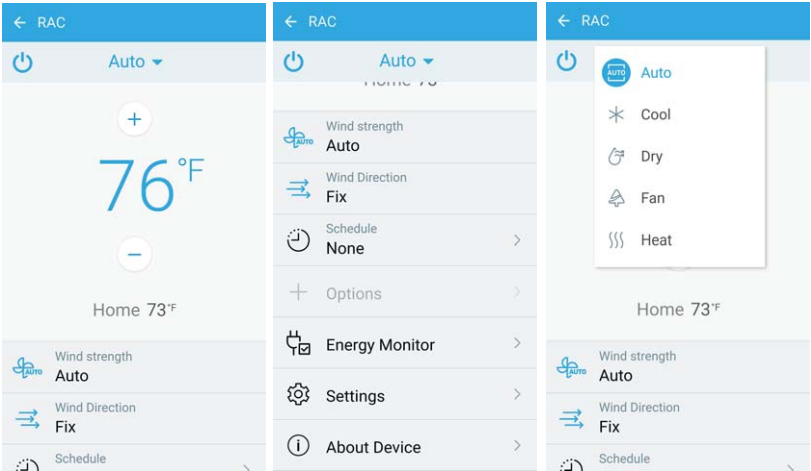


Wi-Fi Control Specifications

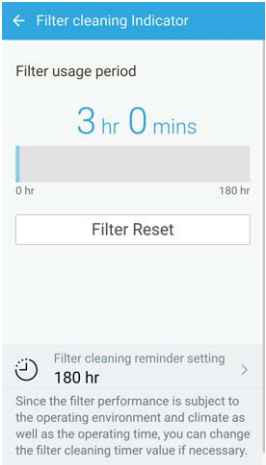
• Samsung's "Smart Home" app can monitor and control an unlimited quantity indoor units.

• A network with Wi-Fi connectivity is required to use the Wi-Fi adapter. Wi-Fi-direct control is not possible.

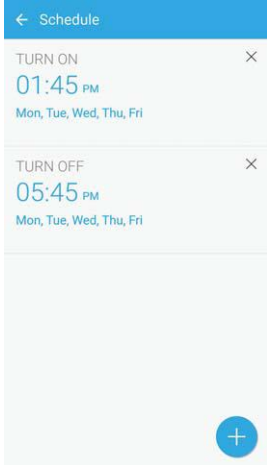
Samsung "Smart Home" App Examples



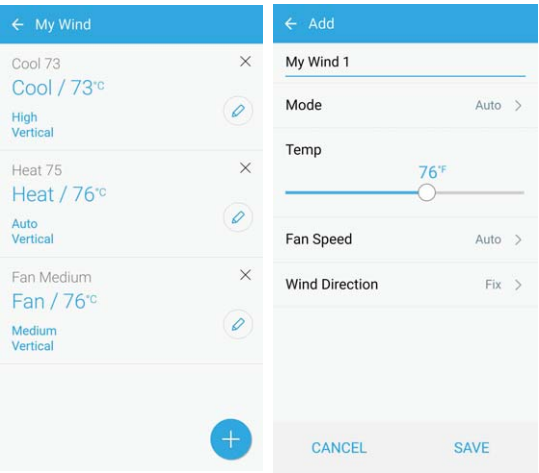
Main control page



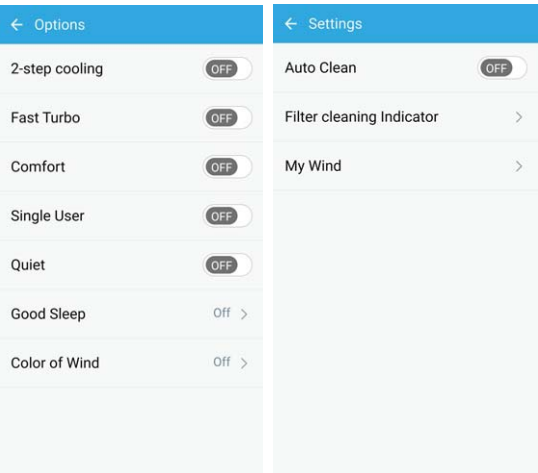
Filter reminder setting page



Timer setting page example



"My Wind" settings page



Options and settings pages



Energy usage page