Fi Whisper", wall mounted evaporator, split system

Approval

Job Name			Location	
Purchaser			Engineer	
Submitted to			Reference	
Unit Designation	n		Schedule	
	10	Specifications		
Model	System Model Nun Indoor Unit Model		AR18HSFSJWK AR18HSFSJWKN	
	Outdoor Unit Mode		AR18HSFSJWKX	
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,600	
	Capacity Range	Cooling (Btu/h)	5,459 - 23,884	
	SEER / EER	Heating (Btu/h)	4,094 - 27,296 20.5 / 13.2	
	COP		3.84	
	HSPF		9.0	
	Condensate (pints/	/hour)	4.4	
Power	Voltage	ø / V / Hz	1 / 208-230 / 60	
	Working Voltage R Operating Current		176 - 254 (max. 3% deviation from each) 1.8 / 6.2 / 9.7	
	(Low/Std./High)	Heating (A)	1.5 / 7.3 / 10.5	
	Maximum Current		14.0 / 17.5	
	Max. Breaker	Amps	20	
	Min. Circuit Ampac		17.7	
Dimensions	WXHXD	Indoor Unit	41 7/8 X 11 9/16 X 12 1/2	
	(inches)	Outdoor Unit Indoor Unit	34 5/8 X 31 9/32 X 12 3/16 31	
	Weight (lbs.)	Outdoor Unit	117	
	Condensate Conne		11/16" OD	
	Indoor & Outdoor	Туре	Aluminum Fin - Copper Tube	
	Unit	FPI	18	
eat Exchanger		Pipe Diameter	1/4"	
Cound Dragours Lovel	Indoor Unit	Main and Sub coils Upper Coil	2 row / 14 step 1 row / 10 step	
	Outdoor Unit	opper con	2 row / 24 step	
	Indoor Unit (dB)	Quiet / High	25 / 41	
ound Pressure Level	Outdoor Unit (dB)	High	51	
Operating Temperatures (°F) Pipe Connections	Outdoor	Cooling	Standard: 14 ≤ T ≤ 115	
			0 ≤ T ≤ 115 with wind baffle accessory	
		Heating	5 ≤ T ≤ 75 61 ≤ T ≤ 90	
	Indoor	Cooling Heating	T ≤ 80	
	<del></del>	High side (flare)	1/4"	
	Indoor & Outdoor	Low side (flare)	1/2"	
	Maximum / Minimu	ım Line Set Length (ft.)	98 / 10	
	Maximum Vertical Separation (ft.)		50	
Refrigerant	Туре		R410A	
	Control Method		Electronic Expansion Valve 70.5	
	Factory Charge Charged for	OZ.	25'	
	Additional Refriger	ant	0.16 oz./ft. over 25 ft.	
	Manufacturer		Samsung	
	Type		DC, Inverter Driven, Rotary	
	1 9 0 0	Δ.	8.3	
ompressor	RLA	Α	45 ( 47 ( 70	
ompressor	RLA Operating	Cooling (low/std./high)	15 / 47 / 73 15 / 54 / 72	
ompressor	RLA Operating Frequency (Hz)		15 / 54 / 72	
	RLA Operating Frequency (Hz) Type	Cooling (low/std./high) Heating (low/std./high)		
	RLA Operating Frequency (Hz)	Cooling (low/std./high)	15 / 54 / 72  BLDC motor with cross-flow fan (1)	
	RLA Operating Frequency (Hz) Type Air Volume	Cooling (low/std./high) Heating (low/std./high)  CFM (L / M / H)	15 / 54 / 72 BLDC motor with cross-flow fan (1) 350 / 460 / 640	
· 	RLA Operating Frequency (Hz)  Type Air Volume Consumption	Cooling (low/std./high) Heating (low/std./high)  CFM (L / M / H) Watts	15 / 54 / 72  BLDC motor with cross-flow fan (1)  350 / 460 / 640  27	
vaporator Fan	RLA Operating Frequency (Hz)  Type Air Volume Consumption Operating Current Motor Output	Cooling (low/std./high) Heating (low/std./high)  CFM (L / M / H) Watts Amps  Watts	15 / 54 / 72  BLDC motor with cross-flow fan (1)  350 / 460 / 640  27  0.12  BLDC motor with axial fan (1)  97.5	
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vaporator Fan	RLA Operating Frequency (Hz)  Type Air Volume Consumption Operating Current Motor Output FLA  Condensate pump	Cooling (low/std./high) Heating (low/std./high)  CFM (L / M / H) Watts Amps  Watts Amps	15 / 54 / 72  BLDC motor with cross-flow fan (1)  350 / 460 / 640  27  0.12  BLDC motor with axial fan (1)  97.5  0.37  ASP-MO-UNIV 110-250  AR-WRS (includes sub-PCB and	
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Evaporator Fan  Condenser Fan  Optional Accessories	RLA Operating Frequency (Hz)  Type Air Volume Consumption Operating Current Motor Output FLA  Condensate pump Wired Controller	Cooling (low/std./high) Heating (low/std./high)  CFM (L / M / H) Watts Amps  Watts Amps	15 / 54 / 72  BLDC motor with cross-flow fan (1)  350 / 460 / 640  27  0.12  BLDC motor with axial fan (1)  97.5  0.37  ASP-MO-UNIV 110-250  AR-WRS (includes sub-PCB and MWR-WH00 controller)	



Construction

(actual equipment appearance may vary)

### **General Information**

- Outdoor unit shall provide 208/230V power to indoor unit via 14 AWG X 3 interconnect power cable (seperate communication wire required)
- · Electro-static, washable, main filter as standard accessible from the front/top of unit

### Construction

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

#### Heat Exchanger

• The heat exchanger shall be mechanically bonded fin to copper tube

### Refrigerant System

- The compressor shall be hermetically sealed, inverter controlled, Twin 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 (up/down) louver

## **General Control**

- · Control signal shall be DDC type signal
- Unit shall have a built-in Wi-Fi adapter as standard to allow control with mobile devices (details on page 4)
- 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 available

### Convenience

- Auto restart
- Digital display on the front of indoor unit (hidden behind louver when off) to display temperature and service codes
- "Fast Comfort" mode to quickly reach set temperature
- · Auto changeover
- 24 hour, single event timer
- · Good'sleep mode
- Quiet mode
- · Drv 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
   Filter cleaning reminder indicator
- · Display ON/OFF and beep ON/OFF with wireless controller
- Smart install mode startup system diagnostics operation to ensure system readiness during initial operation

logic, compressor overload sensing 10 Years compressor, 10 Year Parts, 1 Year Limited Labor (registration required)

Line sets - insulated and flared, interconnect

Front

Back

Wall bracket (for outdoor unit)

cables included

Wind Baffle

Certifications

Guard

Devices

Safety

www.SamsungHVAC.com

25' - ILS2507

50' - ILS5007

WBMF-9/12/18

PCB fuses, indoor unit terminal block thermal fuse, current transformer,

over-voltage protection, crankcase heating, temperature limit protection

WBMB-9/12/18/36

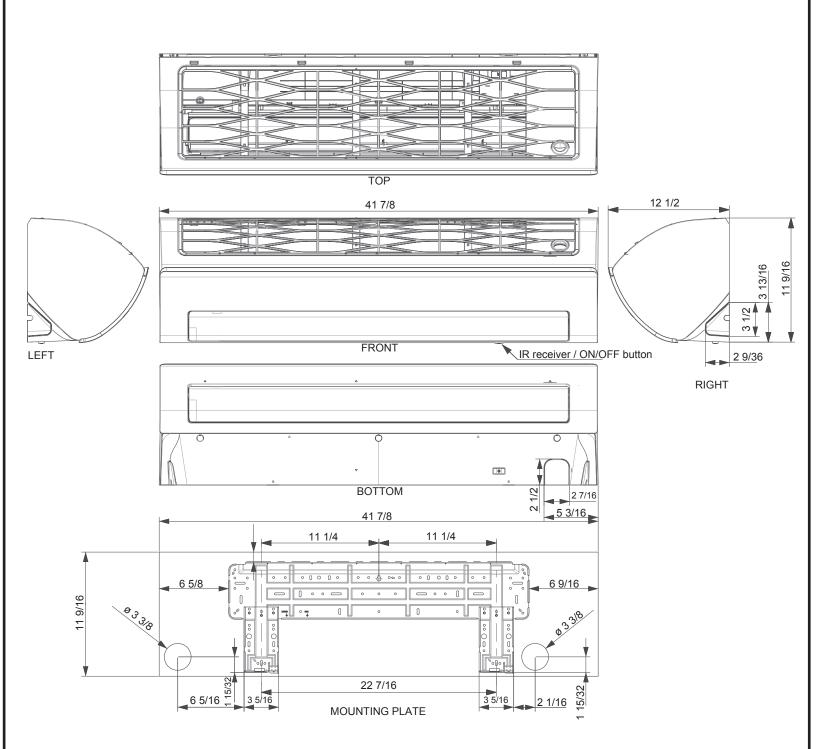
CKN-250 or CKN-500

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

<sup>\*</sup> Nominal cooling capacities are based on: Indoor temperature: 80°F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB.
\* Nominal heating capacities are based on: Indoor temperature: 70°F DB, 60°F WB. Outdoor temperature: 47°F DB, 43°F WB.

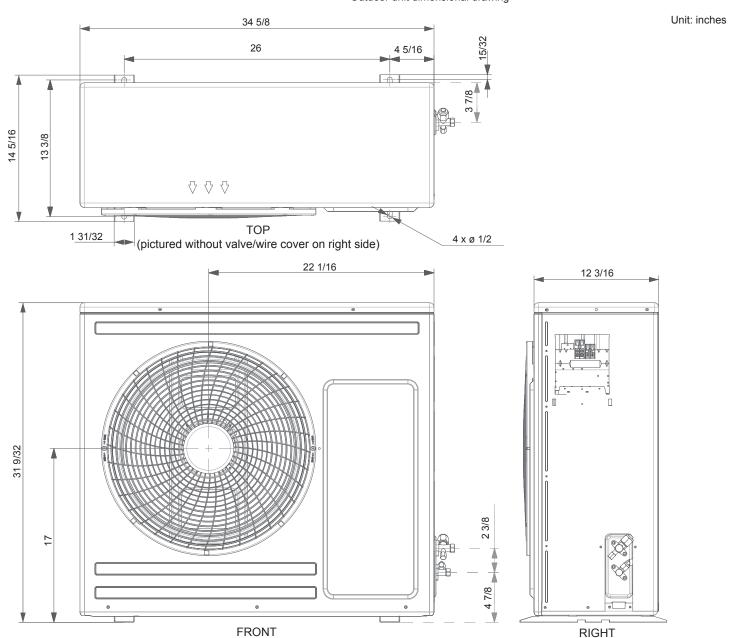
Samsung "Wi-Fi Whisper", wall mounted evaporator, split system Indoor unit dimensional drawing

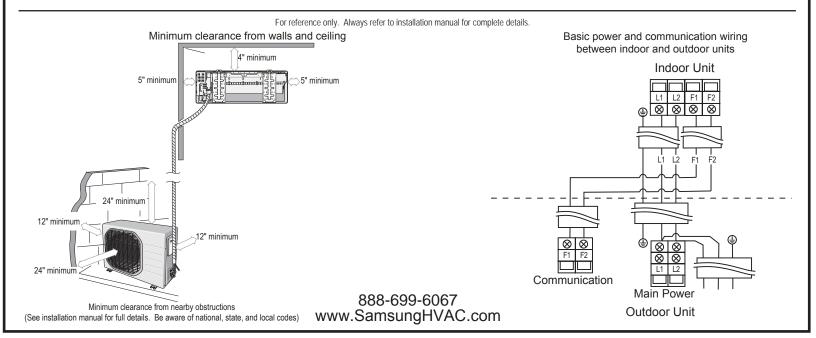
Unit: inches



Samsung "Wi-Fi Whisper", wall mounted evaporator, split system Outdoor unit dimensional drawing

(pictured without valve/wire cover)





(pictured without valve/wire cover on right side)

Samsung "Wi-Fi Whisper", wall mounted evaporator, split system Wi-Fi Control Details

General Wi-Fi Control Information

• Allows control of system on a local network via Wi-Fi or

• Allows control of system on a local network via Wi-Fi or through the internet when outside of home/office with Samsung's "Smart Air Conditioner" 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 Air Conditioner" 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.
- Users must register each indoor unit at http://www.samsungsmartappliance.com to setup control.
- Use is based on acceptance of Samsung's Smart Appliance terms and conditions when creating user profile and registering

# Samsung "Smart Air Conditioner" App Examples



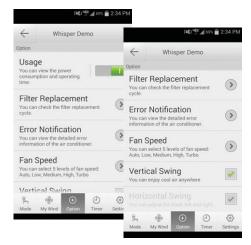
Main control page



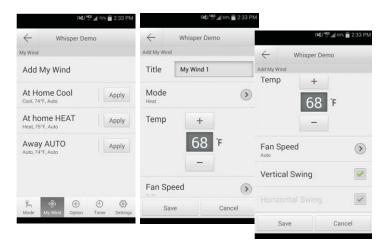
Energy usage page



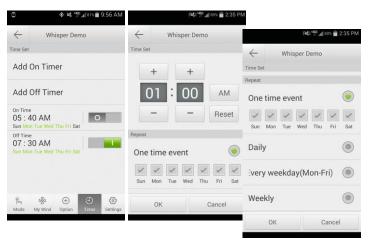
Filter reminder setting page



Options page



"My Wind" settings page



Timer setting page example