

Samsung WindFree™ 4-Way Cassette, Single Zone, Split System

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

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

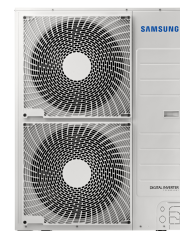
Specifications

Model	Indoor Unit Model Number (US Code)		AC042BN4DCH/AA (CNH424DB)
	Outdoor Unit Model Number (US Code)		AC042BXADCH/AA (CXH42ADB)
Performance	Nominal Capacity ¹	Cooling / Heating (Btu/h)	42,000 / 47,000
	Capacity Range	Cooling (Btu/h)	11,500 - 47,000
		Heating (Btu/h)	12,500 - 58,000
	SEER / EER		18.5 / 10.0
	COP (nominal heating)		3.60
	HSPF		10.2
AHRI Certification Number		207462391	
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254 (max. 3% deviation from each)
	Operating Current (min. / std. / max.)	Cooling (A)	4.8 / 18.6 / 25.2
		Heating (A)	3.6 / 17.0 / 31.1
	Max. Breaker	Amps	40
	Min. Circuit Ampacity (A)	29.5	
Dimensions	W X H X D (in.)	Indoor Unit	33 1/16 X 11 3/8 X 33 1/16
		Outdoor Unit	37 X 47 11/16 X 13
	Weight (lbs.)	Indoor Unit	45.6
		Outdoor Unit	191.8
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	34 / 40 / 44
	Outdoor Unit dB(A)	Cooling / Heating (high)	53 / 55
Operating Temperatures	Outdoor	Cooling	23 ~ 122°F (-5 ~ 50°C) 0 ~ 122°F (-18 ~ 50°C) W/Baffle
		Heating	-13 ~ 75°F (-25 ~ 24°C)
	Indoor	Cooling	61 ~ 90°F (16 ~ 32°C)
		Heating	T ≤ 80°F (27°C)
Pipe Connections	Indoor & Outdoor	High side (flare)	3/8
		Low side (flare)	5/8
	Maximum (ft.)		246
	Maximum Vertical Separation (ft.)		98.4
Condensate Connection		1 1/4" OD, 1" ID	
Refrigerant	Type		R410A
	Factory Charge	lbs.	7.50
	Charged for		25 ft
	Additional Refrigerant		0.11 oz./ft. over 24.6 ft
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	20.9
Evaporator Fan	Type		BLDC (1) With Turbo Type Fan (1)
	Air Volume	CFM (L/M/H)	671 / 911 / 1208
	Output	Watts	97 X 1
Condenser Fan	Motor		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		1.25 A / 125 W / 3,532 CFM
Fascia Panel	PC4NUFMUN	L X W X H (in.)	37 3/8 X 37 3/8 X 2 1/2
		Weight (lbs.)	13.9
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	

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.

* 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.



General Information

- 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 outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- High-voltage terminal block temperature sensor to disable unit in the event of power connection overheating
- Auto-restart after power loss
- Soft-start compressor minimizing current inrush
- All heat exchangers shall be mechanically bonded aluminum fin to copper tube
- The condensing unit heat exchanger salt spray test method: ASTM-B117-18 - The heat exchanger showed no unusual rust or corrosion development to 2,280 hours
- Integral condensate pump with maximum 29" lift from bottom of the unit with check valve and float switch to disable unit in the event of condensate overflow.
- Knock-out for outside air capability (with booster fan connection)

Option settings

- The outdoor unit shall have snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- Night-time Quiet Mode: reduction of operational sound during (*automatic or manual activation*)
- Emergency Temperature Output (ETO) function: when indoor unit is in error status or when room temperature exceeds configurable temperature level, the system outputs a signal to an external source, e.g., backup system, building management system, alert device (ex: status light, warning lamp, buzzer).
- System can be configured as heating/cooling, cooling only, or heating only via outdoor unit option setting
- Maximum Current Control configurable from 50% - 100% via outdoor unit, wired controller or central controls

Indoor Fan

- Indoor fan is a single turbo type
- Three fan speed settings and auto setting
- Washable filter as standard
- Fascia panel shall have LED display, infrared receiver, and motorized louver(s)
- The WindFree™ function will close the supply air outlet louver while in cooling mode to gently disperse cool air into the space without blowing directly onto occupants. The WindFree™ feature is optional and can be enabled using central or local control options.
- The WindFree™ indoor unit has an integral humidity sensor that will open the louver for standard cool mode when space conditions could potentially cause condensation formation on the chassis surface.

Construction

- Outdoor unit: Galvanized steel with a baked-on powder coated finish for durability
- Indoor unit: Insulated, HIPS chassis and fascia panel certified to UL94 V0

Controls

- Control wiring shall be 2 X 16 AWG
- Wired controllers must be purchased separately
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller or central control options.
- No additional interface modules/adapters are required when connecting to Samsung central control options.
- The unit shall be operated via a wireless or wired remote control with DDC type signal

Refrigerant System

- The compressor shall be hermetically sealed, inverter-controlled BLDC rotary type
- Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Warranty

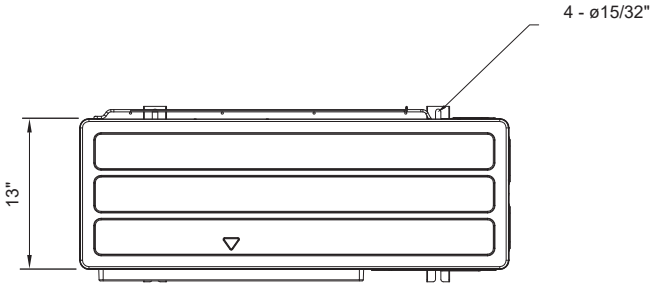
10 years compressor, 10 years parts, 1-year limited labor (conditions apply)

Required Accessories

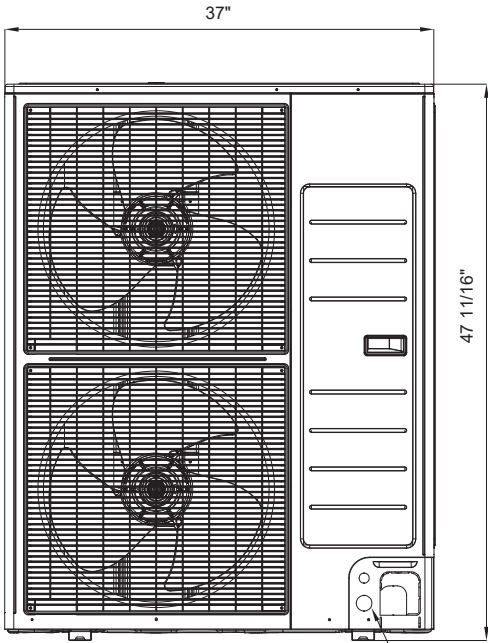
Fascia panel	WindFree™ Type	PC4NUFMUN
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Optional Accessories

Wired controller	Advanced	MWR-WG00UN
	Touchscreen	MWR-SH11UN
Thermostat adapter (24vac)		MIM-A60UN
Wireless controller		AR-EH04U
Wi-Fi adapter	Single indoor unit	MIM-H14UN
	1-16 indoor units	MIM-H04UN
Motion Detection Sensor		MCR-SMC
External temperature sensor		MRW-TA
External contact control		MIM-B14
Wall bracket (for outdoor unit)		CKN-250
Wind baffle	Front	WBF-1M2
	Back	WBB-2M-B
Hail guard		TBD
Line sets - insulated and flared, interconnect cables included		25' - ILS2510
		50' - ILS5010

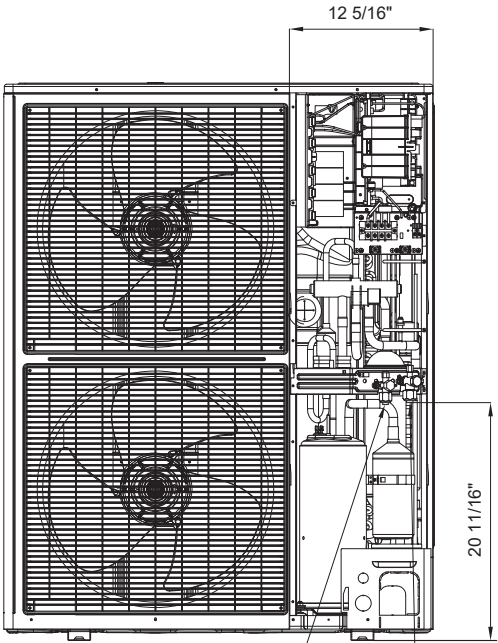


TOP



FRONT

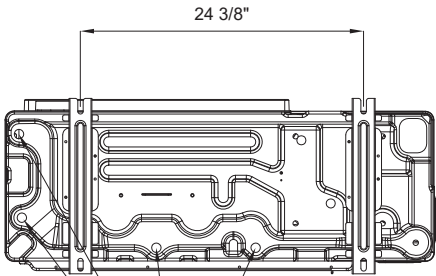
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FRONT WITHOUT SERVICE COVER

1

2



BOTTOM

3

No.	Name	Description
1	Refrigerant liquid pipe	Φ 3/8
2	Refrigerant gas pipe	Φ 5/8
3	Drain hole	Connect with provided drain plug
4	Power and communication conduit openings	--