

## Samsung WindFree™ Mini 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)	AC009BNNDCH/AA (CNH09NDB)	
	Outdoor Unit Model Number (US Code)	AC009BXADCH/AA (CXH09ADB)	
Performance	Nominal Capacity <sup>1</sup>	Cooling / Heating (Btu/h)	9,000 / 10,000
	Capacity Range	Cooling (Btu/h)	3,400 - 14,000
		Heating (Btu/h)	2,900 - 15,000
	SEER / EER		21.0/ 13.0
	COP (nominal heating)		4.3
	HSPF		11.7
	AHRI Certification Number		207462387
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254 (max. 3% deviation from each)
	Operating Current	Cooling (A)	1.3 / 3.3 / 6.5
		Heating (A)	1.1 / 3.2 / 7.9
	Max. Breaker	Amps	15
	Min. Circuit Ampacity (A)		9.1
Dimensions	W X H X D (in.)	Indoor Unit	22 5/8 X 9 13/16 X 22 5/8
		Outdoor Unit	31 1/8 X 21 9/16 X 11 1/4
	Weight (lbs.)	Indoor Unit	20.6
		Outdoor Unit	74.3
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	25 / 28 / 31
	Outdoor Unit dB(A)	Cooling / Heating (high)	46 / 47
Operating Temperatures	Outdoor	Cooling	23 ~ 122°F (-5 ~ 50°C)
		Heating	0 ~ 122°F (-18 ~ 50°C) W/Baffle
	Indoor	Cooling	-13 ~ 75°F (-25 ~ 24°C)
		Heating	61 ~ 90°F (16 ~ 32°C)
Pipe Connections	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	3/8"
	Maximum (ft.)		65.6
	Maximum Vertical Separation (ft.)		49.2
	Condensate Connection		1 1/4" OD, 1" ID
Refrigerant	Type		R410A
	Factory Charge	lbs.	2.6
	Charged for		25 ft
	Additional Refrigerant		0.11 oz./ft. over 24.6 ft
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, BLDC Rotary
	RLA	Amps	6.0
Evaporator Fan	Type		BLDC (1) With Turbo Type Fan (1)
	Air Volume	CFM (L/M/H)	212 / 247 / 283
	Output	Watts	65 X 1
Condenser Fan	Motor		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		0.42A / 40W / 1,059 CFM
Fascia Panel	PC4SUFMUN	L X W X H (in.)	24 7/16 X 24 7/16 X 1 13/16
		Weight (lbs.)	6.0
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

<sup>1</sup>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.

\* 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
- Base pan heater equipped as standard
- 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 500 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)

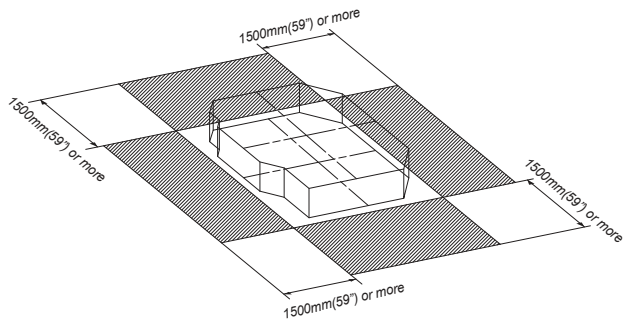
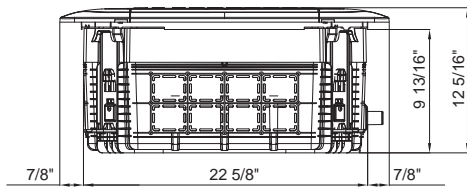
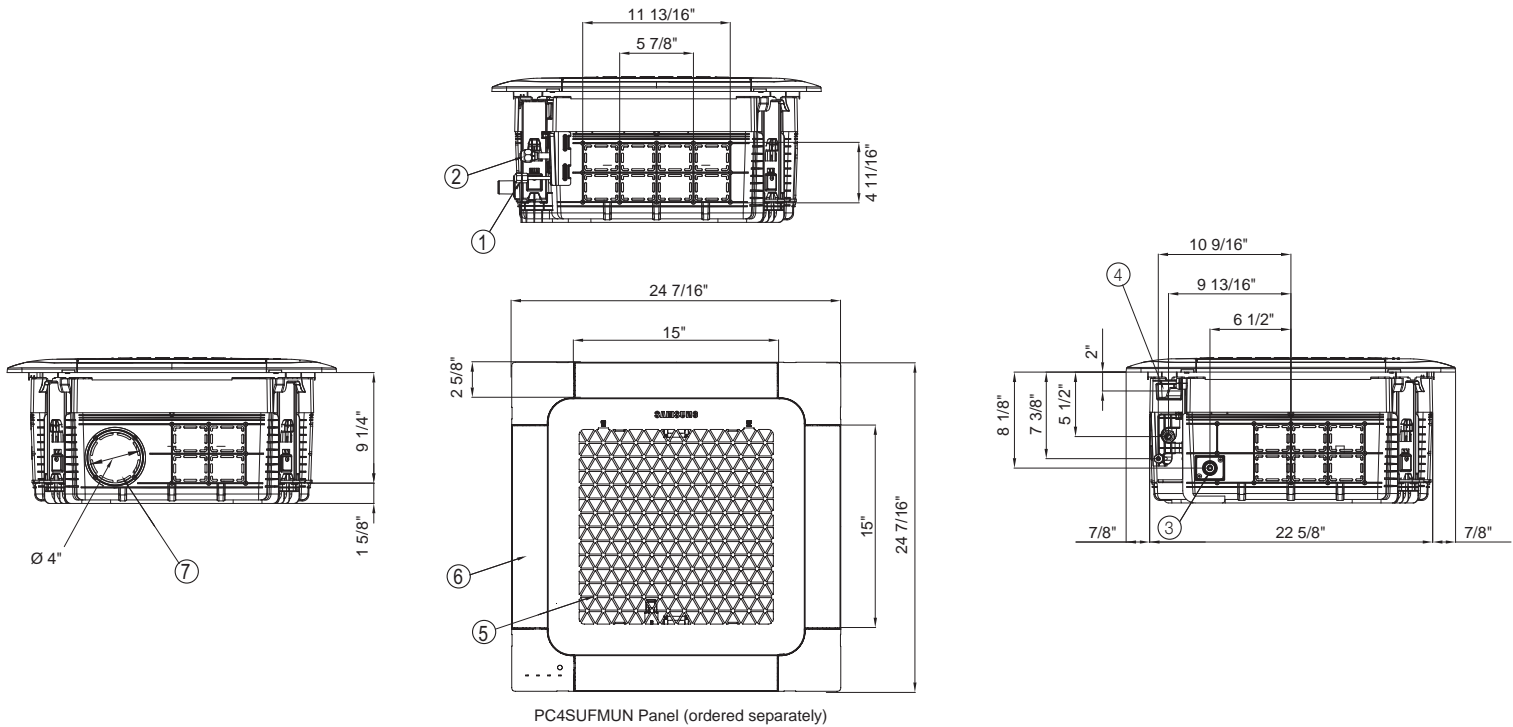
**Required Accessories**

Fascia panel	WindFree™ Type	PC4SUFMUN
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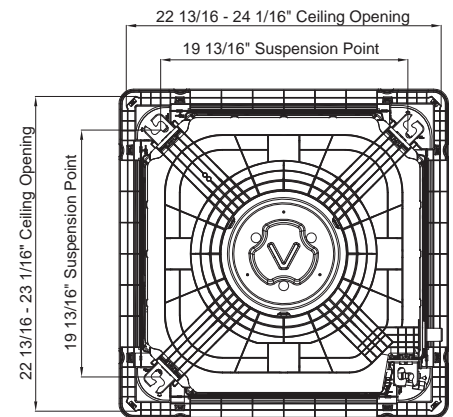
**Optional Accessories**

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-SMD
External temperature sensor		MRW-TA
External contact control		MIM-B14
Wall bracket (for outdoor unit)		CKN-250
Wind baffle	Front	WBF-3M
	Back	WBB-5M
Hail guard		TBD
Line sets - insulated and flared, interconnect cables included		25' - ILS2506
		50' - ILS5006

## Samsung WindFree™ Mini 4-Way Cassette, Single Zone, Split System AC009BNNDCH/AA Dimensional Drawing

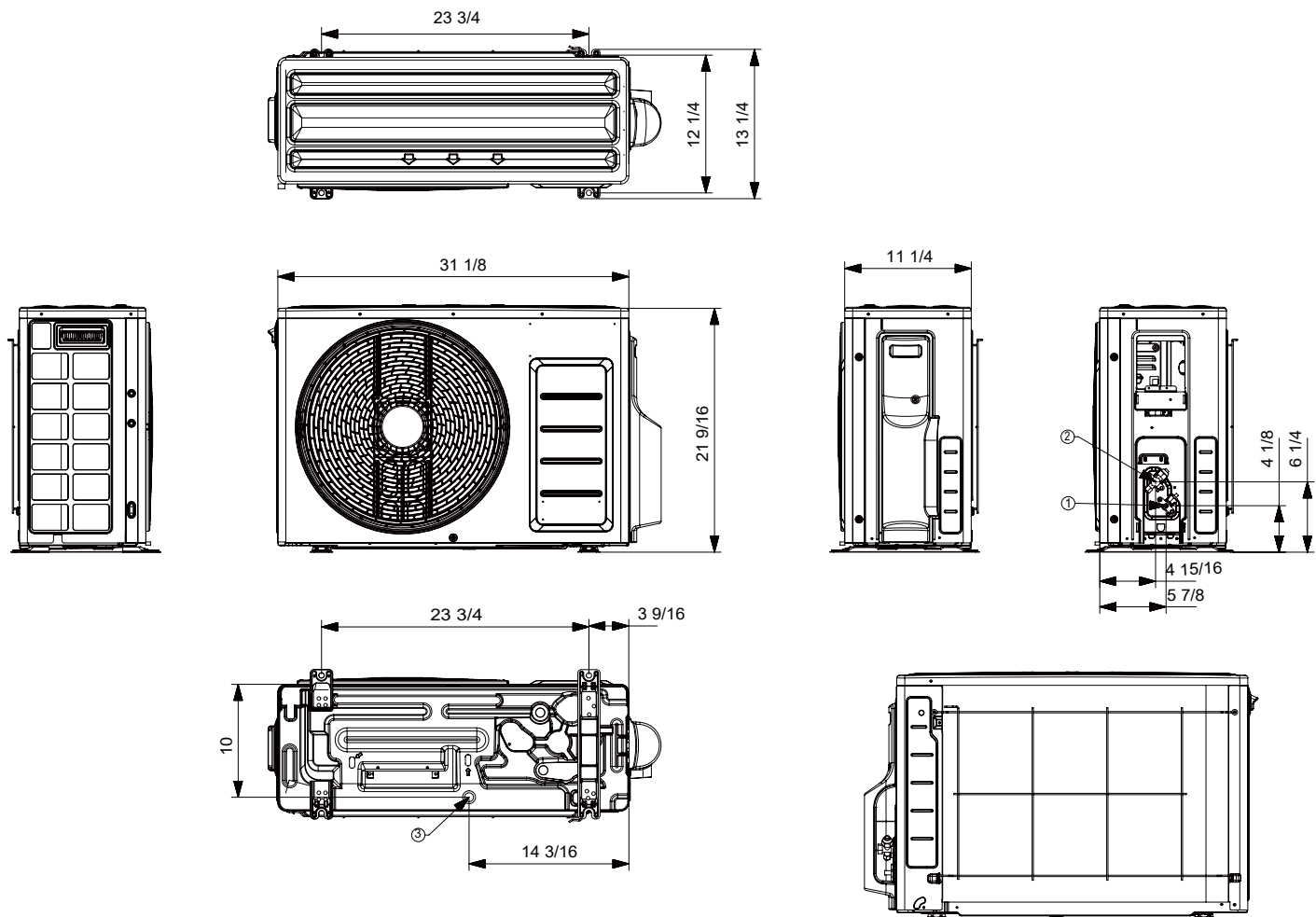


Proper clearance must be maintained around unit for proper operation.



No.	Name	Description
①	Liquid Pipe Connection	Ø 1/4" Flare
②	Gas Pipe Connection	Ø 3/8" Flare
③	Drain Pipe Connection	Quick Lock, OD 1 1/4", ID 1"
④	Conduit for Power & Communication Wiring	-
⑤	Air Inlet Grille	-
⑥	Air Outlet Louver	-
⑦	Fresh Air Intake	Ø 4 "

Samsung WindFree™ Mini 4-Way Cassette, Single Zone, Split System  
AC009BXADCH/AA Dimensional Drawing



No.	Name	Description
1	Refrigerant liquid pipe	Ø 1/4
2	Refrigerant gas pipe	Ø 3/8
3	Drain hole	Connect with provided drain plug