Samsung Wind-Free™ 4-Way Cassette, Single Zone, Split System

ob Name	Location			
Purchaser	Engineer			
Submitted to	Reference	Approval	Construction	
Init Designation	Schedule #			

		Specifications	
Model	Indoor Unit Model N		AC024NN4DCH/AA (CNH244DN)
iviodei	Outdoor Unit Model	Number (US Code)	AC024JXADCH/AA (CXH24ADJ)
	Nominal Capacity	Cooling / Heating (Btu/h)	24,000 / 27,000
	Canacity Banga	Cooling (Btu/h)	7,000 - 27,000
	Capacity Range	Heating (Btu/h)	5,200 - 31,000
Performance	SEER / EER		20.50 / 11.40
	COP (nominal heati	ng)	3.16
	HSPF		9.70
	AHRI Certification Number		202087966
	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Ra	inge (VAC)	176 - 254 (max. 3% deviation from each)
Power	Operating Current		2.8 / 9.8 / 12.0
- Owei	,	Heating (A)	2.5 / 11.6 / 14.5
	Max. Breaker	Amps	20
	Min. Circuit Ampacit	ty (A)	12.06
	WXHXD	Indoor Unit	33 1/16 X 8 X 33 1/16
Dimonoloss	(in.)	Outdoor Unit	37 X 39 11/16 X 12 3/4
Dimensions	Weight	Indoor Unit	33.07
	(lbs.)	Outdoor Unit	142.2
		Туре	Aluminum Fin / Copper Tube
	Indoor Unit	FPI	18
Heat Exchanger		Pipe Diameter (in.)	1/4
	Outdoor Unit	Type	Aluminum, flat fin, micro channe
Sound Pressure	Indoor Unit dB(A)	L/M/H	
Level	Outdoor Unit dB(A)	Cooling / Heating (high)	30 / 33 / 36
_evei	Odladdi Offit dB(A)	Cooling / Heating (high)	50 / 50
o "	Outdoor	Cooling	23 ~ 115°F(-5 ~ 46°C)
Operating			0 ~ 115°F(-18 ~ 46°C) w/ baffle
Temperatures		Heating	-4 ~ 76°F(-20 ~ 24°C)
°F(°C)		Cooling	61 ~ 90°F(16 ~ 32°C)
		Heating	T ≤ 80°F(27°C)
	Indoor & Outdoor	High side (flare)	1/4"
		Low side (flare)	5/8"
Pipe Connections	. ,		164
	Maximum Vertical S		98
	Condensate Connection		1 1/4" OD, 1" ID
	Туре		R410A
	Control Method		Electronic Expansion Valve
Refrigerant	Factory Charge	OZ.	74.08
	Charged for		25 ft
	Additional Refrigerant		0.11 oz/ft over 25 ft
	Manufacturer		Samsung
Compressor	Туре		Inverter Driven, Twin BLDC, Rotary
	RLA	A	9.0
	Туре		BLDC With Turbo Type Fan (1)
Tuenerator Fon	Air Volume	CFM (L/M/H)	430 / 490 / 580
Evaporator Fan	Output	Watts	65
	Operating Current	Amps	0.33
	Motor		BLDC With Axial Type Fan (1)
Condenser Fan	FLA / Watts / CFM (max.)		0.48 A / 125 W / 2,190 CFM
Facilia Danala	,	,	
	Model Number	PC4NUFMUN (Wind-Free™)	PC4NUSKUN (standard)
Fascia Panels	L X W X H (in.)	37 3/8 X 37 3/8 X 2 1/2	37 3/8 X 37 3/8 X 1.75
	Weight (lbs.)	13.89	12.79
	Certifications		L (UL 1995)
Safety	Dovinos	PCB fuses, indoor unit terminal block thermal fuse, current transformer,	
	Devices over-voltage protection, crankcase heating, temperature limit protection, compressor overload sensing		

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 Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ 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. Refer to www.AHRIdirectory.org for current reference numbers.

Warranty

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





- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- Auto-restart after power loss
- The outdoor unit shall have a snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- The indoor unit shall have a removable EEPROM that stores system programming information, unit name, and other data
- Electro-static, washable, pleated filter as standard (included with fascia panel).
- Knock-out for outside air capability (with booster fan connection)
- Fascia panel shall have LED indicator lights, IR receiver, and 4 motorized louvers (independent louver control is possible with wireless or premium wired controller).
- The outdoor unit shall have a night time quiet mode option to reduce operating sound during the night.
- Built in condensate pump with maximum 29" lift from the bottom of the unit, check valve, and float switch that disables indoor unit during overflow detection
- Wind-Free™ 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 Wind-Free™ feature is optional and can be enabled using central or local control options (MWR-SH11UN, MWR-WG00UN, AR-EH03U only).
- The Wind-Free™ panel (PC4NUFMUN) has an integral humidity sensor that will open the louvers for standard cool mode when space conditions could potentially cause condensation formation on the panel surface.
- The Wind-Free™ 4-way cassette can be configured for 2-stage operation, cooling the space with the louver open (fixed or swing) until the room temperature nears set temperature. Once room temperature is near set temperature, Wind-Free™ operation will start automatically, closing the louver and using the face of the fascia panel to gently cool the space with still air*.

Construction

The outdoor unit shall be galvanized steel with a baked on powder coated finish for durability

The indoor unit shall be have a galvanized steel frame with HIPS chassis and fascia panel certified to UL94 V0.

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

Controls

Control signal shall be a DDC type signal

Interconnect control wire between outdoor and indoor unit shall be 16 AWG X 2 shielded

Wired or wireless controls must be purchased separately

The system shall integrate with the Samsung NASA Controls Solution

Refrigerant System

The refrigerant shall be R410A

The compressor shall be hermetically sealed, inverter controlled, twin BLDC Rotary

Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Soft-start to reduce current demand during compressor start



Wind-Free™ 4-Way Cassette, Single Zone, Split System AC024NN4DCH/AA Accessories and Dimensional Drawing

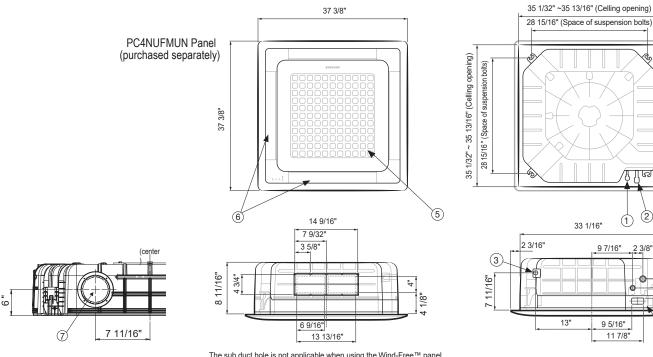
Required Accessories

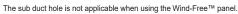
Fascia Panel	Wind-Free™	PC4NUFMUN
	Standard	PC4NUSKUN

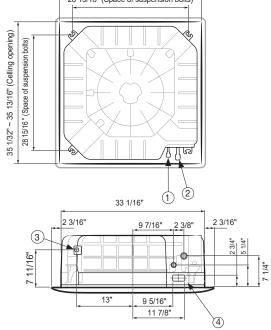
^{*}A fascia panel is required for cassette unit operation and is sold separately. PC4NUFMUN is required to use the Wind-Free™ functions.

Optional Accessories

Wired Controller	Simplified Touch Controller	MWR-SH11UN	
	Advanced Wired Controller	MWR-WG00UN	
Wi-Fi Adapter		MIM-H04UN	
External Temperature Sensor		MRW-TA	
Wireless Controller		AR-EH03U	
External Contact Control		MIM-B14	
Wall Bracket (for outdoor unit)		CKN-250	
Wind Baffles	Front	WBF-2M-B	
	Back	WBB-3M	
Line Sets - insulated and flared, interconnect cables included		25' - ILS-2509	
		50' - ILS-5009	
Thermostat Adaptor (for connection to a standard 24VAC thermostat)		MIM-A60UN	
Motion Detection Sensor		MCR-SMC	







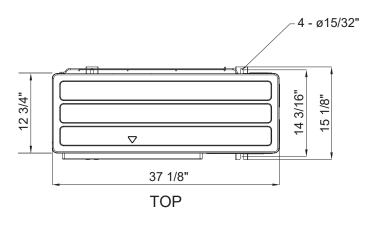
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59" Minimum

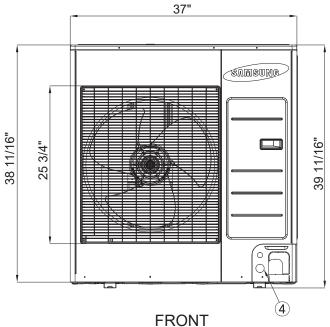
No.	Name	Description
1	Liquid Pipe Connection	Ø 1/4" Flare
2	Gas Pipe Connection	Ø 5/8" Flare
3	Drain Pipe Connection	OD 1 1/4", ID 1"
4	Conduit for Power & Communication Wiring	-
5	Air Inlet Grille	-
6	Air Outlet Louver	-
7	Fresh Air Inlet	Ø 4"

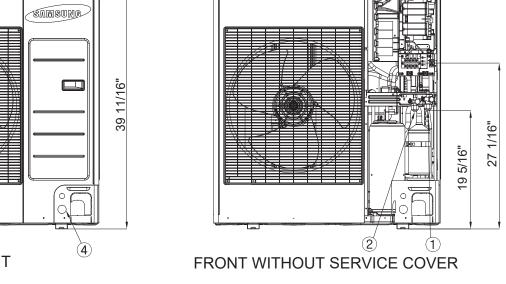
Proper clearance must be maintained around unit for proper operation.

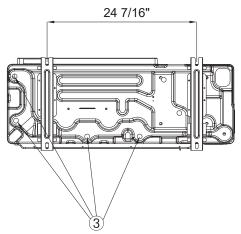
Wind-Free™ 4-Way Cassette, Single Zone, Split System AC024JXADCH/AA Dimensional Drawing

11 9/32"









No.	Description	
1	Liquid service valve	
2	Suction service valve	
3	Power and communication conduit openings	

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