

Job Name \_\_\_\_\_

Purchaser \_\_\_\_\_

Submitted to \_\_\_\_\_

Unit Designation \_\_\_\_\_

Location \_\_\_\_\_

Engineer \_\_\_\_\_

Reference \_\_\_\_\_ Approval \_\_\_\_\_ Construction \_\_\_\_\_

Schedule # \_\_\_\_\_

Specifications

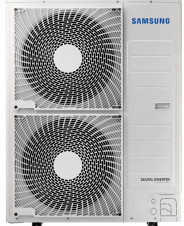
Model	Indoor Unit Model Number (US Code)		AC048BN6DCH/AA (CNH486DB)
	Outdoor Unit Model Number (US Code)		AC048BXADCH/AA (CXH48ADB)
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	48,000 / 54,000
	Capacity Range	Cooling (Btu/h)	12,000 - 52,000
		Heating (Btu/h)	13,000 - 60,000
	AHRI 210-240 2017 <sup>1</sup>	SEER	17.2
		EER	8.3
		HSPF	9.60
	AHRI 210-240 2023 <sup>2</sup>	SEER2	17.8
		EER2	8.3
		HSPF2	8.7
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		187 - 253
	Operating Current (min. / std. / max.)	Cooling (A)	4.9 / 25.6 / 28.8
		Heating (A)	3.6 / 24.7 / 32.0
	Max. Breaker	Amps	40
	Min. Circuit Ampacity (A)		32.8
Dimensions	W X H X D (in.)	Indoor Unit	37 1/4 X 14 3/8 X 37 1/4
		Outdoor Unit	37 X 47 11/16 X 13
	Weight (lbs.)	Indoor Unit	55.6
		Outdoor Unit	195.1
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	35 / 40 / 45
	Outdoor Unit dB(A)	Cooling / Heating (high)	56 / 58
Operating Temperatures	Outdoor	Cooling	23 ~ 122°F (-5 ~ 50°C)
		Heating	0 ~ 122°F (-18 ~ 50°C) W/Baffle
	Indoor	Heating	-4 ~ 75°F (-20 ~ 24°C)
		Cooling	61 ~ 90°F (16 ~ 32°C)
		Heating	T ≤ 86°F (30°C)
Pipe Connections	Indoor & Outdoor	High side	3/8"
		Low side	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.	7.5
	Charged for		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)	823 / 1,024 / 1,257
	Output	Watts	97
Condenser Fan	Motor		BLDC With Axial Type Fan (2)
	FLA / Watts / CFM (max.)		1.25A X 2 / 125W X 2 / 3,532 CFM
Fascia Panel	Ceiling Type (Square)	L X W X H (in.)	39 3/8 X 39 3/8 X 2 5/8
		Weight (lbs.)	7.94
	Open Type (Round)	Diameter X H (in.)	41 15/16 X 2 5/8
		Weight (lbs.)	5.95
Safety	Certifications	UL 60335-2-40	
	Devices	PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing	



Shown with PC4NUNMUN (open type panel)



Shown with PC4NUDMUN (ceiling type panel)



General Information

- 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: ISO-9227 - The heat exchanger showed no unusual rust or corrosion development to 3,000 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.

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 evening hours (*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
- Knock-out for outside air capability (with booster fan connection)
- Fascia panel shall have LED indicator lights and an infrared receiver
- The indoor unit shall not have air louvers or blades allowing full airflow without restriction.
- Air direction control shall be achieved by creating a low pressure area near air outlet causing discharge air to change direction angle.
- Fixed or auto-swing air direction shall be possible with wireless, touch, or premium wired controller (10° ~ 60° angle)
- Independent air distribution control shall be possible with wireless or premium wired controller (three directions, 10° ~ 60° angle)

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
- Wireless controller included as standard.
- 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)

This publication reflects both the 1987 Appendix M metric (SEER) and the 2023 Appendix M1 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to [www.AHRInet.org](http://www.AHRInet.org) for more information about updated energy metrics.

<sup>1</sup>Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.

<sup>2</sup>Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to [www.AHRIdirectory.org](http://www.AHRIdirectory.org) for current reference numbers.

Select models are ENERGY STAR labeled. Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit [www.energystar.gov](http://www.energystar.gov).

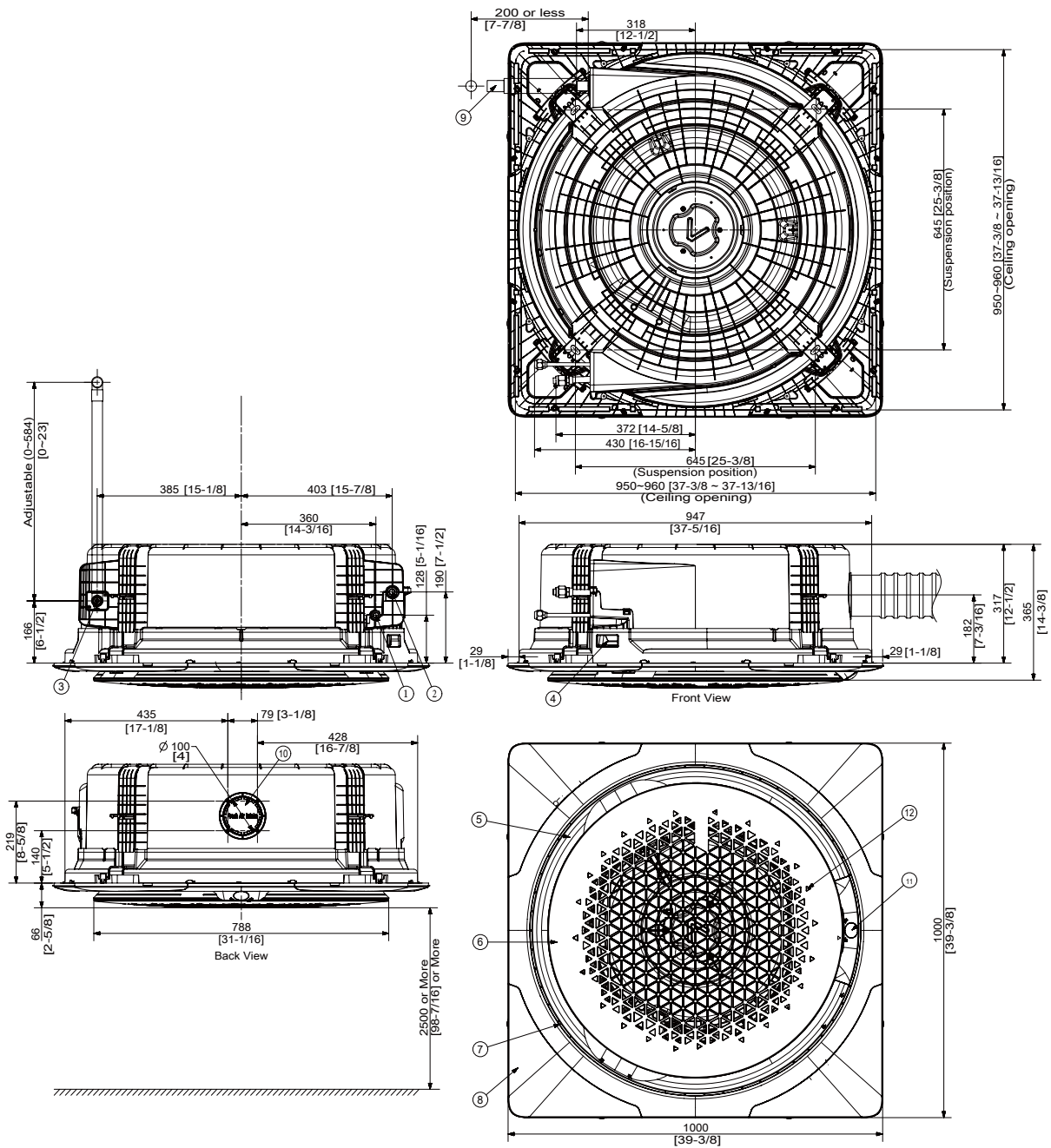
Required Accessories

Fascia Panel	Ceiling Type (square, white)	PC4NUDMUN
	Ceiling Type (square, black)	PC4NBDMUN
	Open Type (round, white)	PC4NUNMUN
	Open Type (round, black)	PC4NBNMUN

Optional Accessories

Wired Controller	Simplified Touch Controller	MWR-SH11UN
	Advanced Wired Controller	MWR-WG00UN
Wi-Fi Adapter	Single Indoor Unit	MIM-H14UN
	1-16 Indoor Units	MIM-H05UN
External Temperature Sensor		MRW-TA
Wireless Controller		AR-KH04U
External Contact Control		MIM-B14
Wall Bracket (for outdoor unit)		CKN-250
Wind Baffles	Front	WBF-1M2
	Back	WBB-2M-B
Hail guard kit (includes back and side guards)		HGK-4
Line Sets - insulated and flared, interconnect cables included	25' - ILS-2510	
	50' - ILS-5010	
Thermostat Adaptor (for connection to a standard 24VAC thermostat)		MIM-A60UN
Motion Detection Sensor (For use with PC4NUDMUN panels)		MCR-SME

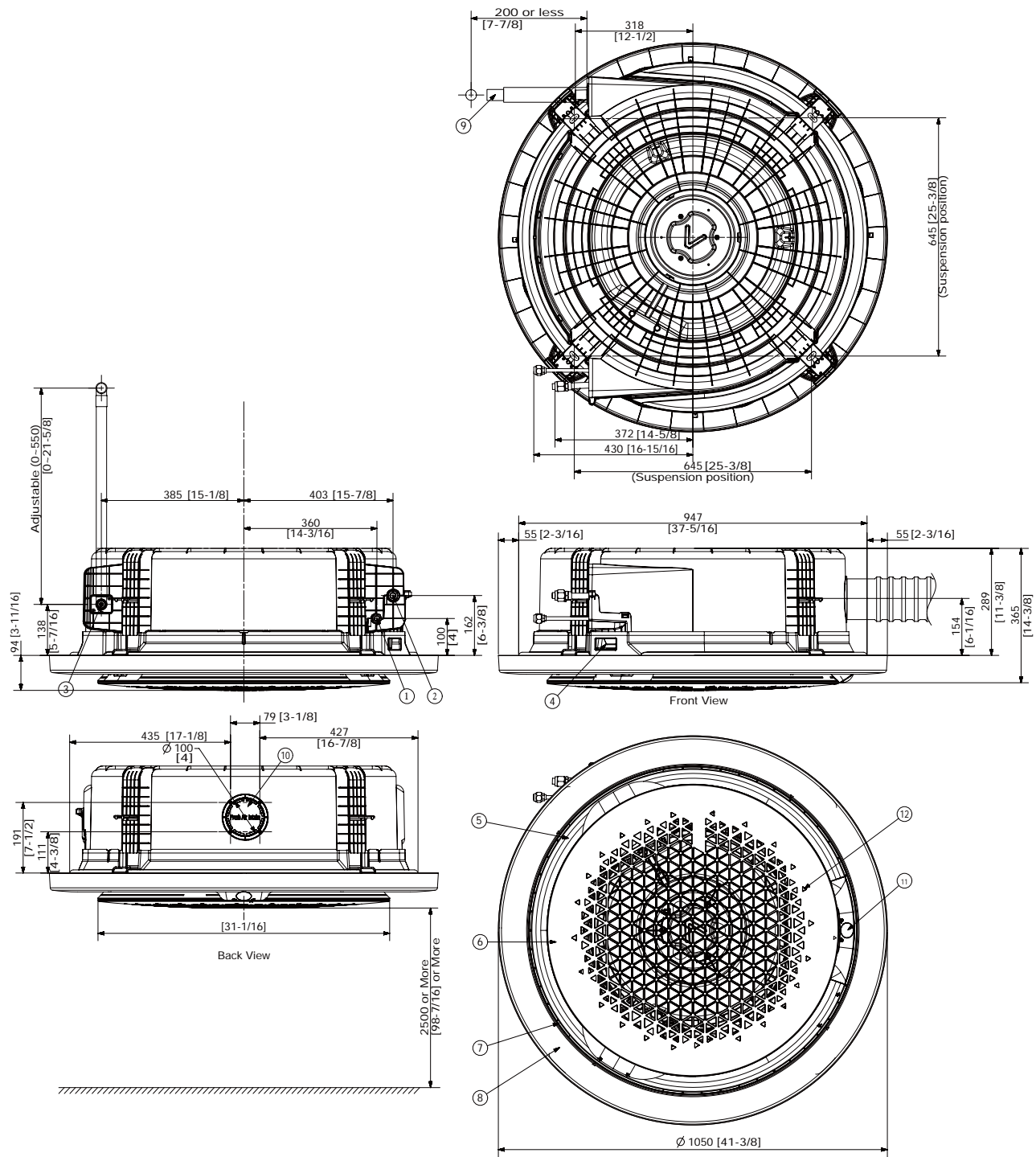
Units: inches



No.	Description
1	Refrigerant Gas Pipe
2	Refrigerant Liquid Pipe
3	Condensate drain
4	Power and wiring entry
5	Air discharge opening
6	Air suction grille

No.	Description
7	Suction rim for air direction booster fan
8	Decoration fascia panel
9	Drain hose
10	Fresh air knockout hole
11	Status display
12	Infrared receiver

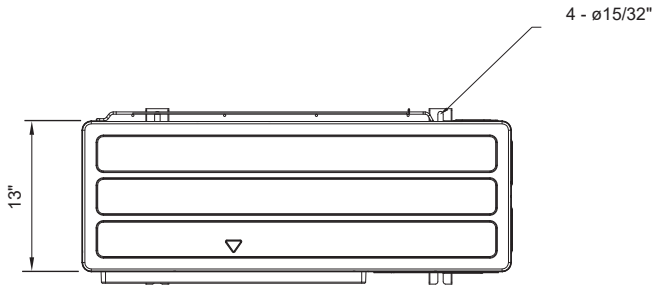
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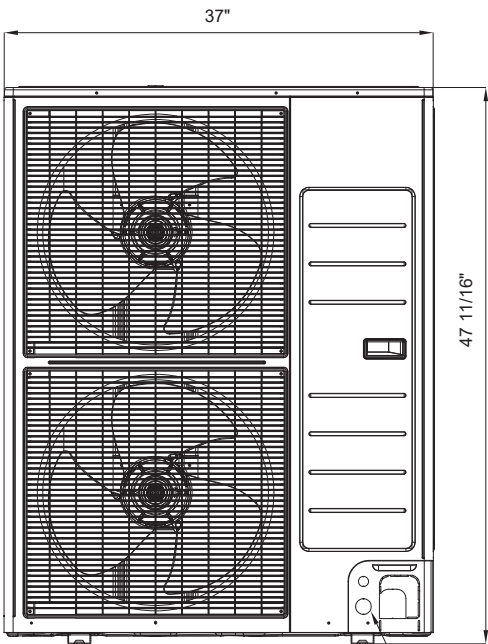
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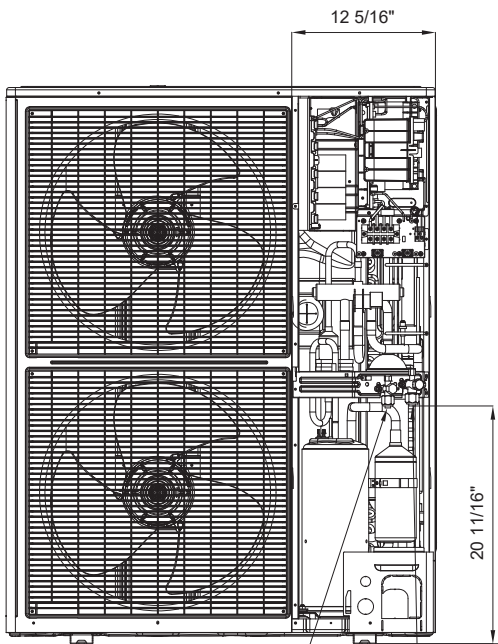


TOP



FRONT

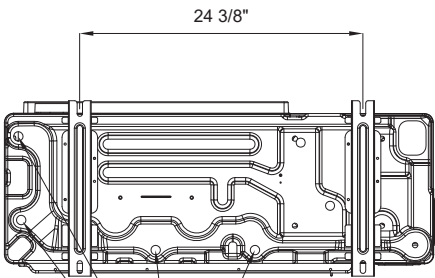
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FRONT WITHOUT SERVICE COVER

1

2



BOTTOM

3

No.	Name	Description
1	Refrigerant liquid pipe	Ø 3/8
2	Refrigerant gas pipe	Ø 5/8
3	Drain hole	Connect with provided drain plug