

Job Name \_\_\_\_\_  
 Purchaser \_\_\_\_\_  
 Submitted to \_\_\_\_\_  
 Unit Designation \_\_\_\_\_

Location \_\_\_\_\_  
 Engineer \_\_\_\_\_  
 Reference \_\_\_\_\_ Approval \_\_\_\_\_ Construction \_\_\_\_\_  
 Schedule # \_\_\_\_\_

**Specifications**

Model	Indoor Unit Model Number	AC048KN4DCH/AA		
	Outdoor Unit Model Number	AC048JXADCH/AA		
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	48,000 / 53,000	
	Capacity Range	Cooling (Btu/h)	18,600 - 51,000	
		Heating (Btu/h)	15,300 - 55,000	
	SEER / EER		19.00 / 8.90	
	COP (nominal heating)		3.02	
	HSPF		9.5	
	AHRI Certification Number		8860527	
Condensate (pints/h)		14.8		
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)		6.40 / 23.80 / 24.00
		Heating (A)		5.00 / 23.50 / 28.00
	Max. Breaker	Amps		35
Min. Circuit Ampacity (A)			22.56	
Dimensions	W X H X D (in.)	Indoor Unit	37 1/4 X 14 3/8 X 37 1/4	
		Outdoor Unit	37 X 48 X 13	
	Weight (lbs.)	Indoor Unit	52.91	
		Outdoor Unit	194	
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	35 / 40 / 45	
	Outdoor Unit dB(A)	Cooling / Heating (high)	53 / 55	
Operating Temperatures °F (°C)	Outdoor	Cooling	23 ~ 115°F (-5 ~ 46°C)	
		Heating	0 ~ 115°F (-18 ~ 46°C) W/Baffle	
	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	
	Condensate Connection		1 1/4" OD, 1" ID	
Refrigerant	Type		R410A	
	Factory Charge	oz.	98.77	
	Charged for		25 ft	
	Additional Refrigerant		0.355 oz./ft. over 25 ft	
Compressor	Manufacturer		Samsung	
	Type		Inverter Driven, Twin BLDC Rotary	
	RLA	Amps	17.0	
Evaporator Fan	Type		BLDC (1) With Turbo Type Fan (1)	
	Air Volume	CFM (L/M/H)	822 / 1,024 / 1,257	
	Output	Watts	97 X 1	
	FLA	Amps	0.35	
Condenser Fan	Motor		BLDC With Axial Type Fan (2)	
	FLA / Watts / CFM (max.)		0.48 A X 2 / 125 W X 2 / 3,040 CFM	
Fascia Panel	Ceiling Type (Square)	L X W X H	39 3/8 X 39 3/8 X 2 5/8	
		Weight	7.94	
	Open Type (Round)	Diameter X H	41 5/16 X 3 3/8	
		Weight	5.95	
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		



Shown with PC4NUNMUN (open type panel)



Shown with PC4NUDMUN (ceiling type panel)



**General Information**

- The indoor unit shall be a round ceiling cassette with 360°, even air distribution
- 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
- All indoor unit addressing and option settings shall be done digitally; the indoor unit does not contain rotary dials or setting switches.
- Electro-static, washable, pleated filter as standard (included with fascia panel).
- 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
- Knock-out for outside air capability (with booster fan connection)
- Pipe connections at the outdoor unit shall be made inside the unit chassis. Refrigerant pipes can exit through the front, side, rear, or bottom sides of the outdoor unit.
- 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)
- The outdoor unit shall have a night time quiet mode option to reduce operating sound during the night (automatic or manual activation with dry contact signal).

**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 aluminum 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  
 The indoor unit shall have a 12VDC output that is interlocked with fan to activate external devices (fan ON = 12VDC ON, fan OFF = 12VDC OFF, pigtail adapter plug required)  
 Interconnect control wire between outdoor indoor unit shall be 16AWG X 2 shielded  
 Wired or wireless controls must be purchased separately

Connection to optional wired controllers shall be 2 X 16AWG shielded wire

No additional interface modules/adapters are required when connecting to Samsung NASA DVM S central control options.

**Refrigerant System**

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

**Warranty**

10 Years compressor, 10 years parts, 1 year limited labor when registered

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.

三星 \* ) \* HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.



## Required Accessories

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

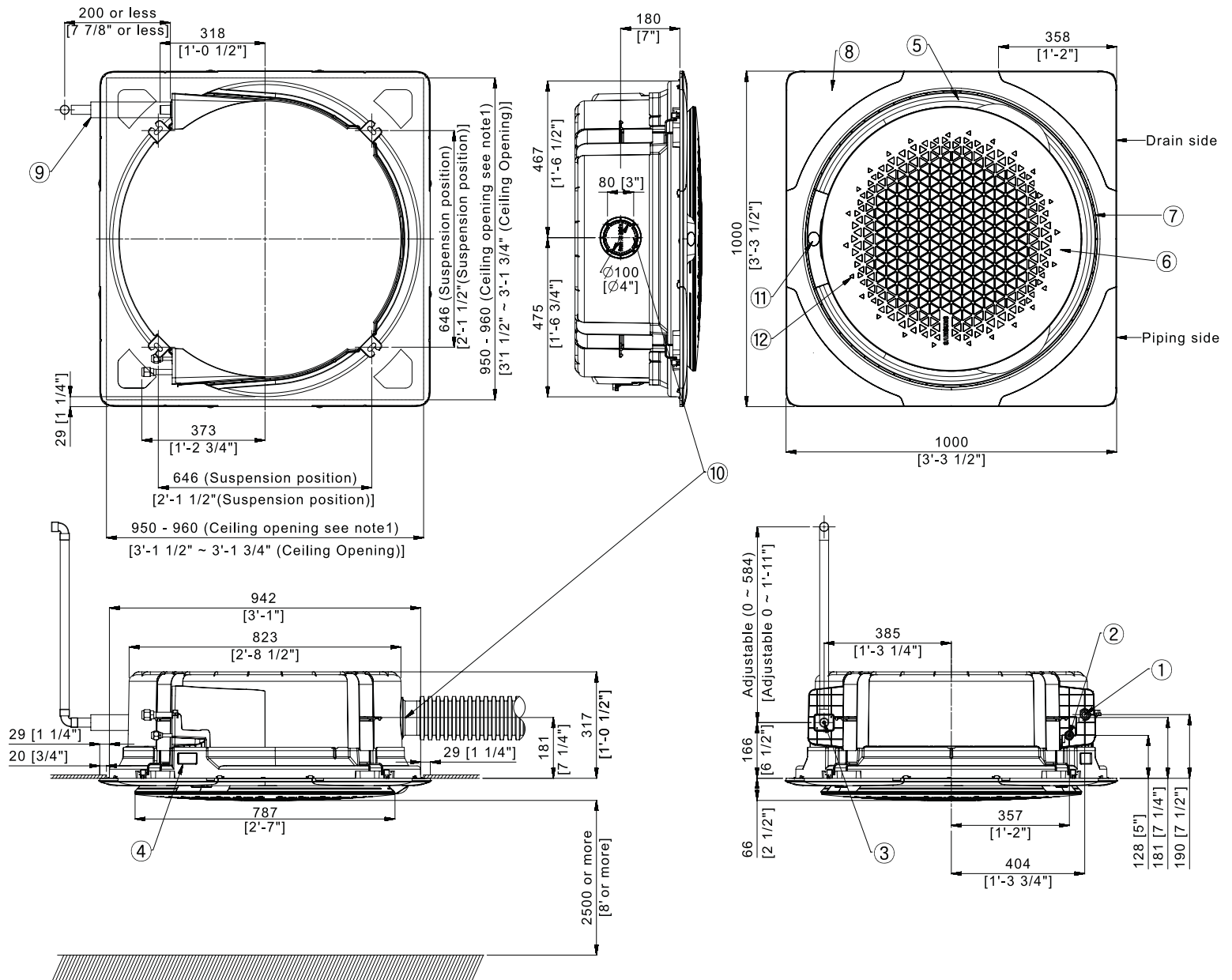
\*A fascia panel is required for cassette unit operation and is sold separately.

## Optional Accessories

Wired Controller	Simplified	MWR-SH00N
	Simplified Touch Controller	MWR-SH11UN
	Premium w/scheduling	MWR-WE13UN
Wi-Fi Adapter		MIM-H03UN
External Temperature Sensor		MRW-TA
Wireless Controller		AR-KH03U
External Contact Control		MIM-B14
Central Control Interface Module for Connection to DVM Plus Controls (non-NASA)		MIM-N01
Wall Bracket (for outdoor unit)		CKN-250
Wind Baffles	Front	WBF-1M2
	Back	WBB-2M
Line Sets - insulated and flared, interconnect cables included		25' - ILS-2510
		50' - ILS-5010
Thermostat Adaptor		TADPT2
Motion Detection Sensor		MCR-SME

Samsung 360 Cassette, Single Zone, Split System  
AC048KN4DCH/AA Dimensional Drawing With Ceiling Type Fascia Panel

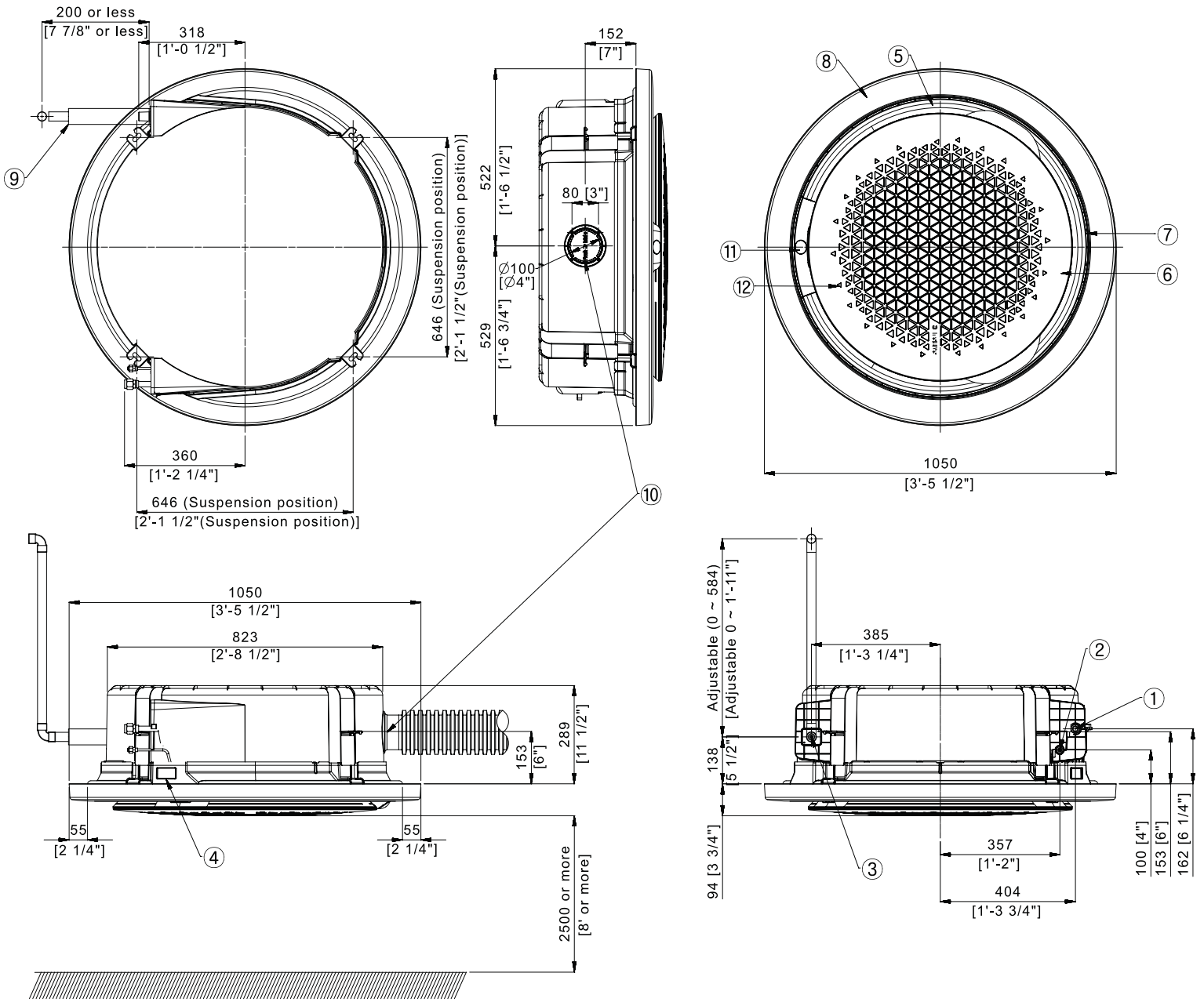
Units: mm [inches]



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

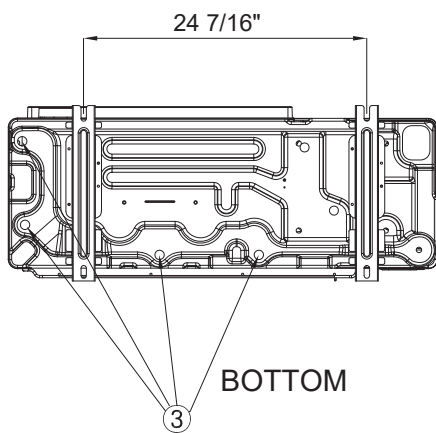
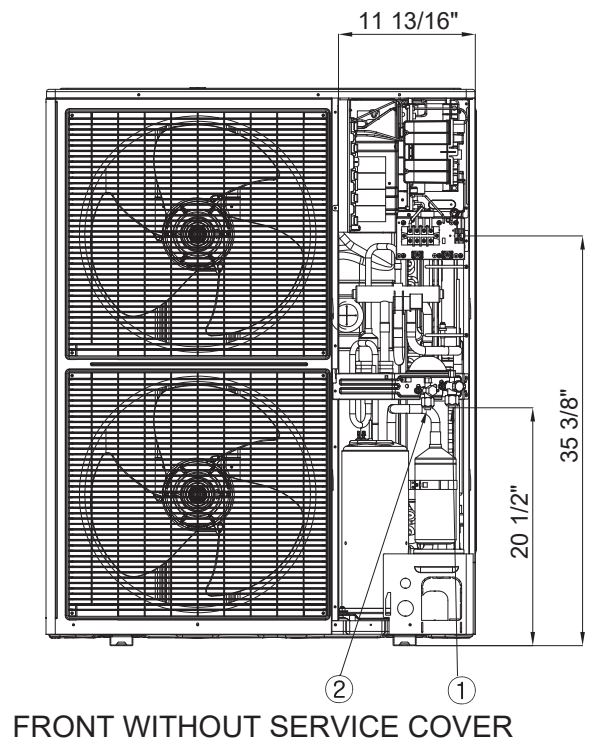
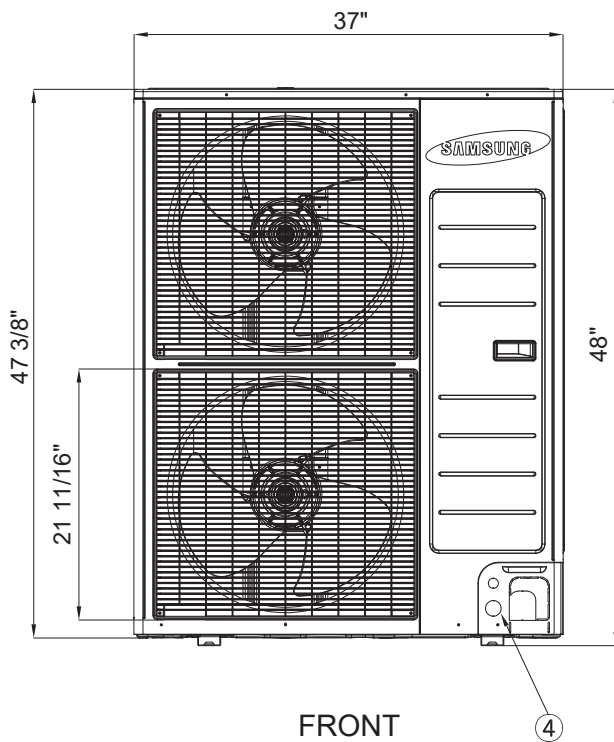
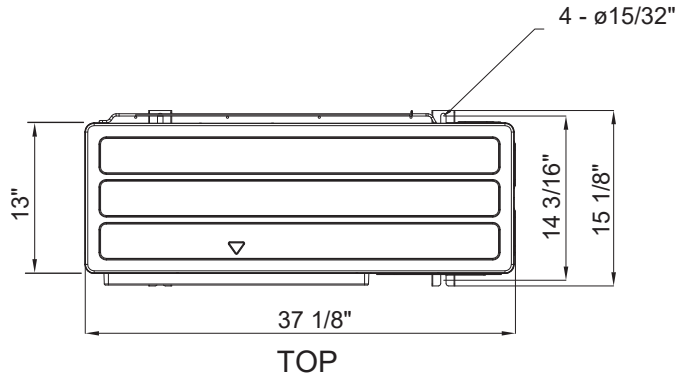
No.	Description
7	Suction rim for air direction booster fan
8	Decoration fascia panel
9	Drain hose
10	Fresh air knockout hole
11	Status display
12	Infrared receiver

Units: mm [inches]



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