## SAMSUNG

#### SUBMITTAL AC018JNHDCH/AA Samsung, Single Zone Duct, Split System

Page 1 of 3 www.SamsungHVAC.com

Job Name _			
Purchaser			
Submitted to	0		
Unit Design			
Unit Design	alion	0	
Model	Indoor Unit Model N		AC018JNHDCH/AA AC018JXADCH/AA
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,000
		Cooling (Btu/h)	5,000 - 21,000
	Capacity Range	Heating (Btu/h)	3,800 - 25,000
	SEER / EER COP (nominal heating)		19.6 / 11.2
	HSPF		3.4 10.3
	AHRI Certification Number Condensate (pints/hour)		8032087 4.26
Power	Voltage	ø / V / Hz	1 / 208-230 / 60
	Working Voltage Ra		176 - 254 (max. 3% deviation from each)
	Operating Current	Cooling (A)	2.1 / 7.4 / 10.0
	(min. / std. / max.) Max. Breaker	Heating (A) Amps	1.7 / 8.0 / 12.0 15
	Min. Circuit Ampaci	<u> </u>	8.6
	WXHXD	Indoor Unit	45 1/4 x 12 9/16 x 18 7/8
	(inches)	Outdoor Unit	34 5/8 X 25 1/8 X 12 1/4
Dimensions	Weight	Indoor Unit	94.8
Diricisions	(lbs.)	Outdoor Unit	99
	Duct Connections (W X H)	Supply (inches) Return (ID, inches)	39 3/8 X 9 5/16 37 1/2 X 8 3/4
	(W XII)		
	Indoor & Outdoor	Type FPI	Aluminum Fin / Copper Tube 18
Heat Exchanger	Unit	Pipe Diameter (inches)	1/4
	Outdoor Unit	Туре	Aluminum, flat fin, micro channel
Sound Pressure	Indoor Unit dB(A)	L/M/H	26 / 30 / 34
Level	Outdoor Unit dB(A)	Cooling / Heating (high)	48 / 48
Onorotina	Outdoor	Cooling	23 ≤ T ≤ 115
Operating Temperatures		Heating	0 ≤ T ≤ 115 w/wind baffle
(°F)		Cooling	-4 ≤ T ≤ 76 61 ≤ T ≤ 90
· ,	Indoor	Heating	T ≤ 80
	Indoor & Outdoor	High side (flare)	1/4"
Pipe Connections		Low side (flare)	1/2"
	Maximum (ft.) Maximum Vertical Separation (ft.)		98
	Condensate Connection		66 1" OD, 3/4" ID
Refrigerant	Туре		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	OZ.	45.86
	Charged for		0 = 6
	Charged for	nt.	25 feet
	Additional Refrigera	ınt	0.11 oz/ft over 25 feet
Compressor	Additional Refrigera	ınt	0.11 oz/ft over 25 feet Samsung
Compressor	Additional Refrigera	Amps	0.11 oz/ft over 25 feet Samsung Inverter Driven, Twin BLDC, Rotary
Compressor	Additional Refrigera  Manufacturer  Type		0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1
	Additional Refrigeral Manufacturer Type RLA		0.11 oz/ft over 25 feet Samsung Inverter Driven, Twin BLDC, Rotary
	Additional Refrigeral Manufacturer Type RLA Type	Amps  CFM (L/M/H)	0.11 oz/ft over 25 feet  Samsung  Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A
	Additional Refrigera  Manufacturer  Type  RLA  Type  Air Volume	Amps   CFM (L/M/H)  x)  Standard ("WC)	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12
	Additional Refrigeral Manufacturer Type RLA Type Air Volume Output (W) / FLA (A	Amps  CFM (L/M/H)	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6
Evaporator Fan	Additional Refrigera  Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A Static Pressure	Amps   CFM (L/M/H)   Standard ("WC)   Min. / Max. ("WC)	0.11 oz/ft over 25 feet  Samsung  Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1)
Evaporator Fan	Additional Refrigeral Manufacturer Type RLA Type Air Volume Output (W) / FLA (A	Amps  CFM (L/M/H) I)  Standard ("WC)  Min. / Max. ("WC)	0.11 oz/ft over 25 feet  Samsung  Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM
Evaporator Fan	Additional Refrigera  Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A Static Pressure	Amps   CFM (L/M/H)   Standard ("WC)   Min. / Max. ("WC)	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N
Evaporator Fan	Additional Refrigeral Manufacturer Type RLA Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A)	Amps   CFM (L/M/H) s)   Standard ("WC)   Min. / Max. ("WC)   (max.)	0.11 oz/ft over 25 feet  Samsung  Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM
Evaporator Fan	Additional Refrigera  Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A  Static Pressure  Motor FLA / Watts / CFM (A)  Wired Controller  Wi-Fi Adapter	Amps  CFM (L/M/H)  Standard ("WC)  Min. / Max. ("WC)  (max.)  Simplified Simplified Touch Controller Premium w/scheduling	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN
Evaporator Fan	Additional Refrigeral Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller Wi-Fi Adapter Wireless Signal	Amps  CFM (L/M/H)  Standard ("WC)  Min. / Max. ("WC)  (max.)  Simplified  Simplified Touch Controller  Premium w/scheduling  Wireless Signal Receiver	0.11 oz/ft over 25 feet  Samsung  Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN MIM-H03UN MRK-A01N
Evaporator Fan	Additional Refrigera  Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A  Static Pressure  Motor FLA / Watts / CFM (A)  Wired Controller  Wi-Fi Adapter	Amps  CFM (L/M/H)  Standard ("WC)  Min. / Max. ("WC)  Simplified Simplified Touch Controller Premium w/scheduling  Wireless Signal Receiver Wireless Controller	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN
Evaporator Fan  Condenser Fan	Additional Refrigeral Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller  Wi-Fi Adapter Wireless Signal Control External Temperatu Filter Box	Amps  CFM (L/M/H)  Standard ("WC)  Min. / Max. ("WC)  (max.)  Simplified  Simplified Touch Controller  Premium w/scheduling  Wireless Signal Receiver  Wireless Controller  ree Sensor	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN MRK-A01N MR-EH00U MRW-TA FB-M3036
Evaporator Fan  Condenser Fan  Optional	Additional Refrigeral Manufacturer Type RLA Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller Wi-Fi Adapter Wireless Signal Control External Temperatu Filter Box External Contact Co	Amps  CFM (L/M/H)  Standard ("WC)  Min. / Max. ("WC)  (max.)  Simplified  Simplified Touch Controller  Premium w/scheduling  Wireless Signal Receiver  Wireless Controller  ure Sensor	0.11 oz/ft over 25 feet  Samsung  Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590  183 W / 0.85 A  0.12  0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N  MWR-SH10N  MWR-WE10N  MIM-H03UN  MIM-H03UN  MRK-A01N  MR-EH00U  MRW-TA
Evaporator Fan  Condenser Fan  Optional	Additional Refrigeral Manufacturer Type RLA Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller  Wi-Fi Adapter Wireless Signal Control External Temperatu Filter Box External Control Inter	Amps  CFM (L/M/H)  Standard ("WC) Min. / Max. ("WC)  (max.)  Simplified Simplified Touch Controller Premium w/scheduling  Wireless Signal Receiver  Wireless Controller re Sensor	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN MRK-A01N MR-EH00U MRW-TA FB-M3036
Evaporator Fan  Condenser Fan  Optional	Additional Refrigeral Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller Wi-Fi Adapter Wireless Signal Control External Temperatu Filter Box External Contact Co Central Control Inter to DVM Plus Control	Amps     CFM (L/M/H)     CFM (L/M/H)     CFM (L/M/H)     CFM (L/M/H)     Standard ("WC)     Min. / Max. ("WC)     Min. / Max. ("WC)     Simplified     Simplified     Simplified     Simplified     Touch Controller     Premium w/scheduling     Wireless Signal Receiver     Wireless Controller     Wireless Controller     Wireless Controller     Touch Connection     Connection	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN MRK-A01N MRK-A01N MRW-TA FB-M3036 MIM-B14 MIM-N01
Evaporator Fan  Condenser Fan  Optional	Additional Refrigeral Manufacturer Type RLA Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller Wi-Fi Adapter Wireless Signal Control External Temperatu Filter Box External Control Inter to DVM Plus Control Wall Bracket (for ou	Amps     CFM (L/M/H)     CFM (L/M/H)     CFM (L/M/H)     CFM (L/M/H)     Standard ("WC)     Min. / Max. ("WC)     Min. / Max. ("WC)     Simplified     Simplified     Simplified     Simplified     Touch Controller     Premium w/scheduling     Wireless Signal Receiver     Wireless Controller     Wireless Controller     Wireless Controller     Touch Connection     Connection	0.11 oz/ft over 25 feet  Samsung  Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590  183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MWR-WE10N MIM-H03UN MRK-A01N MR-EH00U MRW-TA FB-M3036 MIM-B14
Evaporator Fan  Condenser Fan  Optional	Additional Refrigeral Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller Wi-Fi Adapter Wireless Signal Control External Temperatu Filter Box External Contact Co Central Control Inter to DVM Plus Control	Amps  CFM (L/M/H)  Standard ("WC)  Min. / Max. ("WC)  (max.)  Simplified  Simplified Touch Controller  Premium w/scheduling  Wireless Signal Receiver  Wireless Controller  ure Sensor  Ontrol  face Module for Connection  s (non-NASA)  atdoor unit)	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN MRK-A01N MR-EH00U MRW-TA FB-M3036 MIM-B14  MIM-N01 CKN-250 WBMF-9/12/18 WBMB-9/12/18/36
Evaporator Fan  Condenser Fan  Optional	Additional Refrigera  Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller Wi-Fi Adapter Wireless Signal Control External Temperatu Filter Box External Contact Co Central Control Inter to DVM Plus Control Wall Bracket (for ou Wind Baffles Line Sets - insulated	Amps  CFM (L/M/H)  Standard ("WC) Min. / Max. ("WC)  Simplified Simplified Touch Controller Premium w/scheduling  Wireless Signal Receiver Wireless Controller ure Sensor  Ontrol face Module for Connection s (non-NASA) ttdoor unit) Front	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN MRK-A01N MR-EH00U MRW-TA FB-M3036 MIM-B14 MIM-N01 CKN-250 WBMF-9/12/18 WBMB-9/12/18/36 25' - ILS-2507
Compressor  Evaporator Fan  Condenser Fan  Optional Accessories	Additional Refrigeral Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller Wi-Fi Adapter Wireless Signal Control External Temperatu Filter Box External Contact Co Central Control Inter to DVM Plus Control Wall Bracket (for output Sets - insulated cables included	Amps  CFM (L/M/H) Standard ("WC) Min. / Max. ("WC)  (max.)  Simplified Simplified Touch Controller Premium w/scheduling  Wireless Signal Receiver Wireless Controller re Sensor  ontrol face Module for Connection s (non-NASA) ttdoor unit)  Front Back	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN MRK-A01N MR-EH00U MRW-TA FB-M3036 MIM-B14  MIM-N01  CKN-250 WBMF-9/12/18 WBMB-9/12/18/36 25' - ILS-2507 50' - ILS-5007
Evaporator Fan  Condenser Fan  Optional	Additional Refrigera  Manufacturer Type RLA  Type Air Volume Output (W) / FLA (A Static Pressure  Motor FLA / Watts / CFM (A Wired Controller  Wi-Fi Adapter Wireless Signal Control External Temperatu Filter Box External Control Inter to DVM Plus Control Wall Bracket (for ou Wind Baffles Line Sets - insulater cables included  Certifications	Amps  CFM (L/M/H)  Standard ("WC)  Min. / Max. ("WC)  (max.)  Simplified  Simplified Touch Controller  Premium w/scheduling  Wireless Signal Receiver  Wireless Controller  re Sensor  control  face Module for Connection is (non-NASA)  stdoor unit)  Front  Back  d and flared, interconnect	0.11 oz/ft over 25 feet  Samsung Inverter Driven, Twin BLDC, Rotary 6.1  BLDC (1) With Sirocco Fan (2) 390 / 490 / 590 183 W / 0.85 A 0.12 0 - 0.6  BLDC With Axial Type Fan (1) 0.13 A / 39 W / 1,550 CFM  MWR-SH00N MWR-SH10N MWR-WE10N MIM-H03UN MRK-A01N MR-EH00U MRW-TA FB-M3036 MIM-B14 MIM-N01 CKN-250 WBMF-9/12/18 WBMB-9/12/18/36 25' - ILS-2507

.ocation Engineer Reference Approval Construction Schedule #





- · Horizontal discharge airflow
- · Low ambient control built in
- 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.
- The indoor unit shall have a built-in condensate pump as standard with a 29" lift (from bottom of unit).
- The outdoor unit shall have a night time quiet mode option to reduce operating sound during the night.

#### Construction

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

The indoor unit shall be insulated, galvanized steel.

#### 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 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

Controls shall integrate with a BMS system

The system shall integrate with the Samsung NASA Controls Solution

No additional interface modules/adapters are required when connecting to Samsung NASA DVM S central control options (MIM-D00AN, MIM-B17N, MIM-B18N, MCM-A300N).

#### 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

#### Warranty

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

Quietside maintains a policy of ongoing development, specifications are subject to change without notice Refer to www.AHRIdirectory.org for current reference numbers.



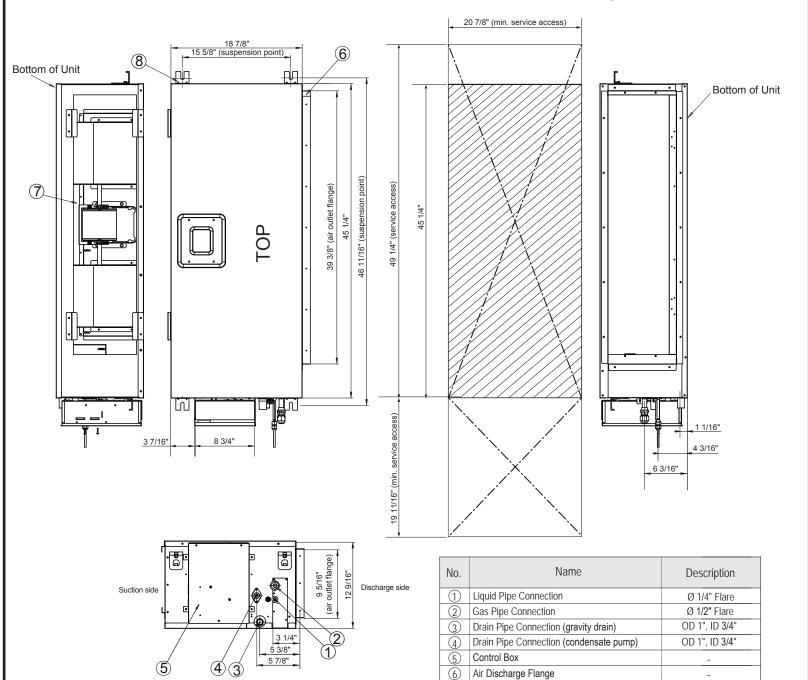
Nominal cooling capacities are based on: Indoor temperature: 80°F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB. Nominal heating capacities are based on: Indoor temperature: 70 F DB, 60 F WB. Outdoor temperature: 47 F DB, 43 F WB

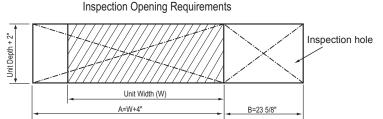
5/16" - 3/8"

13/16" or more

13/16" or more

# Samsung, Single Zone Duct, Split System AC018JNHDCH/AA Dimensional Drawing





In applications where there is not a tile ceiling, an inspection hole is required.

If height between ceiling and structure is 3.25' or more, inspection opening "B" is recommended.

If height between ceiling and structure is less than 3.25', inspection opening "A" and "B" is recommended. (verify state and local codes).

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Air Inlet

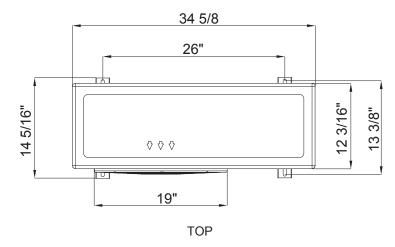
Suspension Hook

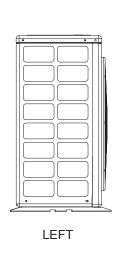
Unit Clearance From Structure

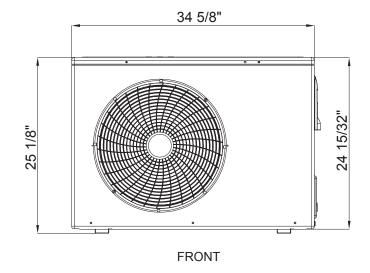
Unit

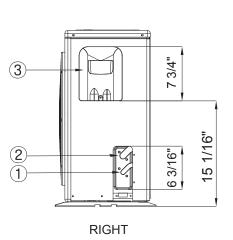
Service Access

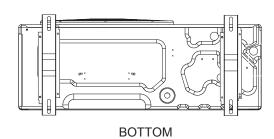
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No.	Description		
1	Liquid service valve		
2	Suction service valve		
3	Power and communication conduit openings		

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