

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

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

Specifications			
Model	Indoor Unit Model Number (US Code)		AC018KNZDCH/AA (CNH18ZDK)
	Outdoor Unit Model Number (US Code)		AC018BXADCH/AA (CXH18ADB)
Performance <sup>1</sup>	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,000
	Capacity Range	Cooling (Btu/h)	5,000 - 22,000
		Heating (Btu/h)	5,000 - 29,000
	SEER / EER		19.2 / 12.0
	COP (nominal heating)		3.10
	HSPF		10.0
AHRI Certification Number			207598067
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)	3.0 / 6.9 / 11.5
		Heating (A)	2.6 / 8.6 / 20.0
	Max. Breaker	Amps	25
Min. Circuit Ampacity (A)			18.7
Dimensions	W X H X D (in.)	Indoor Unit	17 1/2 X 43 X 21
		Outdoor Unit	34 5/8 X 31 7/16 X 12 1/4
	Duct Connections (W X H)	Supply (in.)	12 1/4 X 15 1/2
		Return (ID, in.)	17 1/2 X 21
	Weight (lbs.)	Indoor Unit	98.1
	Outdoor Unit	118.4	
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	32 / 35 / 38
	Outdoor Unit dB(A)	Cooling / Heating (high)	48 / 48
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)
			T ≤ 80°F (27°C)
Pipe Connections	Indoor & Outdoor	High side (braze / flare)	1/4"
		Low side (braze / flare)	1/2"
	Maximum (ft.)		164
	Maximum Vertical Separation (ft.)		98.4
	Condensate Connection (with included adapter)		1 1/16" ID for 3/4" PVC
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	lbs.	4.41
	Charged for		24.6 ft
	Additional Refrigerant		0.11 oz/ft over 24.6 ft
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	12.7
Evaporator Fan	Type		Double-inlet, forward curve, centrifugal (with ECM motor)
	Air Volume	CFM (L/M/H)	494 / 530 / 600 (at standard ESP)
	Output (W) / FLA (A)		290 W / .72 A
	Static Pressure	Standard ("WC)	0.20
		Min. / Max. ("WC)	0.01 - 0.79
Condenser Fan	Motor		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		1.25 A / 125 W / 2,154 CFM
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		



- 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.
  - Base pan heater equipped as standard
  - System shall provide 100% heating capacity at -4°F (-20°C)

- 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*).
  - System can be set up 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 controller

- Indoor Fan**
- Indoor fan is a double Inlet, forward curve, centrifugal type
  - Three fan speed settings and auto setting
  - Field configurable for downflow operation with optional conversion kit

- Construction**
- Outdoor unit shall be galvanized steel with a baked-on powder coated finish for durability
  - Indoor Unit: Insulated, galvanized steel.

- Controls**
- Control wiring shall be 2 X 16 AWG
  - 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
  - Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller or central control options.
  - Wired or wireless controllers must be purchased separately

- 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

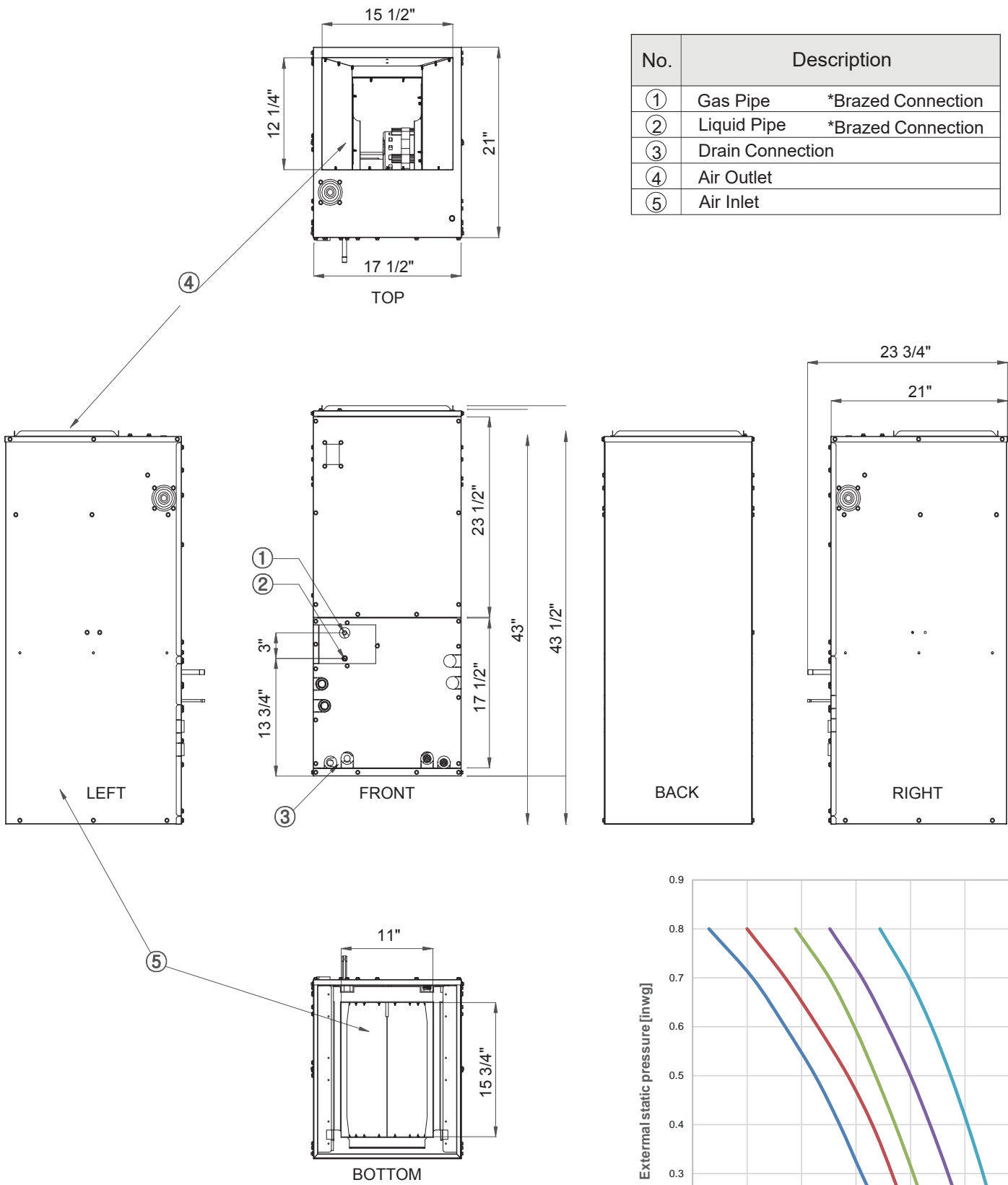
**Warranty**  
 10 Years compressor, 10 years parts, 1 year limited labor when registered

<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.

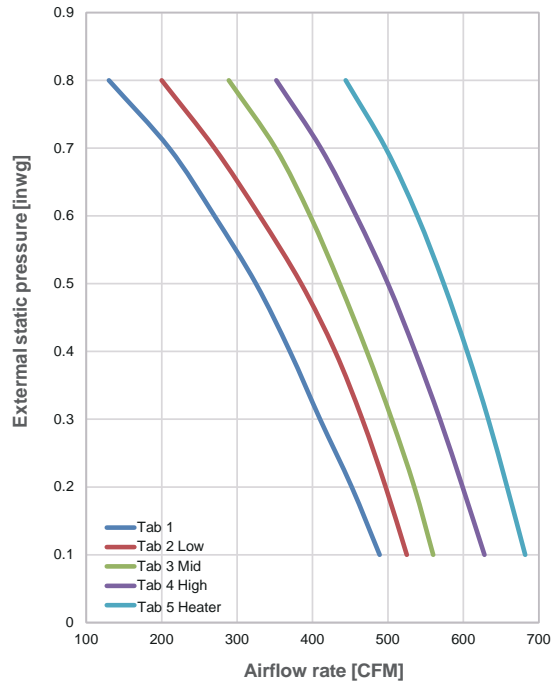
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to [www.AHRIdirectory.org](http://www.AHRIdirectory.org) for current reference numbers.

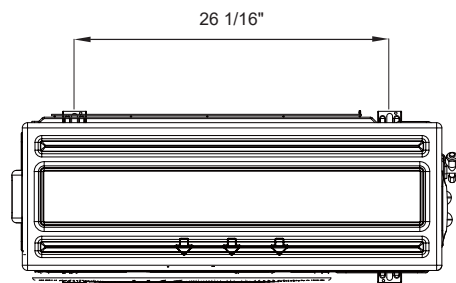
Optional Accessories

Wired Controller	Advanced	MWR-WG00UN
	Touchscreen	MWR-SH11UN
Thermostat Adaptor (for connection to a standard 24VAC thermostat)		MIM-A60UN
Wireless Signal Control	Wireless Signal Receiver	MRK-A10N
	Wireless Controller	AR-EH04U
Wi-Fi Adapter		MIM-H05UN
External Temperature Sensor		MRW-TA
Filter Base (includes 1" MERV 8 filter)		VFB-1
External Contact Control		MIM-B14
Wall Bracket (for outdoor unit)		CKN-250
Wind Baffles	Front	WBF-7M
	Back	WBB-7M-B
Hail Guard		TBD
Line Sets - insulated and flared, interconnect cables included	25' - ILS-2507	
	50' - ILS-5007	
Supplemental Electric Heat Kit	VHK-103A (3 kW)	
	VHK-105A (5 kW)	
Downflow Conversion Kit		VDK-1

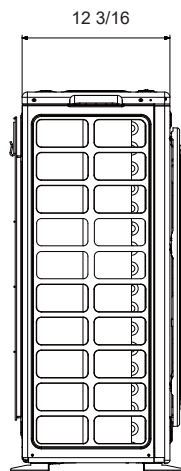


No.	Description	
①	Gas Pipe	*Brazed Connection
②	Liquid Pipe	*Brazed Connection
③	Drain Connection	
④	Air Outlet	
⑤	Air Inlet	

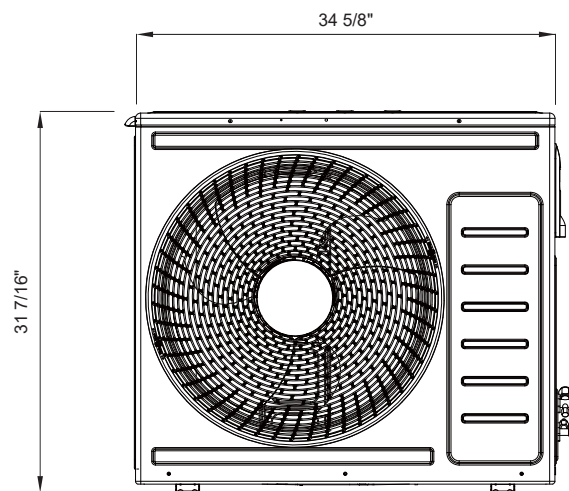




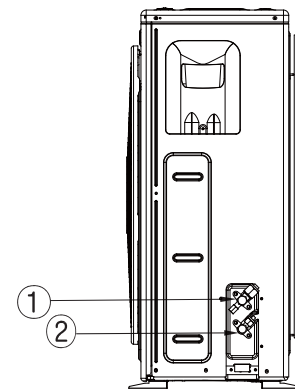
TOP



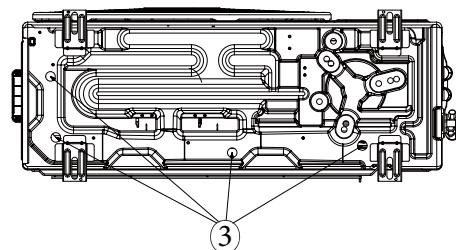
LEFT



FRONT



RIGHT



BOTTOM

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