



**ULTRA HEAT** **ULTRA COOL**

Superior Performance in Extreme Temperature

**Submittal Data: SAP30HP230V1A** 30,000 BTU/H Wall Mounted Heat- Pump System

Job Name Location Date

Purchaser Engineer

Submitted To For  Reference  Approval  Construction

Unit Designation Schedule No.

- GENERAL FEATURES**
- Variable Speed (Inverter) Two-Stage/3 Cylinder Compressor
  - Ultra Heating ( down to -31° F)
  - Ultra Cooling ( 0°F to -115° F)
  - WiFi Controls
  - 4 Indoor Fan Speeds
  - 2 Way Airflow Operation
  - Wireless Remote with LCD Display
  - Copper Tube/Aluminum Fins w/ Acrylic Resin Anti-Corrosion
  - Energy Saving Mode
  - 5 year Limited Parts Warranty



**System Ratings**

<b>Cooling</b>	
Rated Capacity	28,000 BTU/H
Capacity Range	5,500 -30,700 BTU/H
Power Input (Max)	3,650 W
SEER	23.0
EER	11.2

<b>Heating at 47° F</b>	
Rated Capacity	28,800 BTU/H
Capacity Range	4,400 -35,200 BTU/H
Power Input (Max)	5.800 W
HSPF	10.5
COP	3.11

<b>Heating at 17° F</b>	
Rated Capacity	28,800 BTU/H

<b>Operating Range</b>		
Cooling	(Max)	115°F (46°C)
	(Min)	0°F (-18°C)
Heating	(Max)	75°F (24°C)
	(Min)	-31°F (-35°C)

<b>Power Supply</b>	
Normal Operational Voltage	208/230 V, 1 Phase, 60 Hz
Voltage Range	187 - 253 V
Main Power Wire Size	8-2 AWG
Interconnecting Cable Wire Size	14-4 AWG
MCA	16 A
MOCP/Breaker Size	25 A

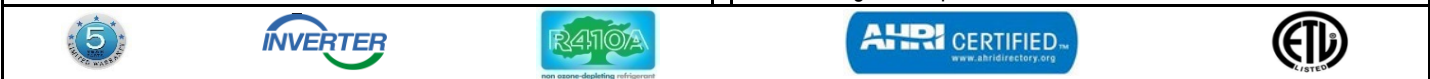
**Indoor Unit Data**

<b>Fan Motor</b>	Type	Cross-flow
	Output Power	70 W
	FLA	0.4 A
<b>Airflow</b>	(Low/High) Cooling	441/824 CFM
	(Low/High) Heating	441/824 CFM
<b>Air Throw</b>	(Max)	31 ft
<b>Sound Pressure Level</b>		
	Cooling (/High - Low)	65/60/56/47 dB(A)
	Heating (/High - Low)	65/60/56/47 dB(A)
<b>Dehumidification</b>		6.34 pt/hr

**Outdoor Unit Data**

<b>Compressor</b>	Type	DC Inverter Driven 2-Stage Rotary
	RLA	23 A
<b>Fan Motor</b>	Output Power	170 W
	RLA	0.73 A
<b>Sound Pressure Level</b>		61 dB(A)

<b>Refrigerant Piping Data</b>	
Gas Pipe Size (OD)	5/8-in
Liquid Pipe Size (OD)	1/4-in
Connection Method	Flared
Factory Charge R410A	123.5 oz
Additional Charge	0.30 oz/ft
Pre-Charge Length	25-ft
MAX Refrigerant Pipe Length	165-ft
MIN Refrigerant Pipe Length	10-ft
MAX Refrigerant Pipe Elevation	100-ft



<b>SYSTEM FEATURES</b>	
Inverter Type	G10
Ultra Low Frequency Torque Control	Yes
Power Factor Correction	Yes
Compressor Type	High Eff. Two Stage Rotary
Refrigerant Type	R410A
Basepan With Electric Heater	YES
Compressor With Electric Heater	YES
Indoor & Outdoor Fin Coating	Acrylic Resin/Anti-Corrosion
Intelligent Defrosting	YES
Intelligent Preheating	YES
Low Voltage Startup	YES
Memory/Power Failure Recovery	YES
Self Diagnosis	YES
Wired Controller Interface	YES
WiFi Interface - Standard	YES
Indoor Fan Type	Cross-flow
Multi Fan Speeds	4 Speeds
Indoor Unit Display	YES
Indoor Air Quality Filters	Optional
Auxiliary Electrical Heater	NO
Ventilation (Outdoor Air)	NO

<b>REMOTE CONTROLLER FUNCTIONS</b>	
Auto Mode	YES
Auto Fan	YES
Auto Swing (Horizontal Auto Swing)	NO
Auto Swing (Vertical Auto Swing)	YES
Clock on Remote Controller	YES
Dry Mode	YES
Dry Anti-Mildew (X-Fan) Mode	YES
Energy Saving Mode	YES
Dirty Filter Alert	NO
I Feel Function	NO
Lock on Remote Controller	YES
Quiet Mode	NO
Room Temperature Display	NO
Sleep Mode	YES
3 Sleep Modes Options	YES
Timer Mode	YES
Turbo Mode	YES
Display On/Off Control	YES
Freeze Guard Mode	NO
Display On/Off Control	YES



**ULTRA COOL**

**COOLING PERFORMANCE (BtuH)\***

Outdoor Ambient Temperature (DB) °F	Indoor Entering Air Temperatures					
	68F DB		73°F DB		80°F DB	
	57F WB		61°FWB		67°FWB	
	TC	SHC	TC	SHC	TC	SHC
0°F	9520	6902	11760	8526	14000	10150
5°F	10920	7972	13160	9607	15400	11242
14°F	12320	9055	14560	10702	16800	12348
23°F	12880	9531	15120	11189	17360	12846
32°F	13440	10013	15680	11682	17920	13350
41°F	15120	11340	17360	13020	19600	14700
50°F	16800	12684	19040	14375	21280	16066
59°F	17920	13619	20160	15322	22400	17024
68°F	18760	14351	21000	16065	23240	17779
77°F	23520	18110	25760	19835	28000	21560
86°F	26040	20181	28280	21917	30520	23653
95°F	23520	18346	25760	20093	28000	21840
104°F	22120	17364	24360	19123	26600	20881
113°F	19320	15263	21560	17032	23800	18802

**ULTRA HEAT**

**HEATING PERFORMANCE (BtuH)\***

Outdoor Ambient Temperature (DB)	Indoor Entering Air Temperatures		
	68°F DB	73°F DB	80°F DB
	57°FWB	61°FWB	67°FWB
	TC	TC	TC
-31°F	17651	17220	16790
-22°F	20521	20090	19660
-13°F	23391	22960	22530
-4°F	26261	25830	25400
0°F	27696	27265	26835
6°F	29131	28700	28270
10°F	29131	28700	28270
17°F	29131	28700	28270
19°F	29131	28700	28270
24°F	29131	28700	28270
32°F	29131	28700	28270
41°F	29131	28700	28270
43°F	29705	29274	28844
47°F	29061	28700	28453
53°F	28090	27728	27482
59°F	27242	26904	26693
64°F	25904	25662	25296
70°F	24422	24132	23861
75°F	22983	22681	22435
78°F	22320	21800	21439

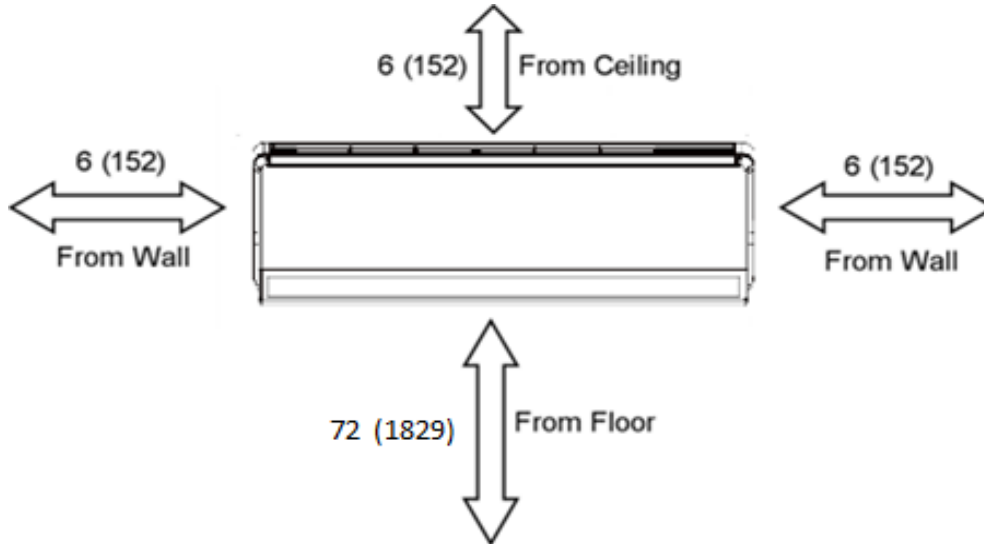
\* Maximum system capacity

TC- Total Capacity ( BtuH)  
SHC- Sensible Capacity (BtuH)

MINIMUM SPACING REQUIREMENTS

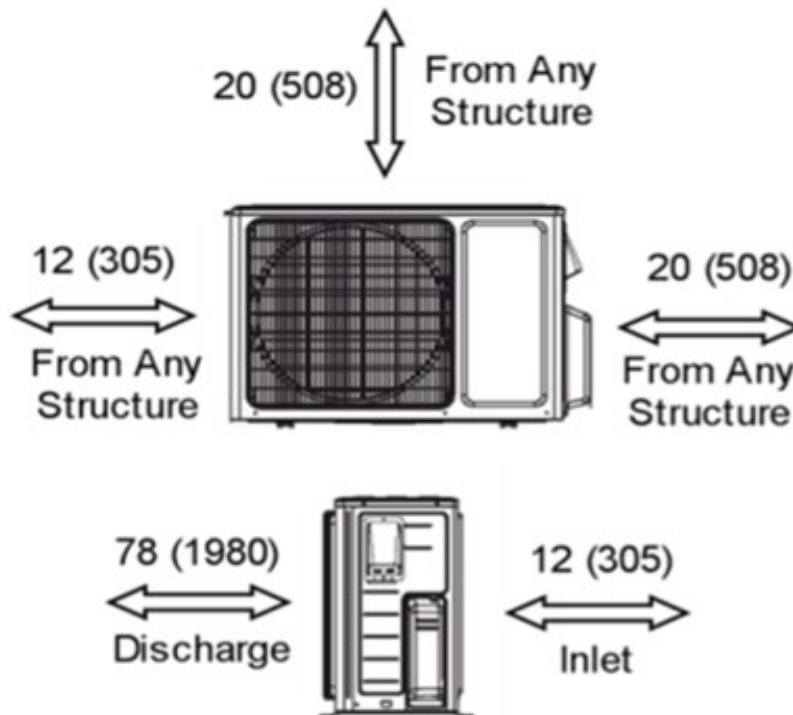
Units: inch (mm)

INDOOR



INSTALLATION SPECIFICATIONS

MINIMUM SPACING REQUIREMENTS



## DIMENSIONAL SPECIFICATIONS

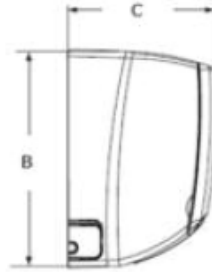
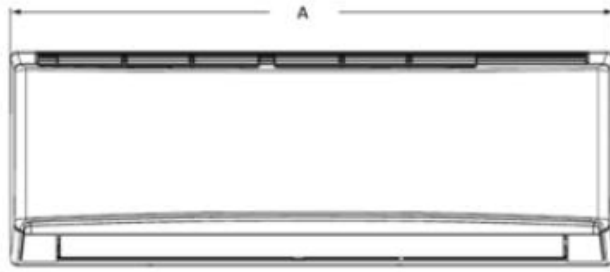
## SAP30HP230V1A

### INDOOR UNIT DIMENSIONS

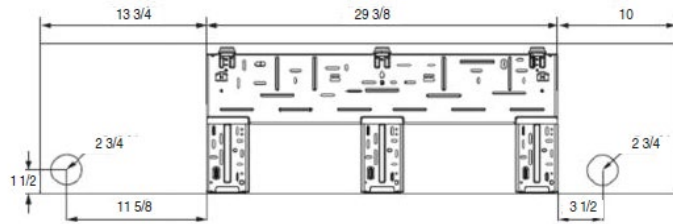
Model No: SAPU30HP230V1AH



Units: inch



Dimensions	
A	53.1
B	12.8
C	10.0



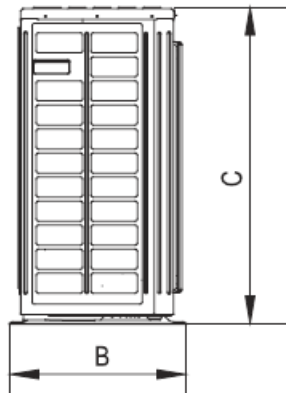
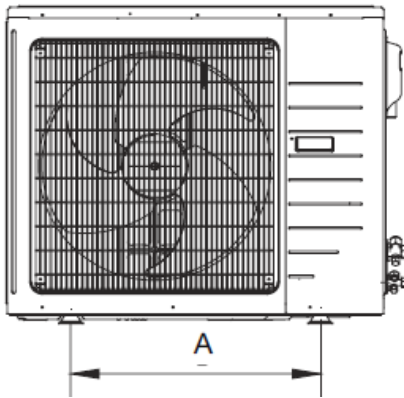
Weight (Net/Gross) 41.9/51.8 lbs

Liquid Line Valve	1/4-in OD Flared
Gas Line Valve	5/8-in OD Flared
Drain Connector	5/8-in OD

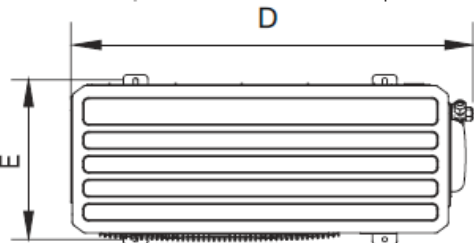
### OUTDOOR UNIT DIMENSIONS

Model No: SAP30HP230V1AO

Units: inch



Dimensions	
A	23.2
B	17.3
C	43.5
D	43.5
E	15.8



Weight (Net/Gross) 229.3/240.3 lbs

Liquid Line Valve	1/4-in OD Flared
Gas Line Valve	5/8-in OD Flared

**Notes:**

1. Recommended Interconnecting Cable Type 14 AWG-4 Stranded Copper Conductors THHN 600V Wire
2. Power wiring cable size must comply with applicable national and local codes.
3. Test conditions are based on AHRI 210/240.

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