



**ULTRA HEAT**

**ULTRA COOL**

Multi-Room Ductless heat-pump systems 48,000 BTU

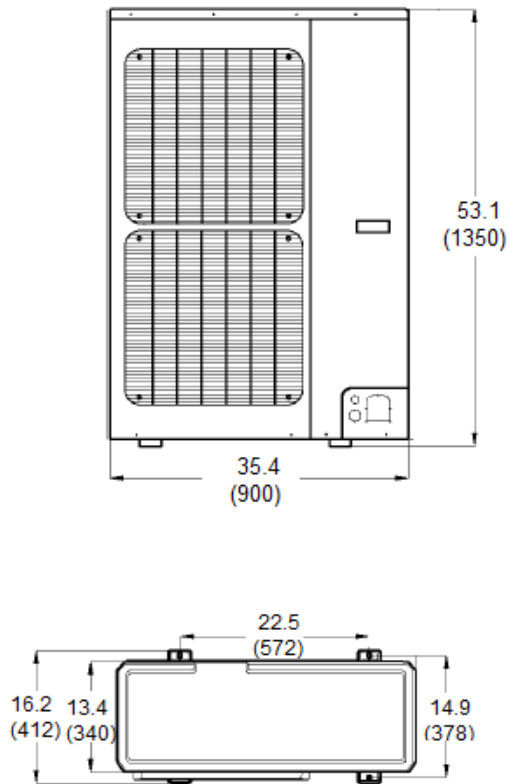
<b>Submittal Data: GWHD(48S)HD3DO</b>		48,000 BTUH
Job Name	Location	Date
Purchaser	Engineer	
Submitted To	For <input type="checkbox"/> Reference <input type="checkbox"/> Approval <input type="checkbox"/> Construction	
Unit Designation	Schedule No.	
<b>GENERAL FEATURES</b> <ul style="list-style-type: none"> <li>-G10 DC Inverter Technology - 2 Stage / 3 Cylinder</li> <li>-2-Way, 3-Way &amp; 5-Way Branch Units Boxes (Sold Separately) *mandatory</li> <li>-Acrylic Resin / Anti-Corrosion Coil Protection</li> <li>-Intelligent Defrost, heated drain pan and crank case heater</li> <li>-Auto Restart on Power Outages</li> <li>-10 yr. unlimited Parts Warranty</li> <li>-Ultra low ambient heating.</li> </ul>		
<b>System Ratings</b>	<b>Outdoor Unit Data</b>	
<b>Cooling</b> Rated Capacity 48,000 BTU/H Capacity Range 3,412-54,592 BTU/H Power Input (Max) 5,430 W SEER 18.0 EER 8.8	<b>Compressor</b> Type DC Inverter Driven Rotary RLA 29.0 A  <b>Fan Motor</b> Output Power 2 x 1/6HP FLA 2 x 1.0 A Air Flow Ea.(Max) 3,531 CFM	
<b>Heating at 47° F</b> Rated Capacity 54,000 BTU/H Capacity Range 4,094-59,369 BTU/H Input Power (Max) 4,950 W HSPF 10.0 COP 3.2	<b>Sound Pressure Level</b> Cooling 56 dB(A) Heating 56 dB(A)  <b>Weight (Net/ Shipping)</b> 307/331 lbs	
<b>Heating at 17° F</b> Rated Capacity 36,400 BTU/H Capacity (Max) 53,418 BTU/H	<b>Refrigerant Piping Data</b>	
<b>Operating Range</b> Cooling (Max) 129°F (54°C) (Min) 32°F (0°C) Heating (Max) 81°F (27°C) (Min) -31°F (-35°C)	Max. Number of Indoor Units 6 Connection Method OD Unit (Flared) 3/8 x 5/8 Refrigerant Type R410A Refrigerant Charge 229.3 oz Additional Charge Per Line Length 0.5-oz/ft Factory Charge for Total Line Length 98-ft  Max. Number of BU Boxes 3  Total Refrigerant Pipe Length 443-ft Max Refrigerant Piping Length to any Indoor Unit 230-ft Min Refrigerant Piping Length to any Indoor Unit 10-ft  Max Elevation between Indoor Units 49-ft Max Lift from Outdoor to Indoor Unit 98-ft Max Drop from Outdoor to Indoor Unit 98-ft	
<b>Power Supply</b> Normal Operational Voltage 208/230 V, 1 Phase, 60 Hz Voltage Range 187 - 253 V Main Power Wire Size 6 AWG Interconnecting Wire Size (Min.) 18 AWG MCA 39 A MOCP/Breaker Size 60 A		

# DIMENSIONAL SPECIFICATIONS

Units: inch (mm)

## 48,000 BTUH MODEL

Model 48,000 BTUH 230V

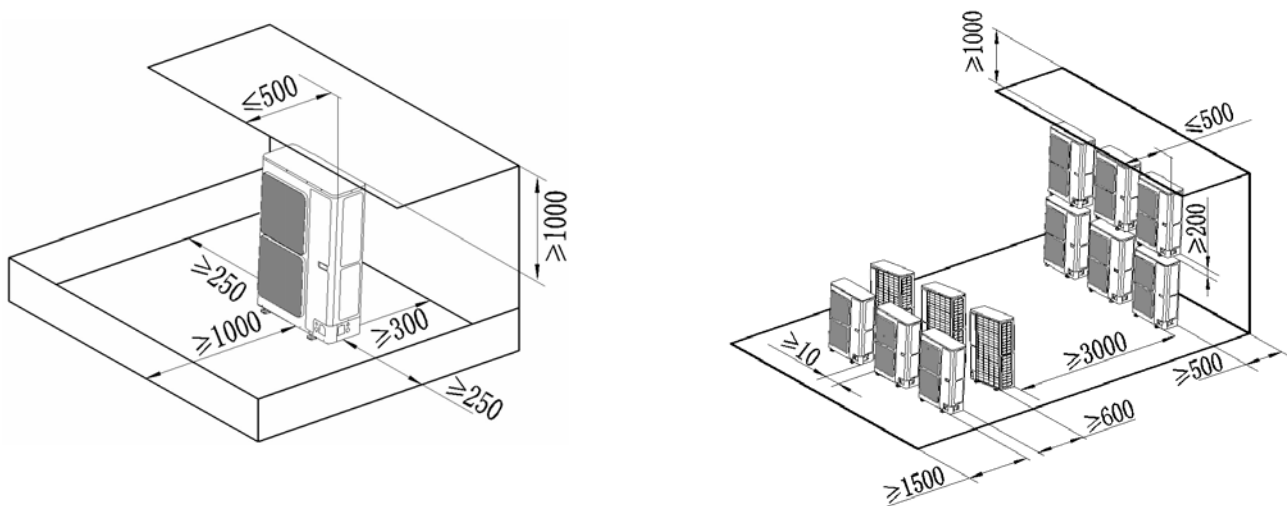


Net Weight	307 lbs
Shipping Weight	331 lbs

Liquid Line Port Size	3/8-in OD Flared
Suction/Gas Line Port Size	5/8-in OD Flared

## MINIMUM SPACING REQUIREMENTS

Units: inch (mm)



**Notes:**

1. Communication Cable minimum 18 AWG Type Stranded Copper Conductors THHN 300V Unshielded Wire
2. Power wiring cable size must comply with applicable national and local codes.

# EXTENDED RATINGS

## HEATING PERFORMANCE (BtuH)\*

**ULTRA HEAT**

Outdoor Ambient Temperature (DB)	Indoor Entering Air Temperatures								
	68°F DB			73°F DB			80°F DB		
	57°F WB			61°F WB			67°F WB		
	TC	Power Input (KW)	COP	TC	Power Input (KW)	COP	TC	Power Input (KW)	COP
-31°F	29,651	6.30	1.38	31,802	6.12	1.52	31,802	6.01	1.55
-22°F	36,502	6.36	1.68	36,351	6.18	1.72	36,351	6.08	1.75
-13°F	42,102	6.53	1.89	41,725	6.35	1.93	41,725	6.24	1.96
-5°F	48,000	6.70	2.10	47,600	6.52	2.14	47,600	6.41	2.18
0°F	49,012	6.72	2.14	48,914	6.53	2.20	48,914	6.42	2.23
5°F	50,815	6.75	2.21	50,628	6.57	2.26	50,628	6.46	2.30
10°F	51,568	6.70	2.26	51,357	6.52	2.31	51,357	6.41	2.35
17°F	53,541	6.60	2.38	53,418	6.42	2.44	53,418	6.31	2.48
19°F	55,000	6.50	2.48	54,482	6.31	2.53	54,482	6.21	2.57
24°F	56,300	6.43	2.57	56,100	6.25	2.63	56,100	6.13	2.68
32°F	59,000	6.40	2.70	58,800	6.20	2.78	58,800	6.10	2.83
41°F	61,000	6.23	2.87	60,200	6.05	2.92	60,000	5.94	2.96
43°F	61,520	6.10	2.96	60,520	5.90	3.01	60,850	5.80	3.07
47°F	63,120	6.20	2.98	58,120	5.53	3.08	56,450	5.27	3.14
53°F	63,120	6.00	3.08	58,120	5.40	3.15	56,450	5.14	3.22
59°F	63,120	5.60	3.30	58,120	5.10	3.34	56,450	4.94	3.35
64°F	63,120	4.86	3.81	58,120	4.39	3.88	56,450	4.24	3.90
70°F	63,120	4.45	4.16	58,120	4.00	4.26	56,450	3.82	4.33
75°F	63,120	4.23	4.37	58,120	3.76	4.53	56,450	3.61	4.58
78°F	63,120	4.09	4.52	58,120	3.52	4.84	56,450	3.40	4.87

\* Maximum system capacity  
 TC- Total Capacity ( BtuH)  
 COP- Coefficient of Performance

# TYPICAL PIPING CONFIGURATION

