

**Submittal Data: MULTI18HP230V1CO** 18,000 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**
- Dual Indoor Units (2-Port)
  - EnergyStar Rated
  - G10 DC Inverter Technology
  - Quiet Operation - Both Indoor & Outdoor
  - Acrylic Resin/Anti-Corrosion Coil Protection Inside & Out
  - Intelligent Defrost
  - Auto Restart on Power Outages
  - Multi-point Diagnostics
  - Limited 5 yr Parts Warranty



AHRI Certified Ref No: 9958975 (non-ducted) & 9956591 (ducted)

**System Ratings**

Non-Ducted Indoor	
Rated Cooling Capacity	18,000 BTUH
Cooling Capacity (min-max)	7,000-21,000 BTUH
Rated Heating Capacity	19,000 BTUH
Heating Capacity (min-max)	8,530-22,600 BTUH
SEER/EER	22.0/12.5
HSPF/COP	11.0/3.7

Ducted Indoor	
Rated Cooling Capacity	18,000 BUTH
Cooling Capacity (min-max)	7,000-21,000 BUTH
Rated Heating Capacity	19,000 BTUH
Heating Capacity (min-max)	8,530-22,600 BTUH
SEER/EER	16.0/11.5
HSPF/COP	8.5/3.1

**Operating Range**

Cooling (min-max)	0 - 118°F
	-18 - 48°C
Heating (min-max)	-4 - 75°F
	-20 - 24°C

**Power Supply**

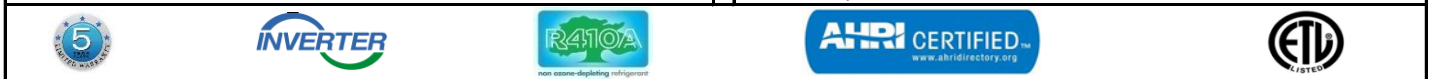
Normal Operational Voltage	208/230 V, 1 Phase, 60 Hz
Voltage Range	187 - 253 V
Main Power Wire Size	12-2 AWG
Interconnecting Cable Wire Size	14-4 AWG
MCA	16.0 A
MOCP/Breaker Size	25 A

**Outdoor Unit Data**

<b>Compressor</b>	Type	DC Inverter Driven Rotary
	RLA	10.8
<b>Fan Motor</b>	Output Power	60 W
	FLA	0.6 A
	Air Flow (Max)	1883 CFM
<b>Sound Pressure</b>	Cooling	56 db(A)
	Heating	56 db(A)
<b>Dimensions &amp; Weights</b>	Unit Dimensions (LxHxD)	38.0 x 27.6 x 15.6 -in
	Weight (Net/Shipping)	114.4/124.3 LBS
	Min. Number of Indoor Units	2
	Max. Number of Indoor Units	2

**Refrigerant Piping Data**

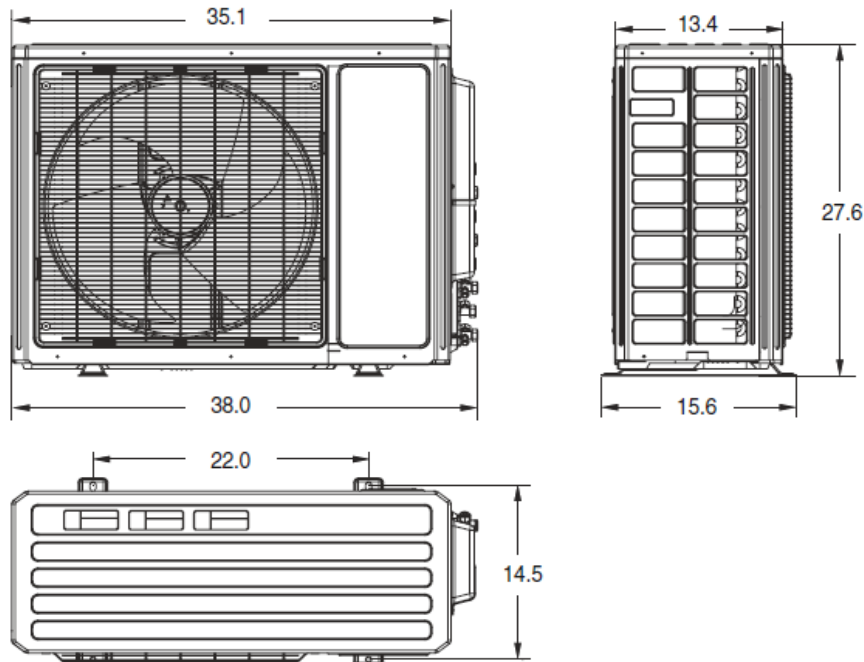
Refrigerant Type	R410A
Refrigerant Charge	56.4 oz
Additional Charge Per Line Length	0.21-oz/ft
Connection Method	Flared
Factory Charge for Total Line Length	33-ft
Total Refrigerant Pipe Length	65-ft
Max Refrigerant Piping Length to any Indoor Unit	33-ft
Min Refrigerant Piping Length to any Indoor Unit	10-ft
Max Elevation between Indoor Units	33-ft
Max Lift from Outdoor to Indoor Unit	33-ft
Max Drop from Outdoor to Indoor Unit	33-ft



Units: inch

**18,000 BTUH MODEL**

Model # MULTI18HP230V1CO 18,000 BTUH 230V



**Suction/Gas Line Port Size**

Port A	3/8-in OD Flared
Port B	3/8-in OD Flared

**Liquid Line Port Size**

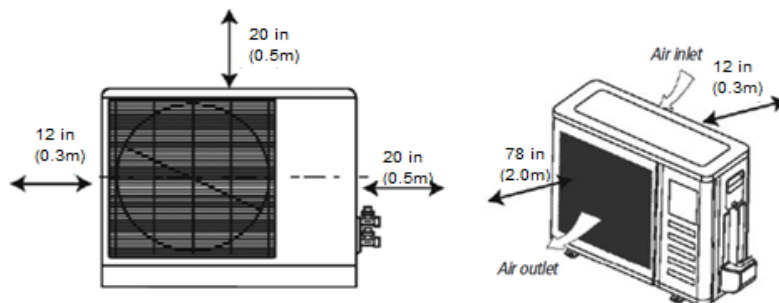
Port A	1/4-in OD Flared
Port B	1/4-in OD Flared

**Factory Supplied Piping Adapters**

Adapter	P/N	Qty
3/8 (F) to 1/2 (M)	6643008	2

**MINIMUM SPACING REQUIREMENTS**

Units: inch (mm)



**Notes:**

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

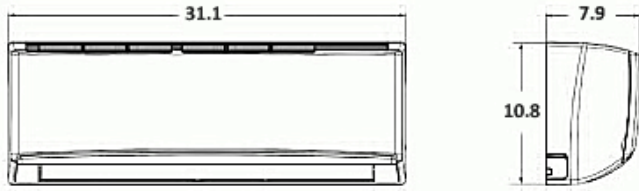
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Units: inch

Model # LIVS09HP230V1xH 9,000 BTUH 230V

**9,000 BTUH MODEL**



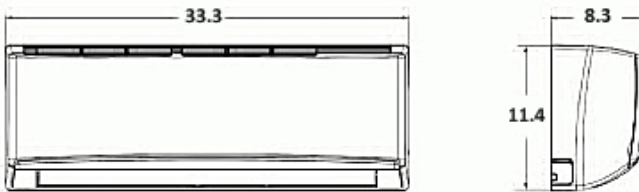
Liquid Line Valve	1/4-in OD Flared
Suction/Gas Line Valve	3/8-in OD Flared
Drain Connector	5/8-in OD

Rated Cooling (BtuH)	Rated Heating (BtuH)	Max. CFM	Dehum (Pt/Hr)	Min/Max Sound Power dB(A)**
9,000	9,500	318	1.7	28/43

*Note: Size Refrigerant lines based on evaporator port sizes.*

Model # LIVS12HP230V1xH 12,000 BTUH 230V

**12,000 BTUH MODEL**



Liquid Line Valve	1/4-in OD Flared
Suction/Gas Line Valve	3/8-in OD Flared
Drain Connector	5/8-in OD

Rated Cooling (BtuH)	Rated Heating (BtuH)	Max. CFM	Dehum (Pt/Hr)	Min/Max Sound Power dB(A)**
12,000	13,000	400	3.0	29/45

*Note: Size Refrigerant lines based on evaporator port sizes.*

\*\*Sound Power ratings are per AHRI 270 and AHRI 350

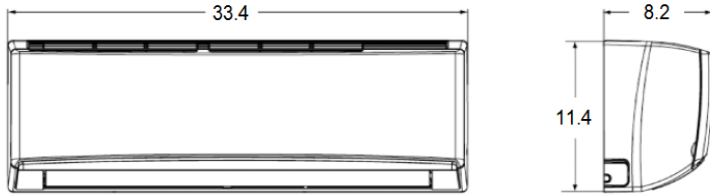
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Units: inch

**9,000 AND 12,000 BTUH MODELS**

Model # VIR09HP230V1xH 9,000 BTUH 230V  
 Model # VIR12HP230V1xH 12,000 BTUH 230V



9,000 BTU	
Liquid Line Valve	1/4-in OD Flared
Suction/Gas Line Valve	3/8-in OD Flared
Drain Connector	5/8-in OD

12,000 BTU	
Liquid Line Valve	1/4-in OD Flared
Suction/Gas Line Valve	1/2-in OD Flared
Drain Connector	5/8-in OD

*Note: Size Refrigerant lines based on evaporator port sizes.*

Indoor Capacity Size	Rated Cooling (BtuH)	Rated Heating (BtuH)	Max. CFM	Dehum (Pt/Hr)	Min/Max Sound Power dB(A)**
9,000 BTUH	9,000	11,000	377	1.7	29/43
12,000 BTUH	12,000	13,000	400	3.0	29/45

\*\*Sound Power ratings are per AHRI 270 and AHRI 350

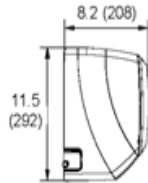
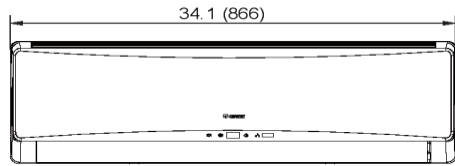
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Units: inch (mm)

**9,000 AND 12,000 BTUH MODELS**

Model # TERRA09HP230V1AH 9,000 BTUH 230V

Model # TERRA12HP230V1AH 12,000 BTUH 230V



Liquid Line Valve	1/4-in OD Flared
Suction/Gas Line Valve	1/2-in OD Flared
Drain Connector	5/8-in OD

*Note: Size Refrigerant lines based on evaporator port sizes.*

Rated Cooling (BtuH)	Rated Heating (BtuH)	Max. CFM	Dehumid. (Pt/Hr)	Min/Max Sound Power dB(A)**
9,000	9,800	418	1.9	23/43
12,000	13,000	453	3	24/44

\*\*Sound Power ratings are per AHRI 270 and AHRI 350

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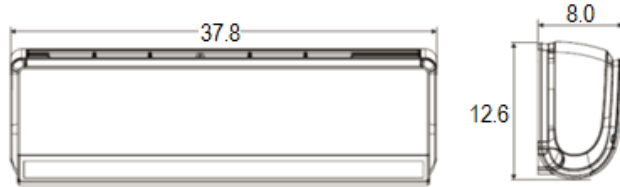
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Units: inch



**9,000 BTUH MODELS**

Model # CROWN09HP230V1xH 9,000 BTUH 230V



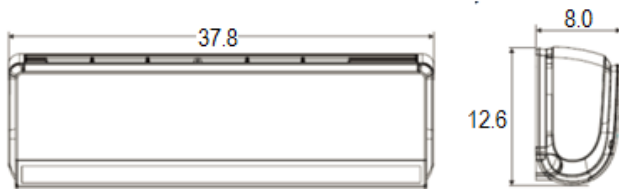
Liquid Line Valve	1/4-in OD Flared
Suction/Gas Line Valve	1/2-in OD Flared
Drain Connector	5/8-in OD

*Note: Size Refrigerant lines based on evaporator port sizes.*

Rated Cooling (BtuH)	Rated Heating (BtuH)	Max. CFM	Dehumid. (Pt/Hr)	Min/Max Sound Power dB(A)**
9,000	9,000	412	1.7	22/41

**12,000 BTUH MODEL**

Model # CROWN12HP230V1xH 12,000 BTUH 230V



Liquid Line Valve	1/4-in OD Flared
Suction/Gas Line Valve	1/2-in OD Flared
Drain Connector	5/8-in OD

*Note: Size Refrigerant lines based on evaporator port sizes.*

Rated Cooling (BtuH)	Rated Heating (BtuH)	Max. CFM	Dehumid. (Pt/Hr)	Min/Max Sound Power dB(A)**
12,000	13,000	471	3.0	23/42

**COOLING CAPACITY (BTUH)**

<b>Indoor Units Combinations</b>	<b>Rated System Capacity (BtuH)</b>	<b>Indoor Unit A (BtuH)</b>	<b>Indoor Unit B (BtuH)</b>	<b>Indoor Unit C (BtuH)</b>	<b>Indoor Unit D (BtuH)</b>
9K+9K	18,000	9,000	9,000	NA	NA
9K+12K	21,000	9,000	12,000	NA	NA

**HEATING CAPACITY (BTUH)**

<b>Indoor Units Combinations</b>	<b>Rated System Capacity (BtuH)</b>	<b>Indoor Unit A (BtuH)</b>	<b>Indoor Unit B (BtuH)</b>	<b>Indoor Unit C (BtuH)</b>	<b>Indoor Unit D (BtuH)</b>
9K+9K	19,000	9,500	9,500	NA	NA
9K+12K	22,500	9,500	13,000	NA	NA

Capacity data is based on the following conditions :

Cooling Nominal Test Conditions

Indoor: 80°F DB/67°F WB

Outdoor: 95°F DB/75°F WB

Heating Nominal Test Conditions

Indoor: 70°F DB/60°F WB

Outdoor: 47°F DB/43°F W

**COOLING PERFORMANCE**

		Indoor Ambient Temperature											
		70°F (21°C)			75°F (24°C)			80°F (27°C)			90°F (32°C)		
		59°F (15°C)			63°F (17°C)			67°F (19°C)			73°F (23°C)		
		TC (BtuH)	SC (BtuH)	Input Power (watts)	TC (BtuH)	SC (BtuH)	Input Power (watts)	TC (BtuH)	SC (BtuH)	Input Power (watts)	TC (BtuH)	SC (BtuH)	Input Power (watts)
Outdoor Ambient Temperature (DB)	-0.4°F (-18°C)	10,850	8,510	700	12,230	9,600	740	12,930	10,140	770	14,570	11,430	820
	5°F (-15°C)	11,120	8,720	700	12,550	9,840	750	13,420	10,530	770	14,940	11,720	820
	14°F (-10°C)	11,480	9,010	720	12,950	10,160	760	13,690	10,740	790	15,430	12,100	850
	23°F (-5°C)	12,580	9,870	720	14,330	11,240	760	15,420	12,090	790	16,960	13,300	840
	32°F (0°C)	13,226	10,375	719	15,064	11,814	763	15,489	12,143	789	17,829	13,989	841
	41°F (5°C)	13,905	10,907	756	15,836	12,419	802	16,283	12,766	829	18,743	14,707	884
	50°F (10°C)	14,484	11,361	788	16,496	12,937	835	16,961	13,298	864	19,524	15,319	921
	59°F (15°C)	15,260	11,970	830	17,380	13,630	880	17,870	14,010	910	20,570	16,140	970
	68°F (20°C)	17,281	13,553	1,221	18,361	14,398	1,260	19,621	15,389	1,337	22,501	17,650	1,430
	77°F (25°C)	17,077	13,395	1,254	18,163	14,246	1,293	19,441	15,249	1,375	22,321	17,504	1,474
	86°F (30°C)	16,235	12,733	1,403	17,317	13,584	1,447	18,901	14,824	1,535	21,631	16,963	1,645
	95°F (35°C)	15,367	12,052	1,507	16,441	12,891	1,551	18,001	14,119	1,650	20,719	16,252	1,766
	104°F (40°C)	14,623	11,469	1,557	15,691	12,307	1,606	17,533	13,754	1,705	19,975	15,662	1,826
	113°F (45°C)	13,873	10,879	1,590	14,941	11,718	1,639	16,789	13,164	1,744	19,225	15,079	1,865
118°F (48°C)	13,501	10,587	1,606	14,401	11,292	1,656	16,201	12,709	1,760	18,541	14,544	1,881	

**HEATING PERFORMANCE**

		Indoor Ambient Temperature											
		70°F (21°C)			75°F (24°C)			80°F (27°C)			90°F (32°C)		
		59°F (15°C)			63°F (17°C)			67°F (19°C)			73°F (23°C)		
DB		TC (BtuH)	SC (BtuH)	Input Power (watts)	TC (BtuH)	SC (BtuH)	Input Power (watts)	TC (BtuH)	SC (BtuH)	Input Power (watts)	SC (BtuH)	Input Power (watts)	Input Power (watts)
Outdoor Ambient Temperature (DB)	-4°F (-20°C)	10,260	10,260	1,000	9,970	9,970	1,020	9,780	9,780	1,050	9,530	9,530	1,080
	0°F (-18°C)	11,121	11,121	1,095	10,800	10,800	1,117	10,598	10,598	1,158	10,319	10,319	1,185
	5°F (-15°C)	11,428	11,428	1,119	11,099	11,099	1,142	10,891	10,891	1,184	10,606	10,606	1,212
	7°F (-14°C)	11,736	11,736	1,144	11,397	11,397	1,167	11,184	11,184	1,210	10,893	10,893	1,238
	17°F (-8°C)	12,597	12,597	1,193	12,229	12,229	1,217	11,997	11,997	1,262	11,683	11,683	1,291
	28°F (-2°C)	14,230	14,230	1,271	13,856	13,856	1,297	13,458	13,458	1,345	13,298	13,298	1,376
	38°F (3°C)	17,693	17,693	1,463	17,319	17,319	1,492	16,927	16,927	1,548	16,761	16,761	1,583
	47°F (8°C)	19,997	19,997	1,522	19,392	19,392	1,553	19,006	19,006	1,610	18,483	18,483	1,647
	57°F (14°C)	20,657	20,657	1,551	20,033	20,033	1,583	19,635	19,635	1,641	19,089	19,089	1,679
	68°F (20°C)	21,490	21,490	1,600	20,840	20,840	1,640	20,430	20,430	1,700	19,860	19,860	1,740
	77°F (25°C)	21,990	21,990	1,640	21,330	21,330	1,680	20,900	20,900	1,740	20,320	20,320	1,780

**LEGEND**

- DB --- Dry Bulb
- WB --- Wet Bulb
- TC --- Total Net Cooling Capacity (BtuH)
- SC --- Sensible Capacity (BtuH)
- Input Power---(Watts)

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