

SUBMITTAL DATA SHEET

10 RT (H,Y)VAHP120B41S (Consists of one (H,Y)VAHP120B41S module.)

Job Name:			Location:		
Purchaser:			Order No.:		
Engineer:					
Submitted To:		For:	Ref:	Approval:	
Submitted By:			Date:		
Unit Designation:			Schedule No.:		Model No.:

FEATURES:

- Two-pipe system for ductless and ducted applications
- Inverter-driven scroll compressor
- Long refrigerant piping lengths – up to 3,280 feet total pipe run

ACCESSORIES:

- Piping Kit: for details see Pipe Accessories Submittal
- Hail/Snow Protection Hood: for details see Snow/Hail Guards Kit Submittal

NOTES:

- Rating Conditions are shown as below with piping length 24 feet 7-3/16 inch, piping height 0 feet.
 - Cooling**
Indoor Air Inlet Temperature: 80 DB, 67F WB
Outdoor Air Inlet Temperature: 95F DB
 - Heating**
Indoor Air Inlet Temperature: 70 F DB
Outdoor Air Inlet Temperature: 47F DB, 43F WB
- Rating Conditions are based on the AHRI 1230 test standard.
- For more details, please refer to Engineering manual "Operation range" section.
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- External static pressure can be changed via DSW setting 0.24 in.W.G. (60Pa).

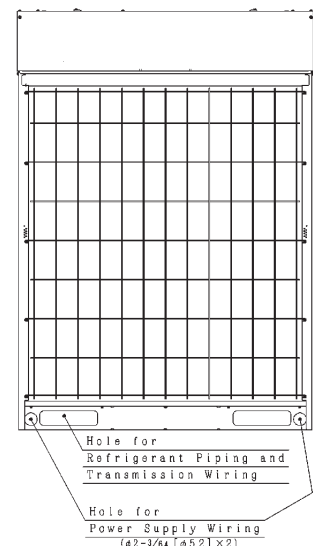
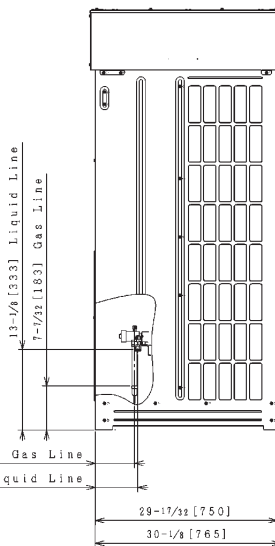
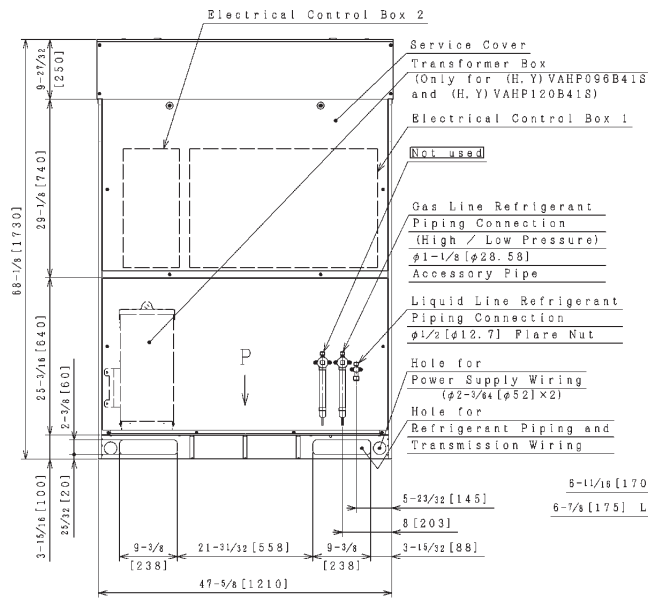
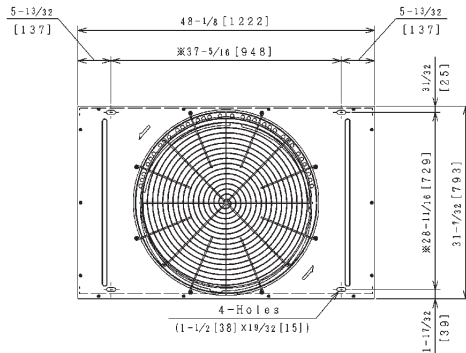
Category		Ton		10RT	
Model (combination)				(H,Y)VAHP120B41S	
Model (individual)		Unit A		-	
		Unit B		-	
		Unit C		-	
		Unit D		-	
Power Supply				460V/ 3PH 60Hz	
Capacity (Nominal) ¹	Cooling	Capacity (Nominal)	Btu/h	(kW)	120,000 (35.2)
		Power input	kW		10.57
		Current input	A		15.8
	Heating	Capacity (Nominal)	Btu/h	(kW)	135,000 (39.6)
		Power input	kW		9.73
		Current input	A		14.4
Efficiency Ratings ²	Cooling	Capacity (Rated)	Btu/h	(kW)	114,000 (33.4)
		EER	Btu/Wh	(W/W)	11.20 (3.29)
		IEER	Btu/Wh	(Wh/Wh)	19.80 (5.81)
	Heating	Capacity (Rated)	Btu/h	(kW)	129,000 (37.8)
		COP	W/W		3.66
		Capacity	Btu/h	(kW)	89,000 (26.1)
Low	COP		W/W	2.25	
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)	
	Outdoor ³	°F DB (°C DB)		14(-10)~118(48)	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)	
	Outdoor ⁴	°F WB (°C WB)		-4(-20)~59(15)	
Cabinet Color (Munsell Code)				2.5Y 8/2	
Outer Dimensions (H x W x D)		in		68-1/8 x 48-1/8 x 31-7/32	
Package Dimensions (H x W x D)		in		74-1/4 x 50-7/8 x 34-1/32	
Weight	Net	lbs	(kg)	798 (362)	
	Gross	lbs	(kg)	856 (388)	
Connection Ratio		Total Indoor Unit Capacity %		130 - 60	
		Max. (Recommendation) indoor units/system		25(16)	
Heat Exchanger	Type			Multi-Pass Cross-Finned Tube	
	Material			Cu-Al (Anti-corrosion)	
Compressor	Type	Inverter			DA65PHD×1
		Fixed Speed			DA65PHC×1
	Motor Output (Pole)	kW (Pole)		6.0(6)+4.4(2)	
	Start Method			inverter	
	Operation Range			15~100	
	Refrigeration Oil Type			FVC68D	
Crank Case Heater		W×Q'ty		40.8(230V)×4	
Fan	Type			Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.91(8)	
	Quantity	Q'ty		1	
	Air Flow Rate	cfm	(m ³ /min)	7413 (210)	
	External static pressure ⁵	in.WG	(Pa)	0 (0)	
	Drive			Direct-drive	
Electrical	Min Circuit Amps	A		25	
	Recommended Fuse/Breaker Size	A		30	
	Maximum Fuse Size	A		30	
Sound Pressure Level	Cooling (Night-Shift)	dB(A)		64 (57)	
	Heating	dB(A)		64	
Protection devices	Cycle			High pressure switch at 601psi (4.15MPa)	
	Inverter			Over-current protection	
	Compressor			Over-heat protection	
	PCB			Over-current protection	
Refrigerant	Type			R410A	
Refrigeration Oil	Charge amount	lbs	(kg)	20.9 (9.5)	
	Charge amount	gal/Unit	(l/Unit)	2.1 (7.9)	
Defrost Method				Reversed Refrigerant cycle	
Main Refrigerant Piping (Heat Pump)	High/Low Pressure Gas Line	in	(mm)	1-1/8 (28.58)	
	Liquid Line	in	(mm)	1/2 (12.7)	

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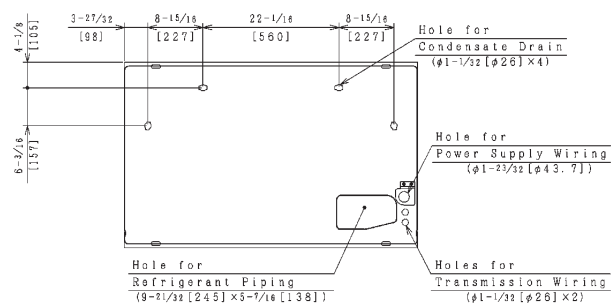
System Dimensions

Heat Pump Type

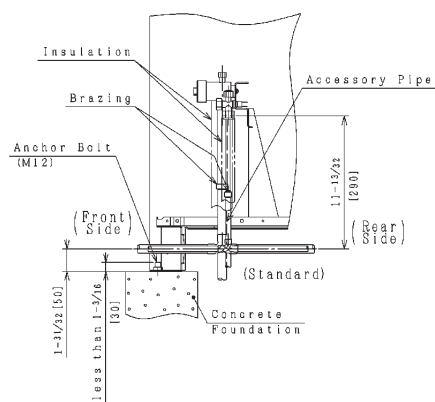
Model: (H,Y)VAHP120B41S



Viewed from P



Field Installation (Example)



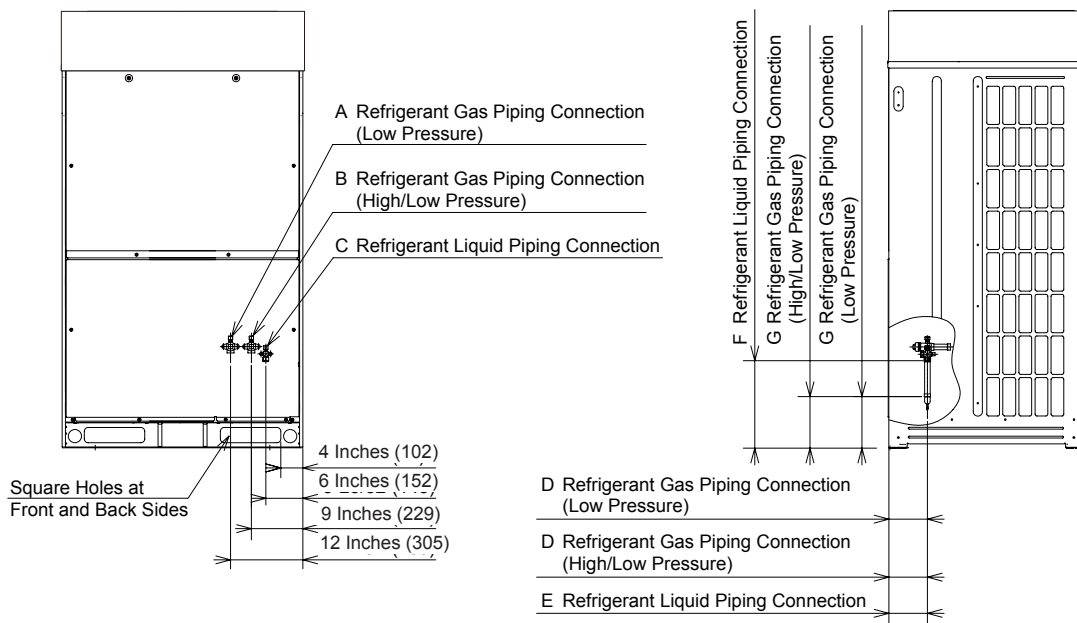
NOTES:

1. Drain water is discharged from the unit during the operation.
 - Ⓞ Choose a place where well drainage is available. Provide a groove for drain.
 - Ⓞ Do not provide an upward slope from the unit to avoid reverse flow of the drain. Provide a second drainpan under the outdoor unit, to collect drain water securely.
 - Ⓞ Do not use the drain boss (optional) in a cold area. (Drain water in the drain pipe may be frozen and the drain pipe may crack.)
2. The dimensions marked with ※ indicates the mounting pitch dimension for anchor bolts.

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Piping Connection Dimensions

Unit: inch (mm)



Model Type	Field Piping (*)					A	B	C	D	E	F	G
	Heat Recovery System		Heat Pump System		Liquid							
	Low Pressure Gas	High/Low Pressure Gas	Low Pressure Gas	High/Low Pressure Gas								
72	1-1/8 (28.58)	7/8 (22.2)	-	1-1/8 (28.58)	1/2 (12.7)	7/8 (22.2)	7/8 (22.2)	3/8 (9.52)	5-29/32 (150)	5-29/32 (150)	13-3/8 (340)	8-1/16 (205)
96	1-1/8 (28.58)	7/8 (22.2)	-	1-1/8 (28.58)	1/2 (12.7)	1 (25.4)	1 (25.4)	1/2 (12.7)	6-11/16 (170)	6-11/16 (170)	12-25/32 (325)	7-7/8 (200)
120	1-1/8 (28.58)	7/8 (22.2)	-	1-1/8 (28.58)	1/2 (12.7)	1 (25.4)	1 (25.4)	1/2 (12.7)	6-11/16 (170)	6-11/16 (170)	12-25/32 (325)	7-7/8 (200)

*Using the accessory pipe (refer to Table 3.6 "Factory-Supplied Accessories"), combine the piping size.

Figure 6.2 Refrigerant Piping Connection

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