

# SUBMITTAL DATA SHEET

8 RT (H,Y)VAHR096B41S (Consists of one (H,Y)VAHR096B41S module.)

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

## FEATURES:

- Three-pipe system for ductless and ducted applications
- Inverter-driven scroll compressor
- Air source simultaneous cooling and heating with Change-Over Box
- Long refrigerant piping lengths – up to 3,280 feet total pipe run

## ACCESSORIES:

- Change-Over Box (required for a heat recovery system): for details see Change-Over Box Submittals
- Piping Kit: for details see Pipe Accessories Submittal
- Hail/Snow Protection Hood: for details see Snow/Hail Guards Kit Submittal

### NOTES:

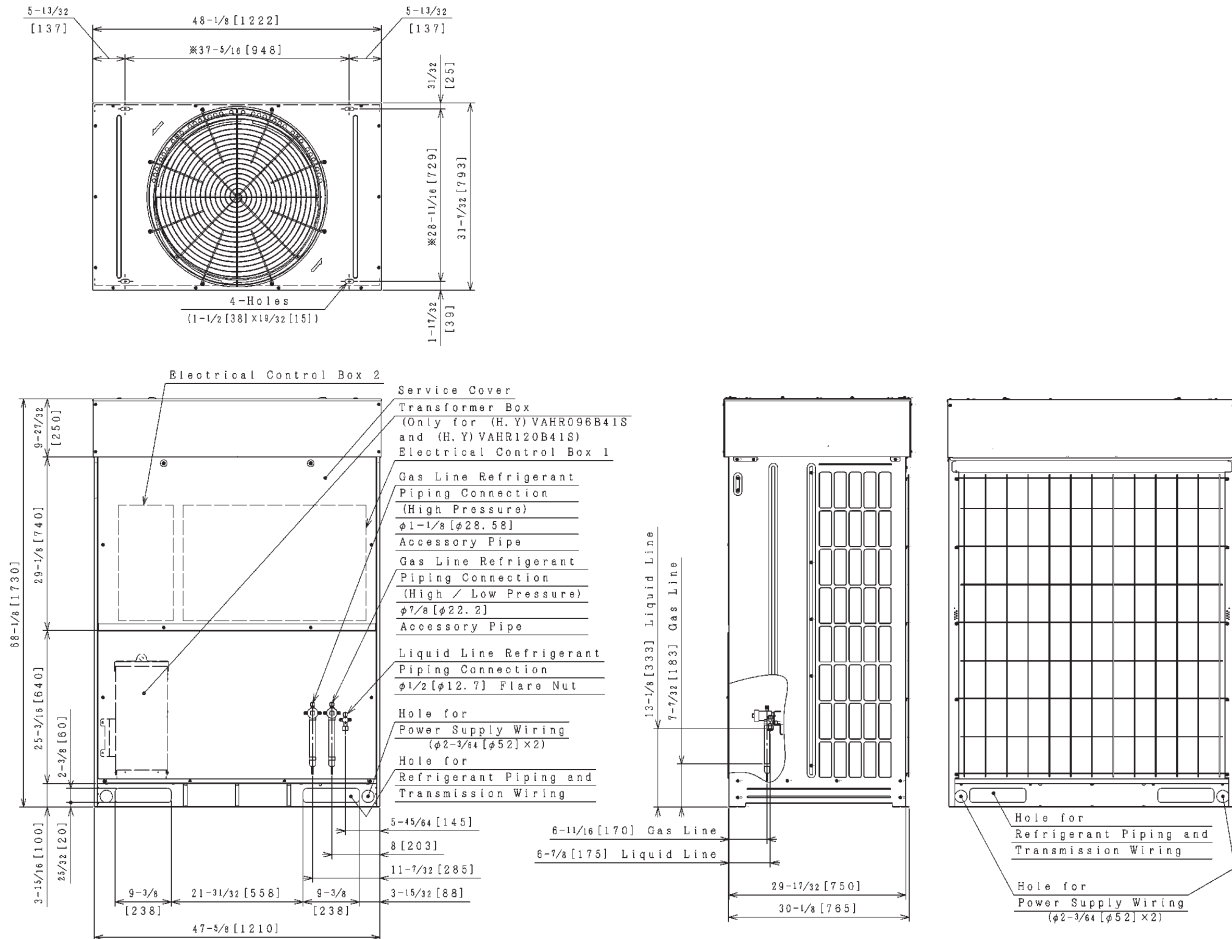
- Rating Conditions are shown as below with piping length 24 feet 7-3/16 inch, piping height 0 feet.  
Cooling  
Indoor Air Inlet Temperature: 80 DB, 67F WB  
Outdoor Air Inlet Temperature: 95F DB  
Heating  
Indoor Air Inlet Temperature: 70 F DB  
Outdoor Air Inlet Temperature: 47F DB, 43F WB
- Rating 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		8RT	
Model (combination)				(H,Y)VAHR096B41S	
Model (individual)		Unit A		-	
		Unit B		-	
		Unit C		-	
		Unit D		-	
Power Supply				460V/ 3PH 60Hz	
Capacity (Nominal) <sup>1</sup>	Cooling	Capacity (Nominal)	Btu/h	(kW)	96,000 (28.1)
		Power input	kW		7.61
		Current input	A		10.6
	Heating	Capacity (Nominal)	Btu/h	(kW)	108,000 (31.7)
		Power input	kW		7.33
		Current input	A		11.1
Efficiency Ratings <sup>2</sup>	Cooling	Capacity (Rated)	Btu/h	(kW)	92,000 (27.0)
		EER	Btu/Wh	(W/W)	13.10 (3.84)
		IEER	Btu/Wh	(Wh/Wh)	21.40 (6.28)
	Heating Hight	Capacity (Rated)	Btu/h	(kW)	103,000 (30.2)
		COP	W/W		3.88
	Heating Low	Capacity	Btu/h	(kW)	76,000 (22.3)
		COP	W/W		2.31
	Heat Recovery	SCHE	Btu/Wh		26.30
Cooling Operating Range	Indoor	°F WB (°C WB)		59(15)~73(23)	
	Outdoor <sup>3</sup>	°F DB (°C DB)		14(-10)~118(48)	
Heating Operating Range	Indoor	°F DB (°C DB)		59(15)~80(27)	
	Outdoor <sup>4</sup>	°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)	796	(361)
	Gross	lbs	(kg)	853	(387)
Connection Ratio	Total Indoor Unit Capacity	%		135 - 65	
	Max. (Recommendation) indoor units/system	-		21 (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)		4.8(6)+4.4(2)	
	Start Method	-		inverter	
	Operation Range	%		16~100	
	Refrigeration Oil Type	-		FVC68D	
Crank Case Heater		W×Qty		40.8 (230V) ×4	
Fan	Type	-		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.66(8)	
	Quantity	Qty		1	
	Air Flow Rate	cfm	(m <sup>3</sup> /min)	6884	(195)
	External static pressure <sup>5</sup>	in.WG	(Pa)	0 (0)	
	Drive	-		Direct-drive	
Electrical	Min Circuit Amps	A		21	
	Recommended Fuse/Breaker Size	A		30	
	Maximum Fuse Size	A		30	
Sound Pressure Level	Cooling (Night-Shift)	dB(A)		62	(57)
	Heating	dB(A)		62	
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	
	Charge amount	lbs	(kg)	18.7	(8.5)
Refrigeration Oil	Charge amount	gal/Unit	(l/Unit)	2.1	(7.9)
Defrost Method		-		Reversed Refrigerant cycle	
Main Refrigerant Piping (Heat Recovery)	Low Pressure Gas Line	in	(mm)	1-1/8	(28.58)
	High/Low Pressure Gas Line	in	(mm)	7/8	(22.2)
	Liquid Line	in	(mm)	1/2	(12.7)

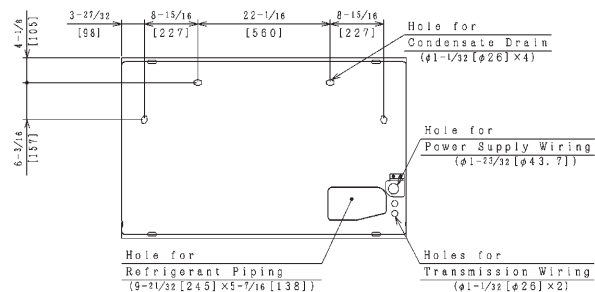
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# System Dimensions

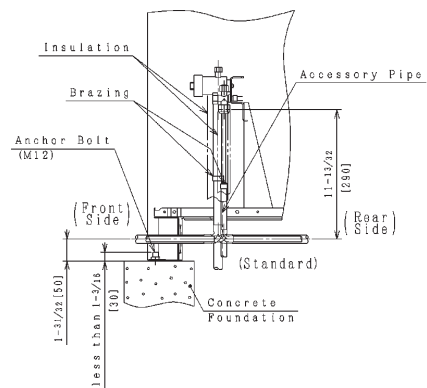
Heat Recovery Type Model:  
(H,Y)VAHR096B41S



Viewed from P



Field Installation  
(Example)



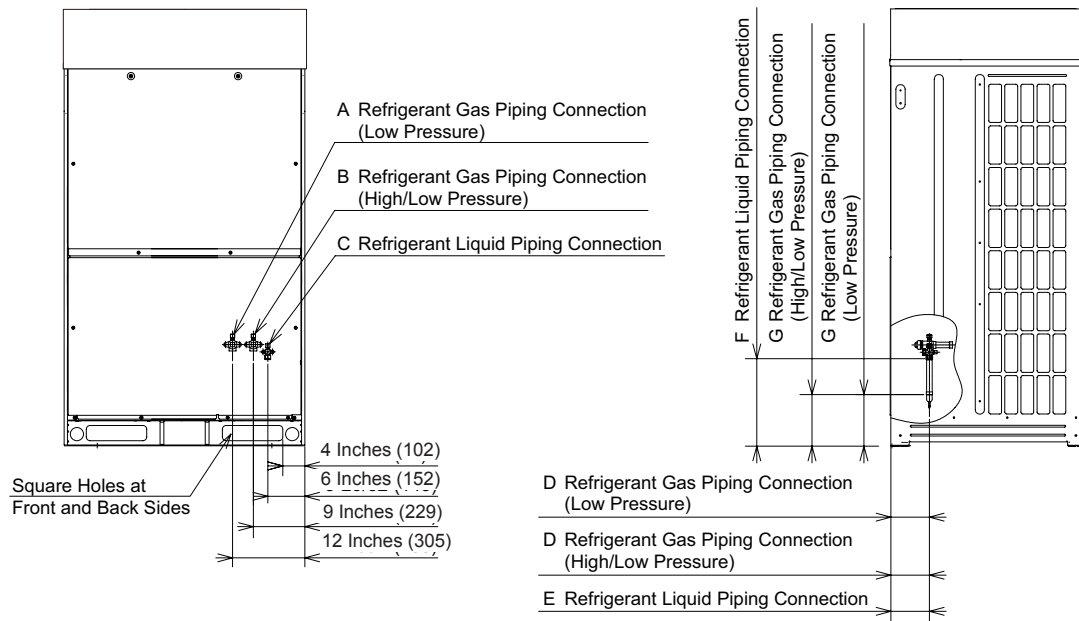
## NOTES:

- Drain water is discharged from the unit during the operation.
  - ① Choose a place where well drainage is available. Provide a groove for drain.
  - ② 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.
  - ③ 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.)
- 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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