

# SUBMITTAL DATA SHEET

6 RT (H,Y)VAHR072B41S (Consists of one (H,Y)VAHR072B41S 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:

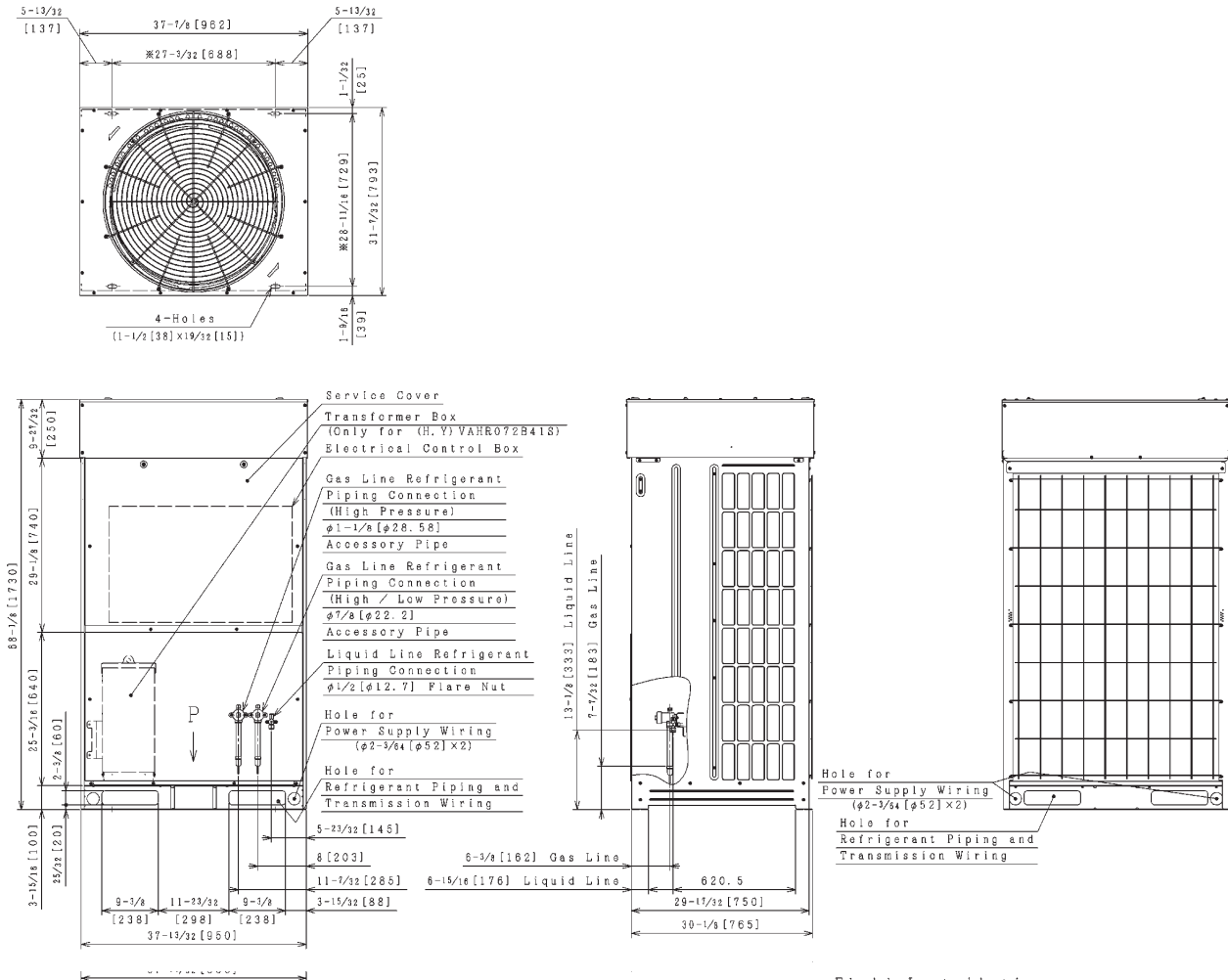
- Rating Conditions are shown as below with piping length 24 feet 7-3/16 inch, piping height 0 feet.  
Cooling  
Indoor Air Inlet Temperature: 80 DB, 67F WB  
Outdoor Air Inlet Temperature: 95F DB  
Heating  
Indoor Air Inlet Temperature: 70 F DB  
Outdoor Air Inlet Temperature: 47F DB, 43F WB
- Rating 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		6RT	
Model (combination)				(H,Y)VAHR072B41S	
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)	72,000 (21.1)
		Power input	kW		6.08
		Current input	A		8.5
	Heating	Capacity (Nominal)	Btu/h	(kW)	81,000 (23.7)
		Power input	kW		5.93
		Current input	A		8.3
Efficiency Ratings <sup>2</sup>	Cooling	Capacity (Rated)	Btu/h	(kW)	69,000 (20.2)
		EER	Btu/Wh	(W/W)	15.30 (4.49)
		IEER	Btu/Wh	(Wh/Wh)	24.80 (7.27)
	Heating High	Capacity (Rated)	Btu/h	(kW)	76,000 (22.3)
		COP	W/W		4.14
	Heating Low	Capacity	Btu/h	(kW)	55,000 (16.1)
		COP	W/W		2.48
	Heat Recovery	SCHE	Btu/Wh		22.60
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 37-7/8 x 31-7/32	
Package Dimensions (H x W x D)		in		74-1/4 x 40-5/8 x 34-1/32	
Weight	Net	lbs	(kg)	606	(275)
	Gross	lbs	(kg)	653	(296)
Connection Ratio	Total Indoor Unit Capacity	%		150 - 70	
	Max. (Recommendation) indoor units/system	-		18 (10)	
Heat Exchanger	Type	-		Multi-Pass Cross-Finned Tube	
	Material	-		Cu-Al (Anti-corrosion)	
Compressor	Type	Inverter		DA65PHD×1	
		Fixed Speed		-	
	Motor Output (Pole)	kW (Pole)		7.2(6)	
	Start Method	-		inverter	
	Operation Range	%		20~100	
	Refrigeration Oil Type	-		FVC68D	
Crank Case Heater		W×Qty		40.8 (230V) ×2	
Fan	Type	-		Propeller Fan	
	Motor Output (Pole)	kW (Pole)		0.49(8)	
	Quantity	Qty		1	
	Air Flow Rate	cfm	(m <sup>3</sup> /min)	6178	(175)
	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)		60	(55)
	Heating	dB(A)		60	
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)	16.1	(7.3)
Refrigeration Oil	Charge amount	gal/Unit	(l/Unit)	1.6	(6.0)
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)

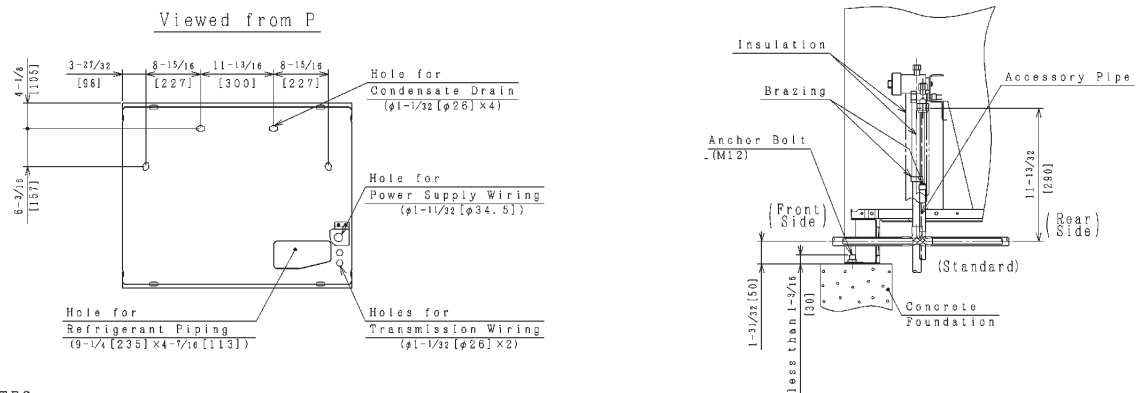
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# System Dimensions

## Heat Recovery Type Model: (H,Y)VAHR072B41S



### Field Installation (Example)



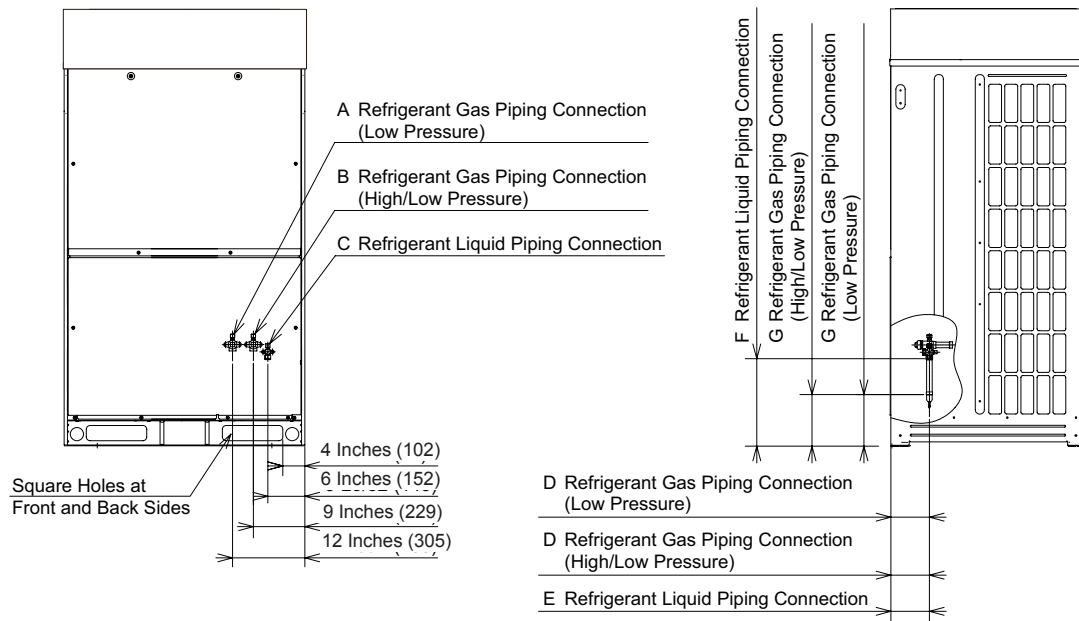
#### NOTES:

1. 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.)
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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