

# SUBMITTAL DATA SHEET

6 RT (H,Y)VAHR072B31S (Consists of one (H,Y)VAHR072B31S 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

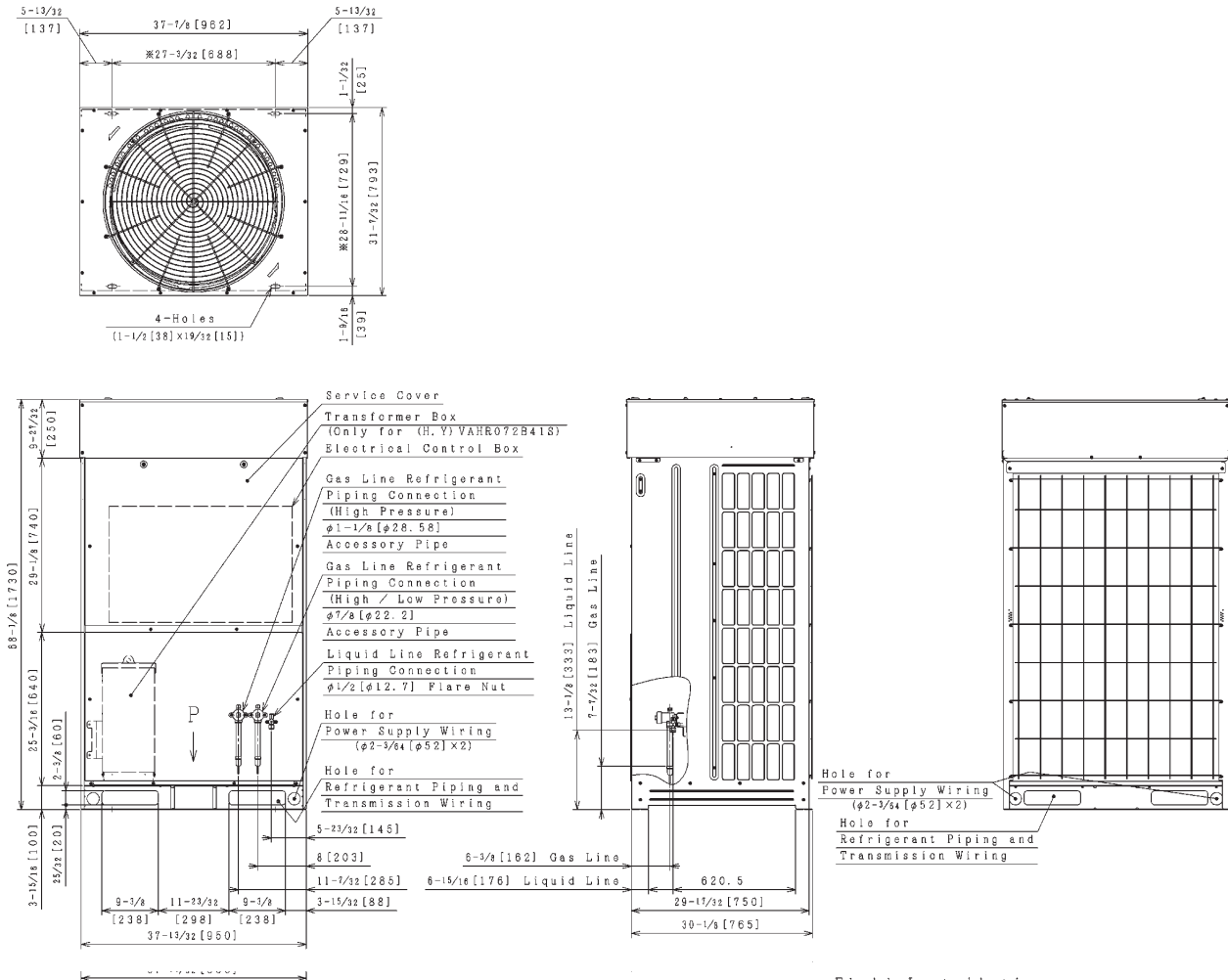
## NOTES:

- \*1 Rating Conditions are based on the AHRI 1230 test standard.
- \*2 Operation under harsh weather requires additional accessories.
- \*3 External static pressure can be changed to 0.24in.W.G.(60Pa).

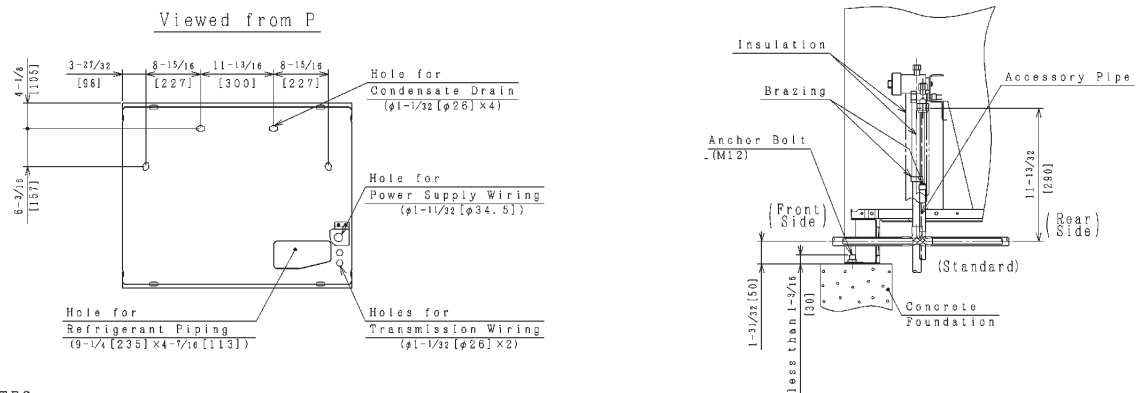
Category	Type	Single Unit
Model (combination)	Ton	6RT
Model (individual)	Unit A	(H,Y)VAHR072B31S
	Unit B	–
	Unit C	–
	Unit D	–
Power Supply		208/230V/ 3PH 60Hz
Cooling *1	Capacity	Btu/h (kW) 69000 (20.2)
	EER	Btu/Wh (W/W) 15.60 (4.58)
	Power input	kW 4.42
	Current input	A (208V/230V) 13.6 (12.3)
Cooling Operating Range *2	IEER	Btu/Wh (W/W) 25.20 (7.39)
	Indoor	F WB (°C WB) 59(15)~73(23)
	Outdoor	F DB (°C DB) 14(-10)~118(48) *1
	Capacity	Btu/h (kW) 76000 (22.3)
Heating High *1	COP	W/W 4.21
	Power input	kW 5.30
	Current input	A (208V/230V) 16.3 (14.8)
	Capacity	Btu/h (kW) 55000 (16.1)
Heating Low *1	COP	W/W 2.60
	Indoor	F DB (°C DB) 59(15)~80(27)
	Outdoor	F WB (°C WB) -4(-20)~59(15)
	SCHE	Btu/Wh (W/W) 23.30 (6.83)
Cabinet Color (Munsell Code)		2.5Y 8/2
Outer Dimensions	Height	in (mm) 68-1/8 (1730)
	Width	in (mm) 37-7/8 (962)
	Depth	in (mm) 31-7/32 (793)
Package Dimensions	Height	in (mm) 74-1/4 (1886)
	Width	in (mm) 40-5/8 (1032)
	Depth	in (mm) 34-1/32 (864)
Weight	Net	lbs (kg) 540 (245)
	Gross	lbs (kg) 587 (266)
Connection Ratio	Total Indoor Unit Capacity	% 150 – 70
	Max. (Recommendation) indoor units/system	18 (10)
Heat Exchanger	Type	Multi-Pass Cross-Finned Tube
	Material	Anti-corrosion/Cu-Al
Compressor	Type	Inverter
	Fix Speed	–
	Motor Output(Pole)	kW(Pole) 7.2(6)
	Start Method	– inverter
	Operation Range	% 20~100
	Refrigeration Oil Type	– FVC68D
Crank Case Heater	W x Q'ty	40.8 (230V) x 2
Fan	Type	– Propeller Fan
	Motor Output(Pole)	kW(Pole) 0.75(8)
	Quantity	Q'ty 1
	Air Flow Rate	cfm (m³/min) 6178 (175)
	External static pressure *3	in.WG (Pa) 0 (0)
Electrical	Drive	Direct-drive
	Min Circuit Amps	A 41/37
	Recommended Fuse/Breaker Size	A 60/50
	Maximum Fuse Size	A 60/50
Control	Type-Qty	– AWG18-2
	Maximum length	Ft (m) 3,280 (1000)
Sound Pressure Level	Cooling (Night-Shift)	dB(A) 60 (56)
	Heating	dB(A) 60
Protection devices	Cycle	High pressure switch at 4.15 (601psi)
	Inverter	Over-current protection
	Compressor	Over-heat protection
	PCB	Over-heat protection
Refrigerant	Type-Qty	– R410A
	Charge amount	lb (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)	Gas Line (High/Low)	in (mm) 1-1/8 (28.58)
	Gas Line (High/Low)	in (mm) 7/8 (22.2)
	Liquid Line	in (mm) 1/2 (12.7)

# System Dimensions

## Heat Recovery Type Model: (H,Y)VAHR072B31S



### Field Installation (Example)

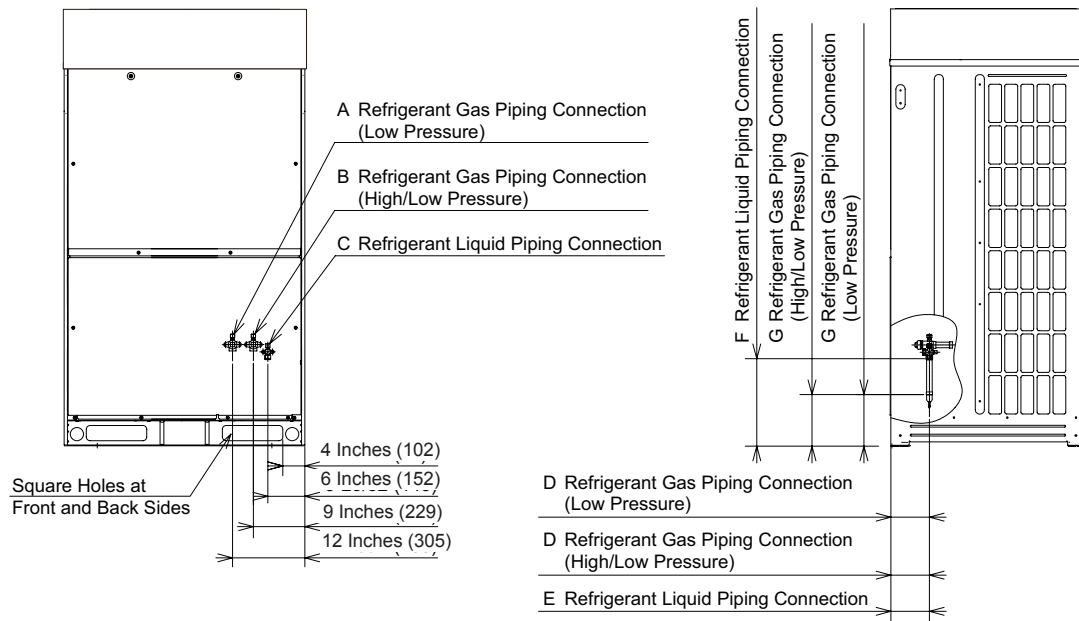


#### NOTES:

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.

# 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



version 201606