

Job Name:

Schedule Reference:

Date:

**UNIT OPTIONS**

Standard Model...QAHV-N136TAU-HPB
Seacoast (BS) Model...QAHV-N136TAU-HPB-BS

OPTIONAL PARTS

Remote controller (PAR-W31MAA-J)
Representative water temperature sensor
(model name TW-TH16E)
Secondary circuit kit (Q-1SCK)

MAIN FEATURES & BENEFITS

- * Operable down to ambient outdoor temperature of -13°F/-25°C.
- * Environmentally friendly, utilizes CO₂ (R744) Refrigerant.
- * Mitsubishi Electric's unique twisted & spiral gas cooler technology which maximizes heat transfer.
- * The system can be monitored and operated remotely.
- * Efficient operation, reduced emissions of CO₂ and NO_x.

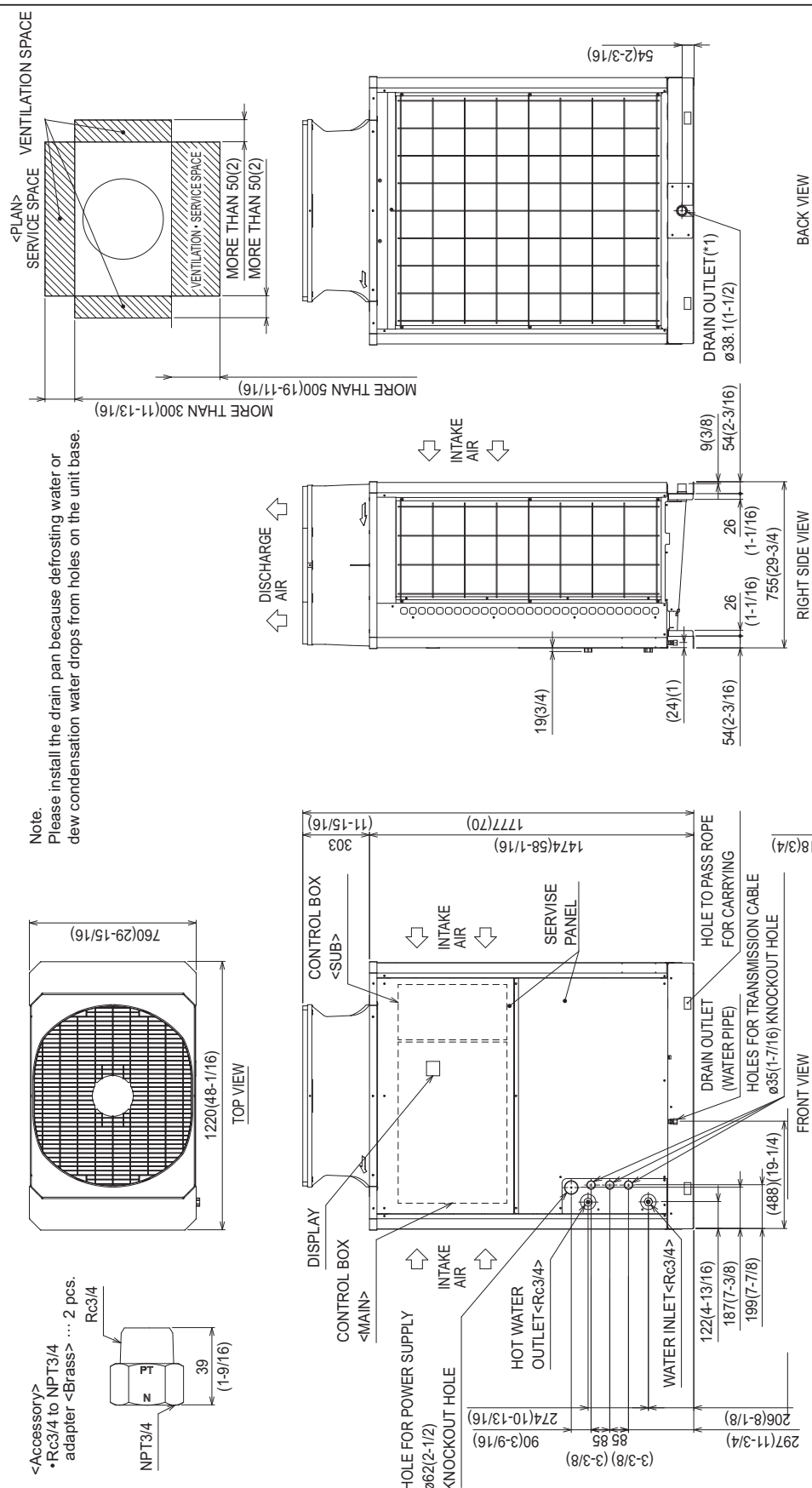
Model		QAHV-N136TAU-HPB(-BS)	
Power Source		3-phase 3-wire 208-230 V 60Hz	
Capacity *1		Btu/h	136,480
		kW	40
	Power input	kW	9.73
	Current input	A	30.0-27.2
Capacity *2		Btu/h	136,480
		kW	40
	Power input	kW	10.44
	Current input	A	32.2-29.1
Capacity *3		Btu/h	136,480
		kW	40
	Power input	kW	10.44
	Current input	A	32.2-29.1
Capacity *4		Btu/h	136,480
		kW	40
	Power input	kW	10.44
	Current input	A	32.2-29.1
Allowable external pump head		ftAq (kPa)	22.75 (68)
Temperature range*3	Inlet water temperature	°F (°C)	41-145 (5-63)
	Outlet water temperature		120-176°F (when the secondary side control is enabled: 120-158°F) 49-80°C (when the secondary side control is enabled: 49-70°C)
	Outdoor temperature	D.B.	-13-109°F (-25-43°C)
Sound pressure level (measured 1m below the unit in an anechoic room) *1 *4		dB (A)	56
Water pipe diameter and type	Inlet	in. (mm)	Rc 3/4 (19.05), screw pipe *5
	Outlet	in. (mm)	Rc 3/4 (19.05), screw pipe *5
External finish		Acrylic painted steel plate <MUNSELL 5Y 8/1 or similar>	
External dimensions H x W x D		in. (mm)	70 x 48-1/16 x 29-15/16 (1,777 x 1,220 x 760)
Net weight		lbs (kg)	895 (406)
Design pressure	R744	psi (MPa)	2,030 (14)
	Water	psi (MPa)	72.5 (0.5)
Heat exchanger	Water-side	Copper tube coil	
	Air-side	Plate fins and copper tubes	
Compressor	Type	Inverter scroll hermetic compressor	
	Manufacturer	MITSUBISHI ELECTRIC CORPORATION	
	Starting method	Inverter	
	Motor output	kW	11.0
	Case heater	kW	0.045
	Lubricant	PAG	
MCA (A)*		67	
MOP (A)*		110	
Fan	Air flow rate	cfm	7,768
		m ³ /min	220
	Type and quantity	Propeller fan x 1	
	Control and driving mechanism	Inverter control, direct driven by motor	
	Motor output	kW	0.75
HIC (Heat inter-changer) circuit		Copper pipe	
Protection devices	High pressure	High-pressure sensor and switch set at 2,030 psi (14 MPa)	
	Inverter circuit	Overheat and overcurrent protection	
	Compressor	Overheat protection	
	Fan motor	Thermal switch	
Defrosting method		Auto-defrost mode (Hot gas)	
Refrigerant	Type and factory charge	lbs (kg)	CO ₂ (R744) 14.3 lbs (6.5 kg)
	Flow and temperature control	LEV	

Notes:

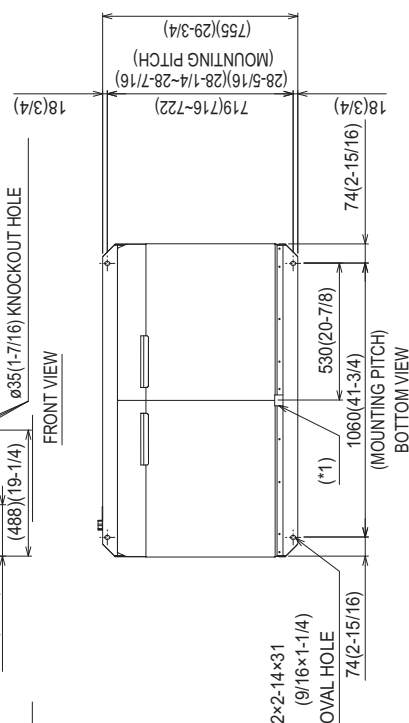
- *1. Under normal heating conditions at the outdoor temperature of 80.6°FDB/71.2°FWB (27.0°CDB/21.8°CWB), the outlet water temperature of 120°F (49°C), and the inlet water temperature of 70°F (21°C) This condition is based on 10 CFR.
- *2. Under normal heating conditions at the outdoor temperature of 80.6°FDB/71.2°FWB (27.0°CDB/21.8°CWB), the outlet water temperature of 149°F (65°C), and the inlet water temperature of 70°F (21°C) This condition is based on 10 CFR except for outlet water temperature. (Outlet water temperature is based on typical operating temperatures.)
- *3. The temperature difference between inlet water and outlet water must be kept above the following values.
Energy saving operation 1 mode ... ΔT=50°F (28°C)
Energy saving operation 2 mode ... ΔT=50°F (28°C)
Max capacity operation ... ΔT=67°F (37°C)
If the unit is operated with the inlet-outlet water temperature difference at or below the ΔT listed above, the flow rate will reach its maximum, which can adversely affect the normal operation of the unit and shorten product life.
Note that, regardless of the inlet-outlet water temperature difference (even during operation within the range with the minimum water inlet-outlet temperature difference), the higher the inlet temperature, the lower the COP.
Keep the inlet water temperature as low as possible to ensure efficient operation.
- *4. The sound pressure level is a value measured in an anechoic room in accordance with the conventional method in JRA4060.
- *5. PT-NPT reducers are included as accessories.
*Due to continuing improvements, specifications may be subject to change without notice.
*Do not use steel pipes as water pipes.
*Keep the water circulated at all times. Blow the water out of the pipes if the unit will not be used for an extended period of time.
*Do not use ground water or well water.
*Do not install the unit in an environment where the wet bulb temperature exceeds 90°F (32°C).
*The water circuit must be a closed circuit.
*There is a possibility that the unit may abnormally stop when it operates outside its operating range. Provide backup (ex. boiler start with error display output signal (blue CN511 1-3)) for abnormal stop.
*In a system in which the ascent rate of inlet water temperature becomes 5 K/min (9°F/min) or above instantly or 1 K/min (1.8°F/min) or above continuously, this model of units cannot be used.

Module: QAHV-N136TAU-HPB(-BS) - DIMENSIONS

Unit: mm (in.)



The specification of the product is for the improvement
a previous notice and might change.



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