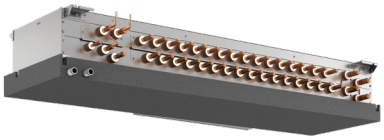
TCMBM1016VA11N4
HYBRID VRF MAIN BC 16 PORT

Job Name:

System Reference: Date:



GENERAL FEATURES

- Provides simultaneous heating and cooling
- Eliminates the need for refrigerant in occupied space
- Transfers heat between refrigerant and water
- Used with Air Source or Water Source outdoor units

Specifications			System
Unit Type			TCMBM1016VA11N4
Number Of Branches			16
Electrical Power Requirements	Voltage, Phase, Hertz, Power Tolerance		208/230V, 1-phase, 60 Hz, ±10%
Minimum Circuit Ampacity (MCA)		A	3.78/3.78
Maximum Overcurrent Protection (MOCP)		A	15
Power Input (208/230V)	Cooling	kW	0.41/0.49
	Heating	kW	0.41/0.49/
Current Input (208/230V)	Cooling	A	2.79/3.02/
	Heating	A	2.79/3.02
External Dimensions		In. [mm]	11-13/16 x 70-7/8 x 24-13/16 [300 x 1,800 x 630]
Net Weight		Lbs. [kg]	217 [98]
External finish			Galvanized steel plate (Drain pan: Pre-coated galvanized sheets + powder coating)
Connectable Outdoor / Heat Source Unit Capacity			4,000 to 180,000
Field drain pipe size		In.	3/4
Refrigerant			R410A
Sound pressure level (measured in anechoic room)	Rated operation	dB(A)	43.0

NOTES:

Each HBC port can handle (3) indoor units up to 30 MBH capacity, use reverse return water piping off single port for water balancing.
Use of copper press fittings, copper brazed fttings and multi-layer composite pipe provided by METUS allowed.
Standard Pex A/B/C or soldered copper not allowed for water piping.
Install an auto air vent at high point of each water piping runout to hydronic indoor (At HBC or indoor unit, whichever is higher elevation).
Install in location ambient humidity levels are <80% RH.
When installing HBC in an environment that may drop below 32°F, please add propylene glycol antifreeze solution to circulating water.
When brazing on refrigerant or water piping, protect HBC lines with wet cloth to prevent internal damage and always use non-oxidative brazing method with nitrogen purge.
When connecting indoor units WL36-WL48, two ports must be twinned on the water side. Use field provided copper press fittings or multi-layer composite fittings provided by METUS.
Water piping sizing between Main HBC and SUB HBC determined by Sub HBC controller connected capacity.
Ensure water piping between Main HBC and SUB HBC ports are connected to matching corresponding port on Main HBC.
Install 3/4” condensate drain pipe to condensate drain pipe to each HBC and route to nearest drain.
Install full port isolation valve on each water port of HBC.
Install 3/4” hose drain valve on lower side ports serving each indoor unit on indoor side of isolation ball valve.
Insulate all water lines and refrigerant lines served from HBC controller, refer to local code for insulation thickness.

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INDOOR UNIT ACCESSORIES: TCMBM1016VA11N4

HVRF Accessories	(2x) Isolation Ball Valve and (2x) 22mm Compression Fitting	☐ KIT2-NA10883-CAL
	25mm Isoflow Multi, 25m Coil w/ 1” Titan	☐ 13630061001-REH
	25mm PVDF SDR11 Sleeve (Box QTY 50)	☐ 11803271001-REH
	25mm SDR11 Coupling (Bag QTY 10)	☐ 11690101001-REH
	25mm SDR11 Elbow (Bag QTY 10)	☐ 11691261001-REH
	25mm SDR11 x 3/4” FPT Fitting (Bag QTY 1)	☐ 15012451001-REH
	25mm SDR11 x 3/4” MPT Fitting(Bag QTY 10)	☐ 15012461001-REH
	25mm x 25mm x 25mm SDR11 Tee(Bag QTY 10)	☐ 11690561001-REH
	25mm x 25mm x 25mm SDR11 Tee(Bag QTY 10)	☐ 15012471001-REH
	40mm Isoflow Multi, 5m Stick w/ 1.5” Titan	☐ 13630071001-REH
	40mm PVDF SDR11 Sleeve (Box QTY 25)	☐ 11803291001-REH
	40mm SDR11 Coupling (Bag QTY 5)	☐ 11690151001-REH
	40mm SDR11 Elbow (Box QTY 1)	☐ 11691301001-REH
	40mm SDR11 x 3/4” MPT Fitting (Box QTY 1)	☐ 15012481001-REH
	40mm x 40mm x 25mm SDR11 Tee (Bag QTY 1)	☐ 11690691001-REH
	Compact Discal AAV w/ Hydroscopic Cap and Drain Plug	☐ KIT3-NA10884-CAL
	Copper Press Tailpieces (3/4”)	☐ KIT5-NA10881-CAL
	Disposable H2O Demineralizer	☐ PUROPAL-1000-AXM
	Disposable H2O Demineralizer w/ Color Changing Media	☐ PUROPAL-1-AXM
	Drain Valve w/ Brass NPT T-Fitting	☐ KIT4-NA10885-CAL
	Expansion Tank Wall Bracket	☐ HN-3-AXM
	HBC Fill Line Assembly (Strainer, Isolation Valve, Double Check, PRV)	☐ KIT1-NA10882-CAL
	High Power Replacement Cartridge for LEADER	☐ LEADER-CARTHP-AXM
	Portable H2O Demineralizer (Requires LEADER-CartHP)	☐ PUROPAL-LEADER-AXM
	Protect 1 (500ml) Scale and Corrosion Inhibitor	☐ AXTH-P1-500ML-AXM
	Protect 1 Dosage Test Kit	☐ AXTH-P1-TEST-AXM
	RAUTOOL A-Light2 Kombi Tool KIT	☐ 11094491001-REH
	System Feeder w/Digital Pressure Control & Wall Bracket (17Gal)	☐ DMF300-AXM
	System Feeder w/Digital Pressure Control & Wall Bracket (4.6Gal)	☐ DMF150-AXM

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INDOOR UNIT DIMENSIONS: TCMBM1016VA11N4

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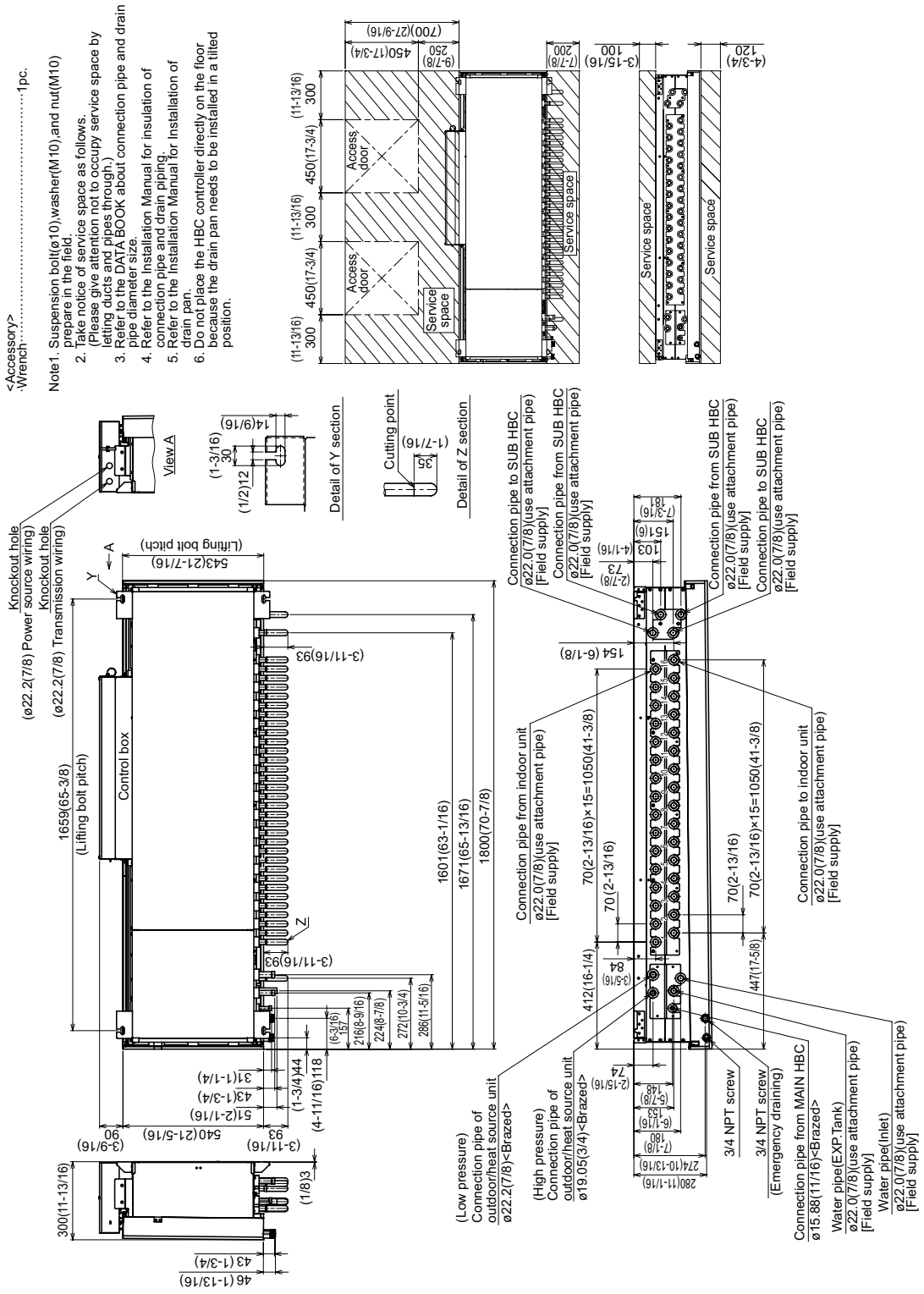
Unit: mm (in.)



FORM# TCMBM1016VA11N4 - 202303

Specifications are subject to change without notice.

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