# **MODEL TACU - CHB INVERTER**

PACKAGED AIR COOLED SCROLL CHILLER 16.7 - 25.4 TR 58.61 - 89.3 kw





### | Touch screen Display (Standard)

A wide 4.3" touch screen color display was designed to make controllers' user interface even easier, more complete and intuitive.



### | Scroll "Inverter" Compressor -



- Precision temperature control : unnoticeable swing in temperature because of its adaptation of capacity to match with any variable conditions automatically.
- High efficiency: deliver only the energy needed to satisfy the cooling condition, thereby save energy.

### | R-410a Refrigerant -



### |Fan & Motor -



- · Environmental friendly to ozone layer
- Non Flammable & safe to use

Aluminium Fan

Durable and provides large air volume

## | Evaporator (Shell and tube heat exchanger) -

- High efficiency performance , low water pressure drop
- Aluminium star rods fitted in copper tubing, create turbulence refrigerant flow and cause higher heat transfer efficiency.
- Removable head and proper selection of head pass avoids excessive refrigerant pressure drops.
- High column strength tube design reduces the hazard of freeze-up.
- Thick insulation to prevent condensation.



### | Condenser Type : Plate Fin Coil



• Inner groove copper tube

Help improve energy efficiency and reduce size of the condenser coil.

#### Aluminium louver fin

Louvered fins increase the heat-transfer capacity by creating air turbulence which reduces the boundary layer on the fin's surface



### | Refrigeration parts



### Solenoid valve

Use electric power to control valve opening and closing.



#### Sight glass

Characterize the state and humidity of the refrigerant.



#### Electronic expansion valve

The system is responsive and accurate with automatic valve opening and closing.



#### Packed Valve

Service Valves for liquid line and suction line



#### Filter drier

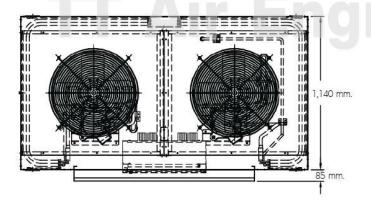
Filters out dirt and absorbs moisture. If the machine does not work properly or has acid build-up, the filter drier will also absorb the acid by the filter drier's inner filling.

### | Electical parts

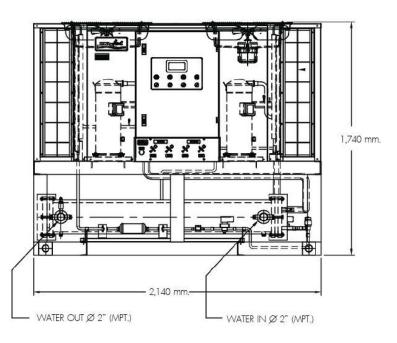
- Magnetic & Overload contactor for fan motor and compressor
- Unit main breaker

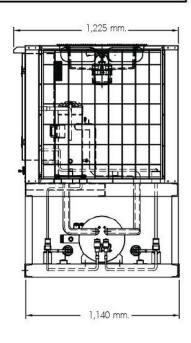
- Hi-low Pressure transducer
- Freezestat

### Dimensional drawings



Model : TACU-CHB (Inverter)
020 A
025 A
030 A





### **PHYSICAL DATA**

Model		TACU-CHB	020A	025A	030A
Nominal Cooling capacity		MBH	200	259	305
Power Consumption		kW	19.00	24.60	28.60
Nominal COP		kW/kW	3.09	3.09	3.13
IPLV.IP		kW/kW	4.49	4.29	4.41
Minimum Capacity		BTUH	25%		
Compressor		Туре	Scroll (Inverter)		
		No. Of Circuits	2		
		Qty./Unit	2		
Condenser Coil		Type/Material	Aluminium Louver Fin with Inner Groove Copper Tube		
Condenser Fan& Motor	Fan	Туре	Propeller Fan		
		Diameter (in)	24 30		
	Motor	RPM	900		
		Air Quantity	14,000	14,000 20,000	
		Qty./Unit	2		
Refrigerant		Туре	R-410a		
		Charge	Holding Charge : R-410a		
Water Chiller	Chiller Water Flow Rate	GPM	37.8	45.2	55.6
	Chiller Water Temp. In/Out	*F	55/45		
	Chiller Water Pressure Drop	Ft.WG	2.49	7.93	11.64
	Water Connection In/Out	in	2 2-1/2		2-1/2
Dimension	Length	mm.	2,140		
	Width	mm.	1,225		
	Height	mm.	1,740		
Weight Operation		Kgs.	670	755	840

<sup>\*</sup>Nominal Cooling Capacity Based on 38° F Sution Temp, and 95°F Ambient Temp Fouling Factor 0.0005 Ft2.h.F/Btu in Chiller

For SI.Unit, Cooling Capacity (kW) = MBH x 1000

MBH = 1,000 Btu/h 3412

Model TACU-CHB		020A	025A	030A
	Qty./Unit	2		
Compressor (Each)	V/Ph/Hz	380/3/50		
Compressor (Each)	Power Input (Watt)	9,128.00	11,557.00	13,555.00
	FLA.(Amp.)	15.2	18.2	22.1
	Qty./Unit	2		
Fan Motor (Each)	V/Ph/Hz	380/3/50		
ran wotor (Each)	Power Input (Watt)	632 960		
	FLA.(Amp.)	1.2	2.3	

Note

FLA. =Full load Amp.



ISO 9001 ISO 14001 TIS 18001 **OHSAS 18001** ISO 45001









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<sup>\*\*</sup>IPLV calculations according to standard performances (in accordance with AHRI 550-590)