



DESCRIPTION

Designed to stabilize the temperature in a second stage of the samples in analyzer systems.

A temperature control unit (TCU) systems are pre-designed available in standard sizes from 3 to 10 tons (others capacities available).

APPLICATIONS

- Stabilization temperature samples in Analyzers Systems.
- Grab Sampling systems.

FEATURES

- Condenser water stainless steel heat exchanger
- Thermostatic valve for regulating the pressure of condensation water
- Self-contained with all necessary controls, pumping and refrigeration systems.
- Local display provides quick operational snapshot.

SPECIFICATIONS

MODEL	UNITS	WTCU 3T	WTCU 5T	WTCU 8T	WTCU 10T
Nominal Cooling Capacity*	W	11.110	18.140	28.850	38.320
Ambient temperature limit	°C (°F)		+10 / +45 (+50 / + 113)		
Range fluid temperature adjustable	°C (°F)		+8 / +25 (+ 46 / 77)		
Type of fluid	-			Water	
Temperature accuracy	°C (°F)		+/- 2 (+/- 3,6)		
Refrigerant	HFC	R134A		R410A	

POWER SUPPLY

Operating voltage	V ph Hz		400V (+/- 10%) 3ph 50Hz		
Secondary operating voltage	V			24 Vac	
Digital thermostat	-			TX200	

COMPRESSOR

Type of compressor	-			Scroll	
Quantity - Refrigerant circuits	nr			1 / 1	
Max absorbed power	kW	4,6	6,6	10,1	13,3
Max absorbed current	A	7,5	12,5	17,3	23,0

CONDENSER

Type of Condenser	-			stainless steel plates	
Quantity	nr	1	1	1	1
Minimum refrigeration flow	l/min (GPH)	35 (9,25)	65 (17,20)	100 (26,42)	130 (34,34)
Cooling water temperature	°C (°F)	25 (77)	25 (77)	25 (77)	25 (77)
Cooling water pressure	Bar (psi)	1,5 (21,75)	1,5 (21,75)	1,5 (21,75)	1,5 (21,75)
Cooling fluid	-	Water			

Storage tank capacity	L (gal)	60 (15,85)	150 (39,63)	220 (58,12)	
Water connections IN/OUT	inch	3/4"	1"	2"	
Empty weight (indicative)**	Kg (lbs)	200 (441)	300 (661)	460 (1014)	520 (1146)
Width	mm	680 (26,77)	750 (29,53)	850 (33,47)	
Depth	mm	800 (31,5)	1.360 (53,54)	1.760 (69,30)	
Height	mm	1.230 (48,43)	1.340 (52,76)	1.480 (58,27)	
Sound pressure level**	dB(A)	60	67	70	70
IP Protection	IP			55	

OPTIONS

H - SPECIAL HYDRAULIC PERFORMANCE

Type of Pump-quantity	-			Centrifugal -1	
Flow rate required	l/min (GPH)	114,0 (30,12)	189,0 (49,93)	303,0 (80,05)	379,0 (100,13)
Pressure at required flow	Bar (psi)			3,0 (43,5)	

N - OPERATING VOLTAGE V ph Hz 460 V (+/-10%) 3ph 60Hz

QE-IP PROTECTION IP 55

HR - Heater KE -BTU/h 5 -17000 10 - 34000

BGC- Temperature precision +/- 1°C (+/- 1,8 °F)

OM - Outdoor application until ambient temperature of -10°C (-14°F)

TPR - Tropicalized version until ambient temperature of +55°C (+131°F)

INX - Housing in AISI 304 Stainless Steel

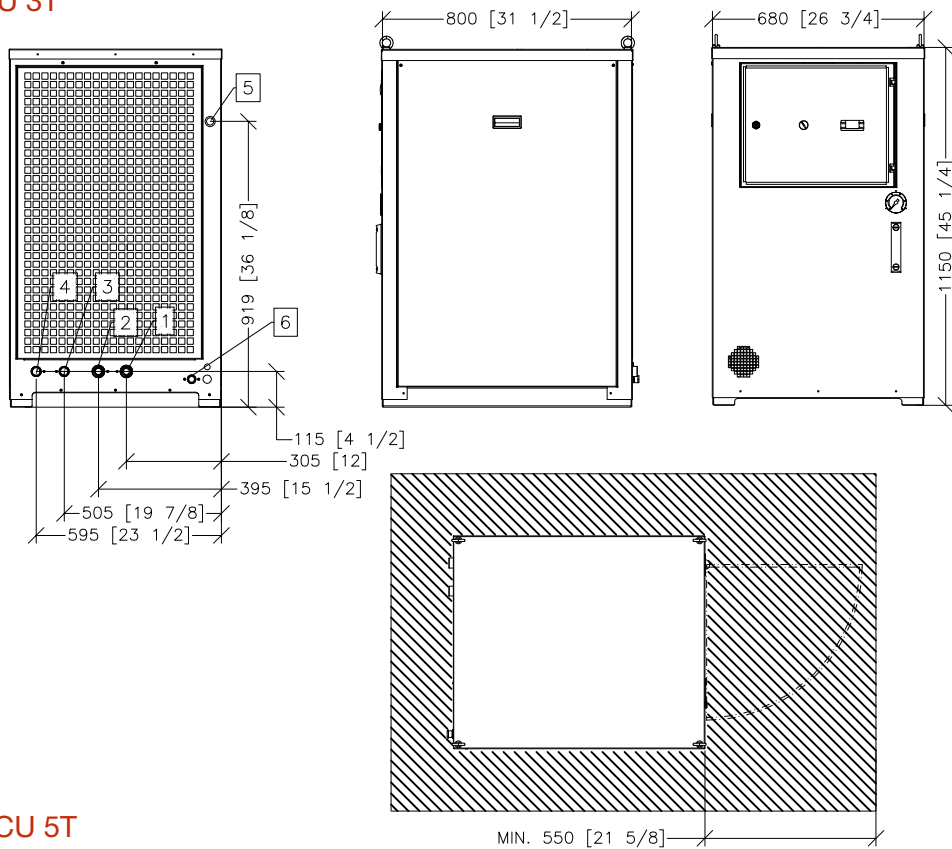
* Referred to following conditions: temperature IN/OUT 20/15°C (68/59 °F) water, condenser water temperature 25°C (77°F). Nominal Cooling power referred to the unit without pump.

** Referred to axial fan models at free conditions, hemispheric field at a distance 1 meter (3.3 ft) from chiller, 1,5 meters (4.92 ft) from ground, norm UNI ISO 3746.

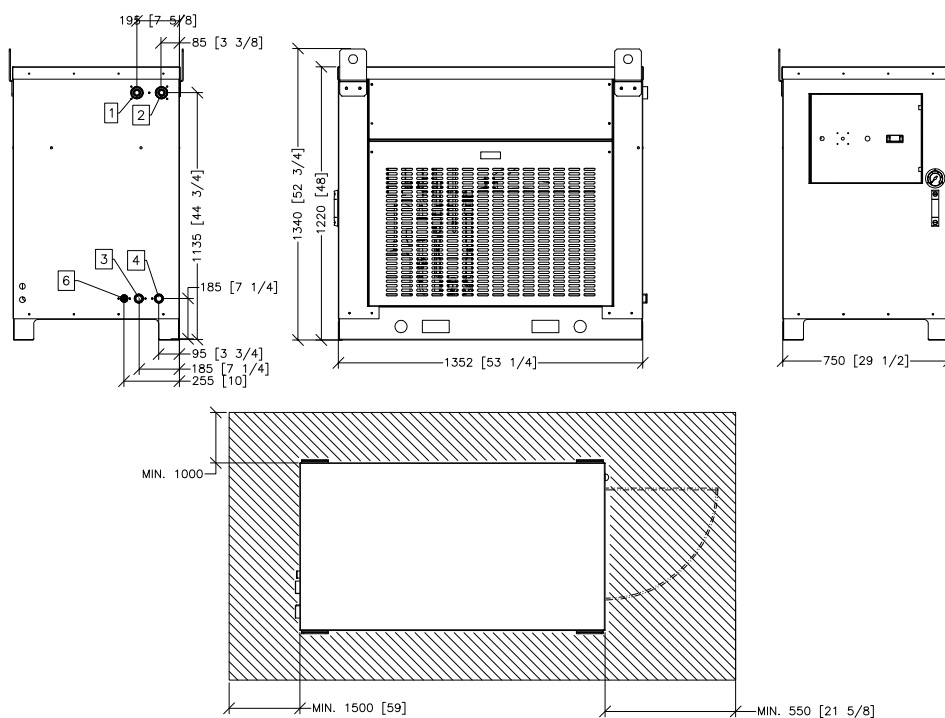
*** Weights include pallet and pack (if present), with refrigerant charge and empty tank.

DIMENSIONS

WTCU 3T

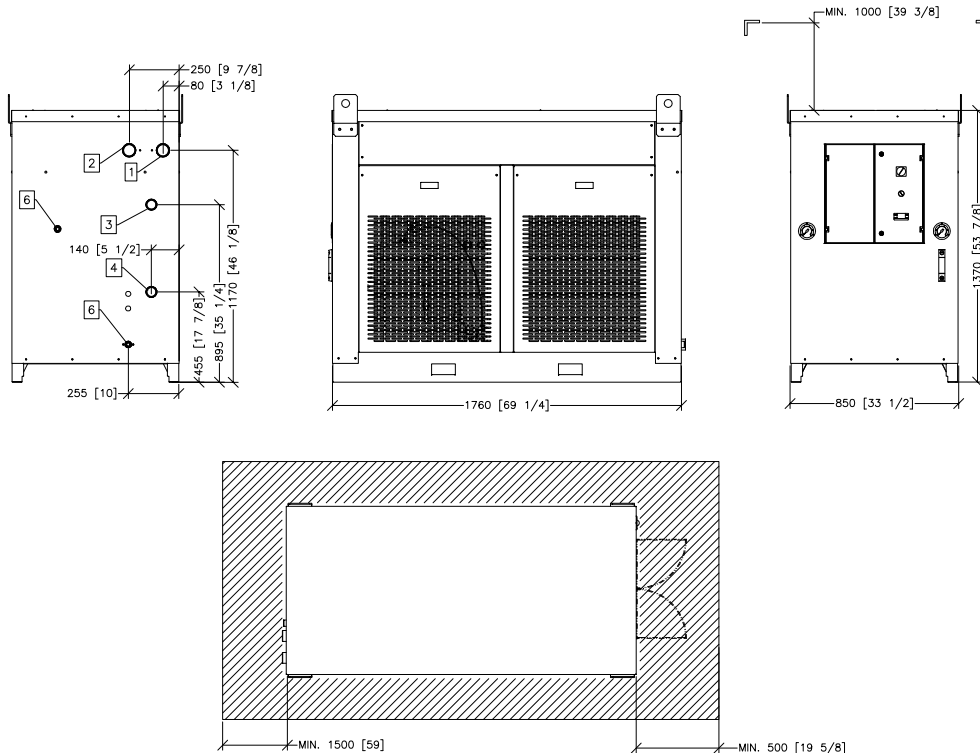


WTCU 5T



DIMENSIONS

WTCU 8T & WTCU 10T



Units: mm [Inches in brackets]

Due to continuous improvements, Manvia reserves the right to change the design and specifications without notice

CONNECTIONS

ID	CONNECTION
1	CONDENSER CIRCUIT OUT
2	CONDENSER CIRCUIT IN
3	EVAPORATOR CIRCUIT OUT
4	EVAPORATOR CIRCUIT IN
5	AUTOMATIC FILLING
6	DRAIN

Connections size in specifications