

MODEL TGWE

PACKAGED WATER COOLED UNIT

Marine package unit with sea-water cooled type.
Package unit with compact structure, hermetic scroll compressor, low noise fan, framing structure and high quality strong casing.

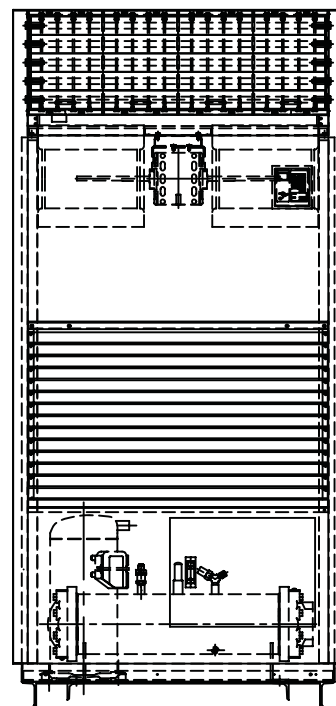
**Capacity Range from
50,000 to 120,000 BTUH
(14.6 kw - 35.2 kw)
Cooling only**

Description :

- The TGWE units are single package water cooled air conditioners.
- The TGWE series includes 4 models of cooling system.
- Suitable for vertical mount, indoor installation.
- Completed with pipe, wiring and refrigeration charging at the factory.
- Ideal for quick and low cost installation.

Features :

- High efficiency, Scroll compressor, refrigerant cooled compressor.
- High efficiency shell & tube condenser. (Cu/Ni)
- Electrical supply connections and knockouts provided.
- Lower operation cost.
- Low noise operation.
- HP and LP cut-out switches.
- Refrigerant R-22 (Option R407,R410a)
- Air filters
- Electrical panel.
- IP 56



Air Conditioning Experts

GUIDE SPECIFICATION

GENERAL

The TGWE Packaged water cooled unit shall be completely factory assembled, leak-tested, evacuated and pre-charged with R-22, ready for installation.

UNIT CASING

The unit shall be constructed from electro galvanized steel. The exterior panels shall be acoustically lined with 1/2" thick, 2.5 lb./cu.ft. fiber glass insulation. The insulation shall be affixed to the casing with the water proof adhesive. All steel metal parts shall be degreased, zinc phosphate bonderized before begin oven-baked with a thick coat of polyester paint.

COMPRESSOR

Each unit shall have scroll hermetic compressor mounted on vibration isolators. The refrigerant gas cooled, high torque motor, quiet running with internal suspension system to eliminate vibration, and internal line break motor protection and motor overheating.

CONDENSER COIL

The water cooled condenser shall be high efficiency profiled shell & tube for unit model TGWE 005 to 012. The copper tube inside the steel pipe shall offer efficient refrigerant cooling. The refrigerant side of the condenser shall be cleaned, dehydrated and tested for 350 psig design working pressure. The condenser including water shall be tested for leakage at the factory.

EVAPORATOR COIL

The direct expansion evaporator shall consist of full face coil with counter flow circuits, seamless 3/8 inch OD staggered copper tubes mechanically bonded into aluminum fins with a maximum of 12 fins per inch. Each coil shall be degreased internally and externally, brazed in nitrogen atmosphere, leak tested at 350 psig and completely dehydrated before assembly.

EVAPORATOR FAN AND MOTOR

The evaporator fan shall be the double inlet, multi-blade centrifugal type. The fan wheel shall be constructed from galvanized steel and statically and dynamically balanced.

REFRIGERANT CIRCUIT

The refrigerant circuit shall be factory piped, leak tested and pre-charged with R-22. Each refrigerant circuit shall consist of a compressor, expansion valve and service valve.

UNIT CONTROL

Each system shall contain factory mounted wired and tested controls required to operate and protect the unit. The control system shall include compressor overload protection, motor winding protection, high and low pressure switches to guard against compressor damage due to high discharge head pressure and system leakage.

FILTERS

Air filters shall be cleanable washable PP.net

PHYSICAL DATA & ELECTRICAL DATA

Model No.		TGWE-005	TGWE-006	TGWE-08	TGWE-012
NOMINAL CAPACITY		50,000	60,000	80,000	120,000
RATED AIR FLOW AT HIGH SPEED		1,600	2,000	3,000	4,000
TYPE		Free Blow Floor Standing Type			
COMPRESSOR	Type	Scroll	Scroll	Scroll	Scroll
	HP.	5	6	8	12
	Power Supply	Volt / Phase / Hz	380/3/50	380/3/50	380/3/50
	Q'ty	Each	1	1	1
WATER COOLED CONDENSER		Shell&Tube			
	Material	Copper/Nickel - 90/10			
	Q'ty	Each	1	1	1
	Water Flow Rate	GPM	12.5	15	20
	Entering Water Temp	°F	90	90	90
	Leaving Water Temp	°F	100	100	100
	Water Pressure Drop	Ft.WG	10.8	19	11.5
	No. of Water Passes		4	4	4
	Water Connection In	Inch	1-1/2	1-1/2	1-1/2
	Water Connection Out	Inch	1-1/2	1-1/2	1-1/2
FAN		Multi Blade Centrifugal Fan			
	Type				
	Size	Inch	8 x 10	8 x 10	9 x 9
MOTOR	Watt	352	352	290 x 2	290 x 2
	Amp	3.2	3.2	2.25 x 2	2.25 x 2
	Power Supply	Volt / Phase / Hz	220/1/50	220/1/50	220/1/50
COIL		Aluminium Corrugated Fin with Plain Tube			
CONTROL		Control Digital Temp			
EXPANSION DEVICE		Thermostatic Expansion Valve			
INSULATION		Fiber Glass			
AIR FILTER		Washable PP. Net			
DIMENSION	Width	mm.	910	910	1070
	Height	mm.	1925	1925	2000
	Depth	mm.	605	605	625
WEIGHT		Kgs.	240	250	320

Option : Power supply 460V / 3Ph / 60Hz.

Actual capacity is performance within +/- 5% variation from Nominal cooling capacity.

Specifications are subjected to change without notice for future improvement.



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