

MODEL THWE

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

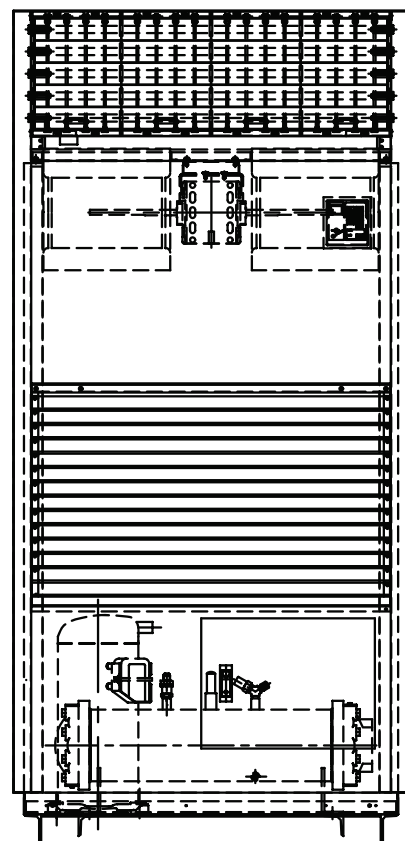
UNI-Aire®
Air Conditioning Experts

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



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, zicc 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

SPECIFICATION MODEL : TGWE

| Model | TGWE | TGWE-005 | TGWE-006 | TGWE-008 | TGWE-012 | |
|-------------------------------------|---------------------|--|---------------|---------------|----------------|-----|
| NOMINAL CAPACITY | BTUH | 50,000 | 60,000 | 80,000 | 120,000 | |
| RATED AIR FLOW AT HIGH SPEED | CFM | 1,600 | 2,000 | 3,000 | 4,000 | |
| TYPE | | Free Blow Floor Standing Type | | | | |
| COMPRESSOR | | Scroll | | | | |
| | HP. | 5 | 6 | 8 | 12 | |
| | Power Supply | Volt/Phase/HZ 380/3/50 | | | | |
| Q'ty | Each | 1 | | | | |
| WATER COOLED CONDENSER | | Shell&Tube | | | | |
| | Material | Copper/Nickel - 90/10 | | | | |
| | Q'ty | Each | 1 | | | |
| | Water Flow Ratr | GPM | 12.5 | 15 | 20 | 30 |
| | Entering Water Temp | ° F | 90 | | | |
| | Leaving Water Temp | ° F | 100 | | | |
| | Water Pressure Drop | Ft.WG | 10.8 | 19 | 11.5 | 9.5 |
| | No. of Water Passes | | 4 | | | |
| | Water Connection In | Inch | 1-1/2 | | | |
| Water Connection Out | Inch | 1-1/2 | | | | |
| FAN | Type | Multi Blade Centrifugal Fan | | | | |
| | Size | Inch | 8 x 10 | 9 x 9 | 10 x 10 | |
| MOTOR | Watt | 352 | | 290 x 2 | | |
| | Amp | 3.2 | | 2.25 x 2 | | |
| | Power Supply | Volt/Phase/HZ 220/1/50 | | | | |
| COIL | Type | Aluminium Corrugated Fin with Plain Tube | | | | |
| CONTROL | Type | Control Digital Temp | | | | |
| EXPANSION DEVICE | Type | Thermostatic Expansion Valve | | | | |
| INSULATION | Type | Fiber Glass | | | | |
| AIR FILTER | Type | Washable PP. Net | | | | |
| DIMENSION | Width | mm. | 910 | 1,070 | 1,450 | |
| | Heigth | mm. | 1,925 | 2,000 | 2,100 | |
| | Depth | mm. | 605 | 625 | 658 | |
| WEIGHT | kgs. | 240 | 250 | 320 | 400 | |

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

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

Specifications are subjected to change without notice for future improvement.



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