

# TAURUS TECH



Air-cooled water chillers with hermetic scroll compressors. Nominal cooling capacity 74 – 148 kW





# Excellence in residential and commercial air-conditioning.

The air-cooled water chillers TAURUS TECH always meet the requirements of residential and commercial air conditioning applications, through their versatility and simple installation. The TAURUS TECH range already meets the performance requirements of the ErP Regulation EcoDesign, combining highest level of seasonal efficiency with huge customization possibilities, to allow the installation on every system. Reduced management and installation costs, maximum reliability and environmental protection make chiller TAURUS TECH the right choice for today and tomorrow installations.



# **Benefits**

- Seasonal efficiency compliant with the parameters required by the ErP regulation for SEER index;
- Acoustic configurations SHE and SSN with reduced sound levels;
- High full load efficiency (EER);
- Extended working limits for starting up and operating even in the worst conditions;
- Wide choice of options and kits for simplified installation;
- Easy access to all internal components.

#### **Options**

- Low ambient temperature option (down to -20 °C);
- High efficiency EC brushless fans;
- Shell & tube evaporator;
- Single or double water pump with low or medium head pressure;
- Water accumulation tank;
- Total or partial heat recovery;
- Anti-freeze protection heaters for heat exchangers, pump/s and water accumulation tank (if included);
- IN/OUT compressors valves;
- Hydraulic group protection with covering panels or metallic mesh;
- Condenser coils protection with metallic filters or metallic mesh;
- Protective coating for condenser coils, suitable for installation in aggressive environments;
- Soft starters to reduce by 30% the starting current.

# Standard features

- · Refrigerant R410A;
- Hermetic scroll compressors on single refrigerant circuit;
- Crankcase heater compressor and phase-monitor;
- Plate evaporator;
- Axial fans with die-cast aluminium blades and AC motors;
- Electrical cabinet protection rating IP54;
- Parametric microprocessor control;
- Electronic expansion valve;
- Air-cooled condensers (copper tubes/aluminium fins) with longitudinal "V" shape layout:
- High and low refrigerant pressure switches;
- · Refrigerant pressure gauges.

#### Kits

- · Antivibration mounts;
- Replicated remote user display (LED or LCD version);
- RS485 ModBus kit for connection to supervisor systems;
- xWEB300D EVO supervisor system;
- Modularity kit (master/slave configuration from 2 to 5 units).

# Acoustic configurations

- HE Basic acoustic configuration;
- · SHE Low noise acoustic configuration;
- SSN Very low noise acoustic configuration.









Integrated partial or total heat recovery Advanced microprocessor digital controller.

External supervisor systems.

All models are individually tested in order to check correct operation.

| TAT Model                        |         | 030                   |      | 035  |      |      | 040  |      |      | 050  |       |       | 055   |       |       | 060   |       |       | 065   |       |       |       |
|----------------------------------|---------|-----------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Versions                         |         | HE                    | SHE  | SSN  | HE   | SHE  | SSN  | HE   | SHE  | SSN  | HE    | SHE   | SSN   | HE    | SHE   | SSN   | HE    | SHE   | SSN   | HE    | SHE   | SSN   |
| Nominal cooling capacity (1)     | kW      | 74,4                  | 72,2 | 69,0 | 82,8 | 79,9 | 75,0 | 95,3 | 91,3 | 84,4 | 110,0 | 107,1 | 102,9 | 121,1 | 117,5 | 112,4 | 135,8 | 131,1 | 124,3 | 148,3 | 142,3 | 133,8 |
| Total absorbed power (1)         | kW      | 24,7                  | 24,3 | 24,7 | 27,4 | 27,3 | 28,6 | 33,0 | 33,5 | 35,8 | 36,5  | 35,7  | 36,2  | 42,0  | 41,6  | 42,6  | 48,9  | 49,0  | 50,9  | 51,7  | 52,4  | 55,1  |
| EER (2)                          |         | 3,01                  | 2,97 | 2,79 | 3,02 | 2,93 | 2,62 | 2,89 | 2,73 | 2,36 | 3,01  | 3,00  | 2,84  | 2,88  | 2,82  | 2,64  | 2,78  | 2,68  | 2,44  | 2,87  | 2,72  | 2,43  |
| SEER (3)                         |         | 4,35                  | 4,46 | 4,36 | 4,26 | 4,24 | 4,19 | 4,34 | 4,29 | 4,20 | 4,25  | 4,53  | 4,62  | 4,14  | 4,29  | 4,26  | 4,20  | 4,31  | 4,23  | 4,26  | 4,29  | 4,27  |
| Max external air temperature (4) | °C      | 46                    | 46   | 46   | 46   | 46   | 45   | 46   | 46   | 42   | 46    | 46    | 46    | 46    | 46    | 45    | 46    | 46    | 43    | 46    | 46    | 43    |
| Power supply                     | V/Ph/Hz | 400 ± 10% / 3-PE / 50 |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |
| Circuits / Compressors           | N°      | 1/2                   |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |
| Sound power level (5)            | dB(A)   | 87,5                  | 82,6 | 79,6 | 87,1 | 82,2 | 78,8 | 86,7 | 81,8 | 78,8 | 90,3  | 84,2  | 81,3  | 90,1  | 83,8  | 80,6  | 88,8  | 83,5  | 80,3  | 89,9  | 84,0  | 79,7  |
| Sound pressure level (6)         | dB(A)   | 59,5                  | 54,6 | 51,6 | 59,1 | 54,2 | 50,9 | 58,8 | 53,8 | 50,9 | 62,3  | 56,3  | 53,3  | 62,1  | 55,9  | 52,6  | 60,9  | 55,5  | 52,3  | 61,9  | 56,0  | 51,7  |
| Depth                            | mm      |                       | 2507 |      |      | 2507 |      |      | 2507 |      |       | 3407  |       |       | 3407  |       |       | 3407  |       |       | 3407  |       |
| Width                            | mm      | 1110                  |      |      | 1110 |      |      | 1110 |      | 1110 |       | 1110  |       | 1110  |       | 1110  |       |       |       |       |       |       |
| Height                           | mm      | 2270                  |      |      | 2270 |      |      | 2270 |      |      | 2270  |       |       | 2270  |       |       | 2270  |       | 2270  |       |       |       |
| Installed weight                 | kg      | 745                   |      | 770  |      |      | 843  |      |      | 964  |       |       | 1011  |       |       | 1064  |       |       | 1085  |       |       |       |

Data declared according to UNI EN 14511:2018. All data refers to standard units without accessories/options which require an electrical feeding source and in nominal working conditions. The listed noise levels, weights and dimensions refer to base chillers with no options/accessories fitted.

- (1) Data referred to nominal conditions, external ambient temperature 35 °C and evaporator water temperature IN/OUT 12/7 °C;
- [2] Data referred to full load operation and nominal conditions , external ambient temperature 35 °C and evaporator water temperature IN/OUT 12/7 °C;
- [3] Data declared in compliance with the European Regulation (EU) 2016/2281 with regard to ecodesign requirements for cooling products (air conditioning application);
- (4) Data declared referred to outlet water temperature 7 °C;
- [5] Determined on the basis of measurements taken in accordance with the standard ISO 3744;
- (6) Average value obtained in free field on a reflective surface at a distance of 10 m from the external side of the electrical panel of machine and at a height of 1,6 m from the unit base. Values with tolerance ± 2 dB.









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