

# TAURUS *tech*

Air cooled water chillers, heat pumps and condensing units with R410A and hermetic scroll compressors.



Taurus*tech* chillers and heat pumps represent the optimal solution for centralised hydronic conditioning of medium sized applications with the wide range of accessories is possible to satisfy the installation and start-up unit needs. The microprocessor control, with dual display and icon interface allows to the user the possibility to modify the unit operating parameters in a simple way. The intelligent FDS (Frost Detecting System) logic automatically and continuously manages heat pump defrosting cycles; unlike commonly adopted solutions, FDS operates only when effectively necessary, optimising defrosting duration and frequency, to the benefit of ambient comfort and operating economy.



Cooling, conditioning, purifying.

## BENEFITS

- Reduced noise levels, thanks to three acoustic versions;
- High EER/COP levels, especially at partial loads;
- Optimisation of performance also in heat pump mode thanks to hot gas injection and the innovative FDS defrosting system (min. ambient temperature -10 °C in heat pump mode);
- Start-up and operation in adverse conditions;
- Easy installation and simple access to all chiller components;
- Easy to use, thanks to an intuitive controller with dual icon-based display.

## MAIN OPTIONS

- 1 or 2 pumps and water pressure gauge;
- Storage tank;
- Compressor shut-off valves on suction and discharge lines;
- Electronic fan speed control;
- Condenser coils designed for aggressive atmospheres;
- Antivibration dampers;
- Anti-freeze heaters on evaporator, pump and tank;
- Metal mesh protective filters or grilles for condensing coils;
- Remote user interface;
- RS485 ModBus interface for connection to supervisor systems;
- xWEB300D for local or remote (GSM mobile phone) monitoring plus data filing based on WEB server technology;
- Electric power supply different from standard;
- Soft starter.

## STANDARD FEATURES

- 2 or 4 scroll compressors positioned in parallel in one or two circuits;
- Compressor crankcase heaters;
- Single welded-brazed stainless steel plate evaporator "dual-circuit";
- Phase monitor against phase reversal;
- Heat pumps equipped with 2<sup>nd</sup> thermostatic valve, for performance optimisation in all operating conditions;
- Condensate tray with hose connection;
- Axial fans with progressive activation for optimised condensing pressure control;
- Solenoid valve on the liquid line of each refrigeration circuit;
- Factory charged with refrigerant and non-freezing oil (MC versions excluded);
- IP54 electric protection rating;
- Inspections and tests performed in factory as per all MTA products and components;
- Environmentally friendly refrigerants with R410A zero ozone depletion potential.

## VERSIONS

- Chiller (TAT);
- Heat pump (HTAT);
- Condensing unit (MCTAT);
- Acoustic configurations:
  - N standard;
  - SN low noise;
  - SSN super-silent.
- Low ambient air temperature in cooling mode (down to -20 °C);
- Version with recovery desuperheaters;
- Version with total recovery condenser.

Microprocessor with double display and icon control.



Pump section with or without storage tank.



Simplified installation and easy access to all internal components.



Remote user interface.



Model TAT - HTAT - MCTAT		030	035	040	050	055	060
TAT	Cooling capacity	kW	73,0	82,7	100	115	143
	Absorbed power	kW	22,5	23,5	30,4	34,7	42,6
	ESEER	-	3,72	3,89	4,14	3,6	3,73
	Max external air temperature	°C	47	47	46	46	46
HTAT	Cooling capacity	kW	70,0	78,5	95,9	111	139
	Heating capacity	kW	77,6	85,0	109	120	150
	Absorbed power (in heating)	kW	22,5	24,2	30,5	35,4	44,7
MCTAT	Min. external air temperature	°C	-8	-9	-8	-8	-8
	Cooling capacity	kW	78,3	86,0	104	121	151
	Absorbed power	kW	23,0	23,8	30,7	35,3	43,2
	Max external air temperature	°C	46	47	45	46	46
Power supply		V/Ph/Hz	400±10%/3/50				
Circuits / Compressors		N°	1/2	1/2	1/2	2/4	2/4
Sound pressure level (N)		dB(A)	59,9	63,0	59,3	61,0	60,5
Sound pressure level (SN)		dB(A)	54,3	57,2	53,5	55,2	54,5
Sound pressure level (SSN)		dB(A)	51,1	53,0	50,0	52,3	51,5
Depth		mm	2507	2507	2507	3407	3407
Width		mm	1110	1110	1110	1110	1110
Height		mm	2120	2120	2120	2120	2120
Installed weight		Kg	995	1028	1177	1524	1598

All data refers to standard units at the following nominal conditions:

**Chiller:** evaporator water inlet-outlet 12-7 °C, external air temperature 35 °C.

**Heat pump:** condenser water inlet-outlet 40-45 °C, external air temperature 7 °C dry bulb, 6 °C wet bulb.

**Condensing unit:** Evaporating temperature 5 °C, external air temperature 35 °C.

Sound pressure level in hemispherical field at 10 m from condenser side and 1.6 m from ground. Values with tolerance ± 2 dB.

The sound levels refer to operation of the unit under full load in nominal conditions and with circulation pump.

The listed noise levels, weights and dimensions refer to base chillers with no options fitted.



MTA participates in the E.C.C. programme for LCP-HP. Certified products are listed on [www.eurovent-certification.com](http://www.eurovent-certification.com). Eurovent Certification applied to the units:  
- Air/Water with cooling capacity up to 600 kW  
- Water/Water up to 1500 kW (N.A. on MC)

[www.mta-it.com](http://www.mta-it.com)

M.T.A. S.p.A.

Viale Spagna, 8 - ZI  
35020 Tribano (PD) - Italy

Tel. +39 049 9588611

Fax +39 049 9588612

[info@mta-it.com](mailto:info@mta-it.com)



MTA is ISO9001 certified, a sign of its commitment to complete customer satisfaction.



MTA products comply with European safety directives, as recognised by the CE symbol.



Cooling, conditioning, purifying.