

# TAURUS

AIR COOLED WATER CHILLERS, HEAT PUMPS AND CONDENSING UNITS WITH R410A OR R407C FEATURING HERMETIC SCROLL COMPRESSORS.  
COOLING CAPACITY 70 - 143 kW, HEATING CAPACITY 71 - 150 kW.



## BENEFITS

- Reduced noise levels, thanks also to the availability of three differing 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);
- SAC self-adapting temperature control for efficient operation in installations with low water contents (dual-compressor models);
- Start-up and operation in even the most 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

- Add-on external pumping unit with 1 or 2 pump 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;
- xWEB300 for local or remote (GSM mobile phone) monitoring plus data filing based on WEB server technology;
- Electric power supply different from standard.

## STANDARD FEATURES

- 2 or 4 scroll compressors positioned in parallel in one or two circuits;
- Single welded-brazed stainless steel plate evaporator "dual-circuit";
- 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;
- Charging of non-freezing oil and refrigerant in compact versions TA/HTA and TAT/HTAT performed in factory;
- IP54 electric protection rating;
- Inspections and tests performed in factory as per all MTA products and components;
- Environmentally friendly refrigerants with R410A and R407C zero ozone depletion potential.

## VERSIONS

- Chiller;
- Heat pump;
- Condensing unit (R407C);
- 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.

		Model TAT <i>tecb</i> - HTAT <i>tecb</i>	030	035	040	050	055	060	
R410A (TAURUS <i>tecb</i> )	TAT	Cooling capacity	kW	73,0	82,7	100	115	129	143
		Absorbed power	kW	22,5	23,5	30,4	34,7	38,7	42,6
		ESEER	-	3,80	4,10	4,23	3,68	3,81	4,01
		IPLV	-	4,03	4,32	4,36	3,87	4,01	4,24
		Max external air temperature	°C	47	47	46	46	47	46
	HTAT	Heating capacity	kW	77,6	85,0	109	120	136	150
		Absorbed power	kW	22,5	24,2	30,5	35,4	41,1	44,7
		Min. external air temperature	°C	-8	-9	-8	-8	-8	-8

Power supply	V/Ph/Hz	400±10%/3/50					
Circuit / Compressors	N°	1/2	1/2	1/2	2/4	2/4	2/4
Sound pressure version N	dB(A)	58,5	58,5	58,3	60,2	59,3	59,3
Sound pressure version SN	dB(A)	52,5	52,5	52,3	54,2	53,3	53,3
Sound pressure version SSN	dB(A)	49,6	49,3	48,9	51,3	50,0	50,0
Depth	mm	2507	2507	2507	3407	3407	3407
Width	mm	1110	1110	1110	1110	1110	1110
Height	mm	2120	2120	2120	2120	2120	2120
Installed weight	Kg	767	801	950	1137	1186	1211

		Model TA - HTA -/MC	070	079	094	106	118	133	
R407C (TAURUS)	TA	Cooling capacity	kW	70	78	93	106	118	131
		Absorbed power	kW	23,8	24,9	32,9	37,1	40,9	45,8
		ESEER	-	3,53	3,74	3,60	3,59	3,54	3,70
		IPLV	-	3,70	3,84	3,77	3,80	3,65	3,82
		Max external air temperature	°C	46	46	45	46	46	46
	HTA	Heating capacity	kW	70,8	78,0	107	114	124	141
		Absorbed power	kW	22,1	24,2	31,7	33,9	38,9	42,9
		Min. external air temperature	°C	-8	-8	-8	-8	-8	-8
	MCTA	Cooling capacity	kW	69,0	75,7	91,0	101	118	128
		Absorbed power	kW	24,1	25,2	33,5	37,2	41,0	45,9
	Max external air temperature	°C	45	46	45	46	46	45	

Power supply	V/Ph/Hz	400±10%/3/50					
Circuit / Compressors	N°	1/2	1/2	1/2	2/4	2/4	2/4
Sound pressure version N	dB(A)	58,5	58,5	58,3	60,2	59,3	59,3
Sound pressure version SN	dB(A)	52,5	52,5	52,3	54,2	53,3	53,3
Sound pressure version SSN	dB(A)	49,6	49,3	48,9	51,3	50,0	50,0
Depth	mm	2507	2507	2507	3407	3407	3407
Width	mm	1110	1110	1110	1110	1110	1110
Height	mm	2120	2120	2120	2120	2120	2120
Installed weight	Kg	767	801	950	1137	1186	1211

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 (R407C):** Evaporating temperature 5 °C (DEW), 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.



Microprocessor with double display and icon control.



Pump section with or without storage tank.



Simplified installation and easy access to all internal components.

