

TAEevo

Air-cooled industrial chillers
with hermetic scroll, reciprocating and rotary compressors.



The evolution of ... perfection

Technological innovation, absolute reliability and customer satisfaction have been MTA's hallmarks in over 25 years in the industrial cooling market. The new TAEevo air cooled chillers, specifically designed for use in industrial applications, are compact units equipped, as standard, with an internal storage tank and pump, offering a tried and tested solution that has received worldwide acclaim. TAEevo chillers guarantee EER energy efficiency levels at the top of the category. The innovative evaporator-in-tank configuration ensures reduced ambient heat gain and a steady temperature of the process fluids. The use of components sourced from premium manufacturers and extensive factory testing of all units make for highest reliability levels, minimising the risks of unplanned stoppages and increasing productivity levels. An extensive range of accessories, coupled with operating limits among the most generous available on the market, allow TAEevo to be personalised to a variety of industrial applications.



Cooling, conditioning, purifying.

INNOVATIVE EVAPORATOR-IN-TANK CONFIGURATION

The innovative evaporator-in-tank configuration (co-axial copper coil immersed in a stainless steel tank on M03-10, finned aluminium/copper coil from 015) ensures reduced ambient heat gain, allows high flow rates with low pressure drops and is furthermore compatible with the presence of contaminated process fluids.

SUITED TO ALL INDUSTRIAL NEEDS

The generous standard offering, plus an extensive range of accessories and kits, backed up by the consolidated experience of MTA, allow each TAE_{evo} unit to match the specific customer requirements. TAE_{evo} chillers, expressly designed for industrial applications, are ideal for a range of differing processes including: cooling of plastic processing machinery, the food and beverage industry, machine tools, the chemical industry, and a host of other industrial requirements.

SCROLL COMPRESSORS

TAE_{evo} chillers are equipped with scroll compressors (from model 081), ensuring high efficiency, excellent performance, and elevated energy savings. Thanks to the reduced number of moving parts and the absence of suction and discharge valves, scroll compressors offer reduced maintenance requirements, minimum noise emissions and maximum reliability over time.



OPTIMUM OPERATION IN ALL CONDITIONS

Generous water temperature limits with inlet water temperatures of -5° to 35°C and outlet water temperatures of -10° (0°C on M03-10) to 30°C, plus numerous versions including the -20°C ambient version, the Close-Control version and the version with centrifugal fans (from 031), ensure TAE_{evo} is suited to all conditions.

EASY OPERATION AND MAINTENANCE

Comprehensive safety equipment, including pressure switches, antifreeze sensors and level sensors, plus an internal hydraulic bypass circuit, ensure stable and safe operation, minimising the risk of system errors. Easily removable panels provide ready access to all refrigeration and hydraulic circuit components, facilitating maintenance operations, also during chiller operation.

NON-FERROUS HYDRAULIC CIRCUIT

Two NON FERROUS versions are available, with a stainless steel tank (model 15-351): the first is suitable for pressurised circuits and is equipped with a completely immersed copper evaporator, whilst the second is suitable for atmospheric pressures and features an external stainless steel plate evaporator. These versions are ideal in applications where the water is aggressive towards ferrous materials or applications that call for particularly pure water.

The sophisticated microprocessor offers an optional duplicate display module which can be mounted upto 150m from the unit

TAE_{evo} can be interfaced with RS485-MODBUS systems, as well as to a web browser or a GSM cell phone

The standard pump has a 3 bar head pressure; a 5 bar pump or twin pumps are also available

The integral yet removable high capacity water tank ensures very precise water temperature control



TAE _{evo} model		M03	M05	M10	015	020	031	051	081	101	121	161	201	251	301	351	402	502	602	
Cooling capacity	kW	1,4	2,5	4,4	7,3	9,5	13,8	20,4	28,4	41,9	52,2	59,2	67,4	80,8	88,3	100,1	126,2	146,5	175,3	
Absorbed power	kW	0,5	0,73	1,32	1,9	2,1	3,6	5,0	6,3	8,5	10,3	13,0	15,3	17,3	19,4	22,7	27,0	30,3	36,0	
Power supply	V/Ph/Hz	230±10%/1/50						400±10%/3/50												
Noise level	dB(A)	48,2	48,3	48,3	52,4	52,4	53,1	53,1	53,6	54,1	54,1	55,0	56,3	56,3	58,0	58,0	64,0	64,0	64,0	
Width	mm	325	575	575	560	560	660	660	760	760	760	760	866	866	866	866	1255	1255	1255	
Depth	mm	728	652	652	1266	1266	1310	1310	1860	1860	1860	1860	2240	2240	2240	2240	3294	3294	3294	
Height	mm	540	805	805	810	810	1400	1400	1447	1447	1447	1447	2064	2064	2064	2064	2140	2140	2140	
Working weight (with P3 pump)	kg	63	106	113	188	193	316	336	474	644	663	674	916	1008	1118	1134	1812	1847	1911	
Tank volume	l	8	25	25	60	60	115	115	140	255	255	255	350	350	350	350	500	500	500	
Evaporator water connections	In	1/4"	1/2"	1/2"	3/4"	3/4"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	

Evaporator water inlet/outlet temperature 20/15 °C, external air 25 °C;

Sound pressure level in hemispherical irradiation conditions at a distance of 10 m from the unit and 1.6 m above the ground.

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