TAE N MINI

ErP

R290

Air-cooled industrial chillers.
Nominal cooling capacity 1,7 – 4,4 kW

The natural choice for industry and our planet

Modern industries require technical solutions which ensure increased productivity, high precision, elevated product quality, reduced overall system costs and high environmental awareness.
TAE N Mini liquid chillers are designed specifically for industry, combining environmentally friendly natural refrigerant **R290** and Eurovent certified performance.
The innovative evaporator-in-tank configuration offers unique benefits to industrial users, maintaining fail-safe operation in all applications and conditions.
TAE N Mini is compact and easy to use and maintain; meticulous attention to every detail assures high reliability even in harsh environments, with minimum downtimes.
Extended operating limits ensure **TAE N Mini** always operates under even the most adverse and deviating conditions, allowing optimum operation at all times.
TAE N Mini: natural, ecological, industrial.

MTA®
Cooling, conditioning, purifying.

TAE N MINI

THE BENCHMARK INDUSTRIAL CHILLER

Industrial chillers are required to operate faultlessly 24/7 under highly differing, and abruptly fluctuating, operating conditions; these conditions differ notably from one application to another, but the chiller must always maintain accurate temperature control.

Industry features rigorous environments, dirty process water and testing schedules; even a short period of imperfect operation, let stand a chiller shut-down, can cause disruptions, and damaged goods, which can cost even millions a day.
Industrial process chillers improve production, accelerate manufacturing cycles, increase product quality and reduce wastages.

The cost of an industrial chiller is irrelevant compared with the potential cost if it does not always work perfectly. Industry requires purpose-built chillers, MTA offers the benchmark industrial chiller.

R290: THE NATURAL CHOICE FOR THE FUTURE

NATURAL > R290 is a totally natural refrigerant.

ECOLOGICAL > With a GWP of only 3 and an ODP of zero, R290 is the most ecological refrigerant and does not impact the environment.

EFFICIENT > R290 offers a higher COP versus traditional alternatives, being pure it has no glide.

ECONOMICAL > Applying R290 avoids carbon taxes and benefits from local national incentives.

SAFE & RELIABLE > R290 is non toxic and only mildly flammable; it has been applied for over 100 years and is fully tried and tested.

FUTURE PROOF > R290 is exempt from HFC phase-out programs, consequently your chiller is future proof.

MTA: MEETS THE APPLICATION

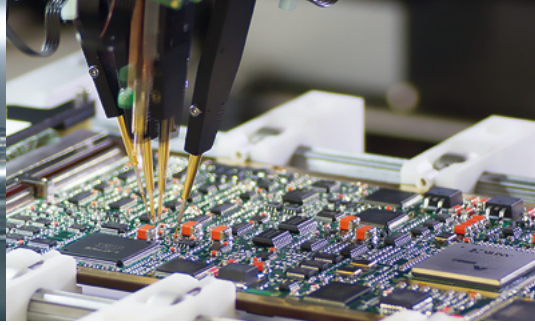
Each industrial application presents individual challenges. MTA's expertise, perfected during 40 years in industry, offers every user a unique solution to their personal needs, perfectly integrated into their process.

Industrial cooling encompasses the precise and continuous temperature control of highly differing production processes, manufacturing tools, finished products, warehousing and working environments.

MTA's application expertise covers welding, filtration, material working, machine tools, lasers, food, beverages & alcohol. plastics, paper & printing, chemical & pharma, medical & healthcare, energy, electronics & electrics, transport & automotive, materials, gas treatment, technical air conditioning and many other applications.

MTA offers the ideal solution, the know-how to apply it and the ability to support every need for many years to come.





BENEFITS

- **Completely natural refrigerant R290**, the most ecological solution.
- **Unique evaporator mounted within the tank** and designed for industry, ensuring reliable operation in even the most demanding industrial applications.
- **Non Ferrous hydraulic circuit**, allowing fluids aggressive to carbon steel to be treated and maintaining maximum quality and cleanliness of the process fluid.
- **Eurovent certified performances**, a unique feature for industrial chillers.
- **Reliable and robust**: TAE chillers keep working whatever the conditions, for years on end.
- **Extended operating limits**: liquid outlet temperatures from 0 °C up to +30 °C, ambient temperatures from +5 °C up to +45 °C.
- All TAE N Mini models are **ErP SEPR HT Tier 2** compliant.
- **Innovation which works**: rotary compressors, microchannel condensers, microprocessor control technology.
- **Simple installation and compact dimensions**, the robust structure with eyebolts allows easy movement of the unit.
- **Easy maintenance**: a rational component layout, simple refrigerant circuit and fully numbered electrics simplify verifications and maintenance, which can even be performed with the unit running.

THE 1

> Industrial chiller with natural refrigerant.
> Eurovent certified dedicated industrial chiller.
> Chiller with evaporator-in-tank technology.
> TAE: possibly the world's favourite industrial chiller.

UNIQUE EVAPORATOR-IN-TANK

MTA's evaporator is a breakthrough in industrial applications, offering notable benefits and ensuring utmost peace of mind in even the most adverse and varying conditions.

INTEGRATED > Innovative evaporator mounted inside the tank: compact, increased tank size, stable liquid temperature.

INDUSTRIAL > Wide fin spacing resists water fouling: industrial and impure liquids pose no problems.

INGENIOUS > 0 °C to +30 °C water outlet, delta T up to 10 °C.

INVINCIBLE > Durable, long-lasting & dependable, many TAE units have been operating for well over 30 years.

INVALUABLE > Non-ferrous liquid circuit allows operation under all conditions and in even the most demanding industries.

INTELLECTUAL > Energy saving, low pressure drop, high water flows and minimal heat gain.

Standard features

- Refrigerant fluid R290 (GWP=3, ODP=0).
- Hermetic rotary compressors.
- High efficiency finned coil evaporator installed inside the storage tank, with copper tubes and aluminum fins.
- Polyethylene coolant storage tank fitted with drain valve, filling and overflow connections and a visual level indicator.
- Air-cooled aluminium microchannel condenser with protection coating and a removable metal mesh filter.
- Peripheral non-ferrous P3 pump (3 barg nominal available head pressure).
- Axial fan equipped with sickle-shaped galvanized sheet blades.
- Non ferrous atmospheric pressure hydraulic circuit with a 0-6 bar pressure gauge.
- Water by-pass for safe continuous operation.
- Hydraulic circuit compatible with glycol concentrations up to 30%.
- High pressure switch with manual reset (M05–M10).
- Easy to use parametric microprocessor control.
- Lamination device: capillary tube.
- AC power plug for simple electrical connection.
- Power supply: 230V/1Ph/50Hz.
- Electrical protection grade IP33.

Options

- Peripheral non-ferrous P5 pump (5 barg nominal available head pressure).
- Hydraulic sectioning system (M08-M10).
- Industrial multipole connector (M08-M10).
- Stainless steel frame.

Kits

- Hydraulic filter.
- Automatic hydraulic by-pass.
- Dynamic set point.
- Antivibration mounts.
- Wheels kit.

TAE N Mini		03	05	08	10
Nominal cooling capacity (1) ▼	kW	1,19	1,83	2,21	2,98
Total absorbed power (1) ▼	kW	0,43	0,66	0,81	1,10
EER (1) ▼	-	2,81	2,77	2,72	2,72
Nominal cooling capacity (2)	kW	1,71	2,68	3,23	4,37
Total absorbed power (2)	kW	0,35	0,59	0,73	1,01
EER (2)	-	4,86	4,54	4,43	4,33
SEPR HT (3) ▼	-	5,14	5,01	5,04	5,01
Power supply	V/Ph/Hz	230 ±10% / 1 - PE / 50			
Sound power level (4) ▼	dB(A)	74	75	75	75
Width	mm	486	486	486	486
Depth	mm	660	660	660	660
Height	mm	622	622	872	872
Operating weight without pump	kg	63	65	91	94
Operating weight with P3 pump (option)	kg	68	71	97	100
Storage tank volume	l	15	15	22	22
Evaporator water connections	Rp	1/2"	1/2"	1/2"	1/2"

Data declared according to EN 14511:2018. All data are referred to standard units without accessories/options which require electrical feeding source, without pump and in nominal working conditions. The listed sound pressure levels are related to base unit with P3 pump option.

(1) Evaporator inlet/outlet water temperature 12/7 °C and external air temperature 35 °C. Total absorbed power of compressor and fan;

(2) Evaporator inlet/outlet water temperature 20/15 °C and external air temperature 25 °C. Total absorbed power of compressor and fan;

(3) Data declared in compliance with the European Regulation (EU) 2016/2281 with regards to EcoDesign requirements for cooling products and high temperature process chillers;

(4) Sound power on the basis of measurements made in compliance with ISO 3744.

▼ Eurovent certified data.

ISO 9001 BUREAU VERITAS Certification

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.

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

MTA participates in the E.C.C. programme for LCP-HP. Certified products are listed on: www.eurovent-certification.com
Certification applied to the units:
- Air/Water up to 600 kW
- Water/Water up to 1500 kW

EAC Declaration

M.T.A. S.p.A.
Business office
Viale Spagna, 8 - ZI
35020 Tribano (PD) - Italy
Tel. +39 049 9588611
Fax +39 049 9588612
info@mta-it.com
www.mta-it.com

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