



TAE G

Air-cooled process chillers with scroll compressors.
Nominal cooling capacity 7 – 254 kW



R513A

R454B



*Cooling your industry,
optimising your process.*



Cooling, conditioning, purifying.



WE MADE IT GREEN

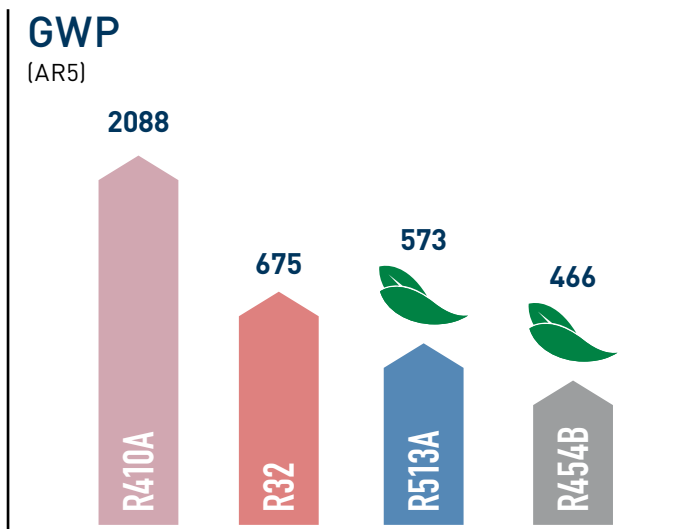
TAE G air-cooled process chillers are designed specifically for use in the most demanding industrial applications.

TAE G is the result of MTA's commitment towards the green transition of energy systems, combining the reliability and durability of our process chillers with the application of eco-friendly refrigerants R513A and R454B, in alternative to R410A.

The chiller's packaged configuration features an internal storage tank and pump as standard, offering a plug & play solution with a worldwide acclaim. An extensive range of options, coupled with wide operating limits, allow TAE G to perfectly fit a variety of process cooling applications.

TAE G: capable, flexible and dependable. Everything your industry needs.

THE SUSTAINABLE COOLING SOLUTION FOR YOUR INDUSTRY, WITHOUT COMPROMISING ENERGY EFFICIENCY



R513A from model 020 to 071

-72%

GWP versus R410A

- Composition 44% R134a + 56% R1234yf;
- Low GWP 573 (IPCC);
- A1 low-toxicity, non-flammable (ISO 817).
- Non-Ozone depleting.

R454B from model 081 to 1002

-77%

GWP versus R410A

- Composition 69% R32 + 31% R1234yf;
- Low GWP 466 (IPCC);
- A2L low-toxicity, mildly flammable (ISO 817);
- Non-Ozone depleting.

Unparalleled operating range

TAE G widens the ordinary chiller limits to match the requirements of multiple applications, The limits can be further extended with the optional EC Brushless fans.

Certified Efficiency

TAE G efficiency exceeds the latest Ecodesign standard for process cooling applications and are guaranteed by Eurovent-certification.

Plug and Play

TAE G features an integrated hydronic group. An extensive range of accessories and kits allow each unit to perfectly fit the application. TAE G is easy-to-use and ready-to-install.

Matchless dependability

TAE G is designed to work whatever the conditions. The standard safety equipment includes a phase monitor, pressure switches, antifreeze sensors, level sensors, compressors crankcase heaters and an internal hydraulic circuit by-pass.

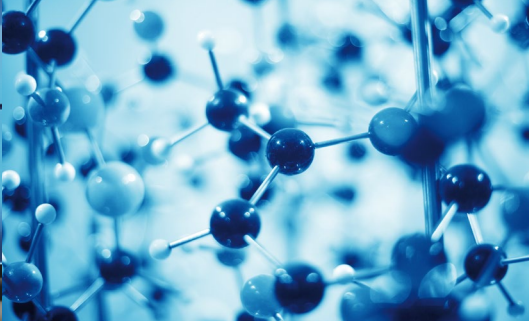
OUTLET WATER TEMPERATURE
-10/+30°C

AMBIENT TEMPERATURE UP TO
-20/+46°C

SEPR^{HT} 5,9
UP TO
(REG. 2016/2281)

SEPR^{MT} 3,8
UP TO
(REG. 2015/1095)





Condensing coil

Copper tubes and corrugated aluminum fins with removable metal filters (mod. 031÷1002) and protection grid (mod. 020).

High efficiency axial fans

Options:

- EC Brushless fans on mod. 031÷1002
- Continuous electronic regulation of the air flow
- Very low ambient temperature operation (-20 °C)
- High efficiency at partial loads

Electrical Panel

- IP54 protection grade (IP44 on mod. 020)
- Parametric microprocessor IC208CX, mod. 381÷1002 with semi-graphic LCD display
- Automatic thermal-magnetic cut-outs on main loads
- Phase monitor

Structure and casing

Sturdy galvanized carbon steel structure with epoxy polyester powder coating.

Centrifugal pumps

P3 Pump (3 barg);

Options:

- P3 Pump for open hydraulic circuits (3 barg)
- P5 Pump (5 barg)
- Double P3+P3 or P5+P5 pumps (mod. 201÷1002)

Unique evaporator-in-tank

High-efficiency finned coil evaporator with copper tubes and aluminum fins, installed inside the water storage tank.

Efficient Hermetic Scroll compressors

Electronic expansion valve

(mod. 031÷1002)

Standard features

- Internal hydraulic by-pass;
- Electronic level sensor with water conductivity function;
- High pressure switch, high pressure transducer (mod. 031÷1002), low pressure switch and low pressure transducer (mod. 031÷1002);
- Refrigerant pressure gauges (mod. 031÷1002).

Options

- Anti-freeze heaters (on tank and pumps);
- Non ferrous hydraulic circuit (mod. 020÷802).

Kits

- Flow rate regulation kit;
- Manual filling tank kit: suitable for atmospheric pressure hydraulic circuits;
- Automatic filling kit: suitable for pressurized hydraulic circuits (up to 6 barg);
- Remote control kit VICX620 (LED display) and VGI890 (LCD display) (max 100 m);
- Supervisor kits: RS485 ModBus, xWEB300D PRO and xVISION;
- External automatic hydraulic by-pass kit (mod.020÷602);
- Modularity kit: up to 5 units in MASTER/SLAVE system.

TAE G		020	031	051	071	081	101	121	161	201	251	301
Nominal cooling capacity (1)	kW	4,96	7,17	10,36	16,60	21,85	25,98	33,05	35,95	43,37	47,66	57,03
Total absorbed power (1)	kW	1,81	2,47	3,64	5,49	8,37	9,56	12,39	14,11	16,93	19,55	21,52
EER (1)		2,75	2,90	2,85	3,02	2,61	2,72	2,67	2,55	2,56	2,44	2,65
Max external air temperature	°C	46	46	46	46	46	46	46	46	46	46	46
SEPR HT (2)		5,11	5,20	5,10	5,20	5,09	5,15	5,01	5,05	5,64	5,60	5,28
SEPR MT (3)		2,85	2,95	2,92	3,17	3,27	3,11	3,29	3,39	3,31	3,36	3,27
Nominal cooling capacity (4)	kW	7,22	10,42	14,89	23,43	30,11	35,43	45,36	48,91	59,69	65,33	78,25
Total absorbed power (4)	kW	1,59	2,22	3,29	4,97	7,28	8,26	11,06	12,47	14,79	17,39	19,00
EER (4)		4,54	4,70	4,53	4,71	4,14	4,29	4,10	3,92	4,04	3,76	4,12
Max external air temperature	°C	46	46	46	46	46	46	43	45	45	45	45
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50										
Circuits / Compressors	N°	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/2	1/2	1/2
Sound power (5)	db(A)	80,4	81,1	81,1	81,6	81,6	82,1	82,1	83	84,3	84,3	86
Sound pressure (6)	db(A)	52,4	53,1	53,1	53,6	53,6	54,1	54,1	55,0	56,3	56,3	58,0
Refrigerant		R513A	R513A	R513A	R513A	R454B	R454B	R454B	R454B	R454B	R454B	R454B
Width	mm	560	660	660	761	761	761	761	761	866	866	866
Depth	mm	1284	1315	1315	1862	1862	1862	1862	1862	2250	2250	2250
Height	mm	904	1420	1420	1556	1556	1556	1556	1556	2172	2172	2172
Working weight (7)	Kg	199	314	324	462	462	624	635	649	924	966	1018
Tank volume	l	60	115	115	140	140	255	255	255	350	350	350
Evaporator water connections	Rp-DN	3/4"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"	2"

TAE G		351	381	401	402	502	602	702	802	902	1002	
Nominal cooling capacity (1)	kW	64,19	75,09	85,08	87,13	99,26	112,32	130,58	148,27	171,91	190,26	
Total absorbed power (1)	kW	26,28	26,39	31,74	34,50	37,94	43,10	50,10	53,43	63,42	74,92	
EER (1)		2,44	2,85	2,68	2,53	2,62	2,61	2,61	2,77	2,71	2,54	
Max external air temperature	°C	46	46	46	46	46	46	46	46	46	46	
SEPR HT (2)		5,36	5,46	5,56	5,49	5,69	5,61	5,61	5,86	5,63	5,36	
SEPR MT (3)		3,38	3,36	3,34	3,42	3,55	3,58	3,64	3,80	3,67	3,61	
Nominal cooling capacity (4)	kW	87,10	103,91	117,70	121,13	137,80	155,57	175,93	197,96	229,66	254,22	
Total absorbed power (4)	kW	23,71	23,29	28,60	30,33	33,56	38,61	44,70	47,29	56,40	67,55	
EER (4)		3,67	4,46	4,11	3,99	4,11	4,03	3,94	4,19	4,07	3,76	
Max external air temperature	°C	44	44	43	44	44	43	43	44	46	45	
Power supply	V/Ph/Hz	400 ± 10% / 3-PE / 50										
Circuits / Compressors	N°	1/2	1/2	1/2	2/2	2/2	2/2	2/2	2/2	2/2	2/2	
Sound power (5)	db(A)	86	88,3	89,7	89,5	89,5	89,5	90,2	90,6	91,7	92,8	
Sound pressure (6)	db(A)	58,0	60,3	61,7	61,5	61,5	61,5	62,2	62,6	78,7	79,8	
Refrigerant		R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B	R454B	
Width	mm	866	1150	1150	1255	1255	1255	1250	1250	1250	1250	
Depth	mm	2250	2790	2790	3298	3298	3298	3535	3535	4655	4655	
Height	mm	2172	2260	2260	2299	2299	2299	2152	2152	2152	2152	
Working weight (7)	Kg	1028	1366	1419	1666	1682	1726	2077	2114	2839	2936	
Tank volume	l	350	410	410	500	500	500	678	678	950	950	
Evaporator water connections	Rp-DN	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	3"	3"	100	100	

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.

- (1) Evaporator water inlet/outlet temperature 12/7 °C, external air temperature 35 °C;
- (2) Data declared in compliance with the European Regulation (EU) 2016/2281 with regard to ecodesign requirements for cooling products and high temperature process chillers;
- (3) Data declared in compliance with the European Regulation (EU) 2015/1095 with regard to ecodesign requirements for cooling products and medium temperature process chillers;
- (4) Evaporator water inlet/outlet temperature 20/15 °C, external air temperature 25 °C;
- (5) Sound power: determined on the basis of measurements taken in accordance with the standard ISO 3744.
- (6) Sound pressure: average value obtained in free field on a reflective surface at a distance of 10 m from the condensate side of the machine and at a height of 1.6 m from the unit support base. Values with tolerance ± 2 dB. The sound levels refer to operation of the unit under full load in nominal conditions;
- (7) The weight refers to the version without accessories/options.



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.



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

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