



# CYGNUS G

Air-cooled water chillers featuring hermetic scroll compressors  
Nominal cooling capacity 26,7 – 80,8 kW



*Cooling your industry,  
optimising your process.*



Cooling, conditioning, purifying.



## THE GREEN INDUSTRIAL SOLUTION

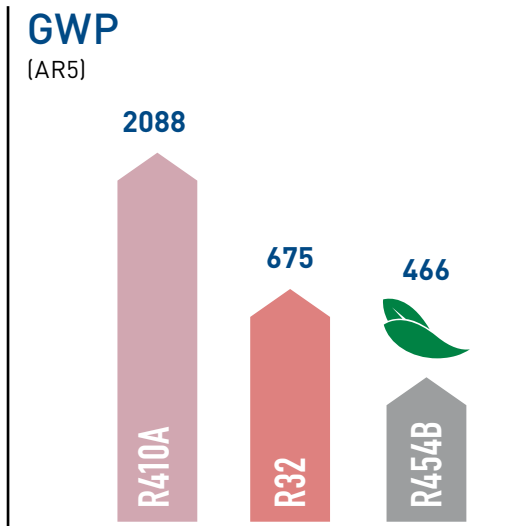
CYGNUS G air-cooled industrial chillers are designed specifically for use in demanding applications.

CYGNUS G is the result of MTA's commitment towards the green transition of energy systems, combining reliability, durability and flexibility with the application of eco-friendly refrigerant R454B.

The packaged plug & play configuration features an internal storage tank and single or twin pumps. Numerous options, coupled with wide operating limits, ensure CYGNUS G perfectly fits a variety of process cooling applications.

**CYGNUS G is the flexible and dependable solution for your industrial needs.**

## SUSTAINABLE COOLING WITHOUT COMPROMISING ENERGY EFFICIENCY



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

### Wide operating range

CYG's wide operating limits match the requirements of multiple applications, with water outlet temperatures from -5 to +20 °C and a delta T from 4 to 10 °C.

### Certified Efficiency

CYG efficiencies exceed the latest Ecodesign SEPR standard for process cooling applications and are guaranteed by Eurovent certification.

### Plug and Play

CYG features an integrated hydronic group. Multiple accessories and kits allow each unit to fit the application needs. CYG is easy-to-use and ready-to-install.

### Industrial quality

CYG is designed to work whatever the conditions. The robust design features field-tested premium components and a meticulous attention to every single detail.

WATER OUTLET TEMPERATURE

**-5/+20 °C**

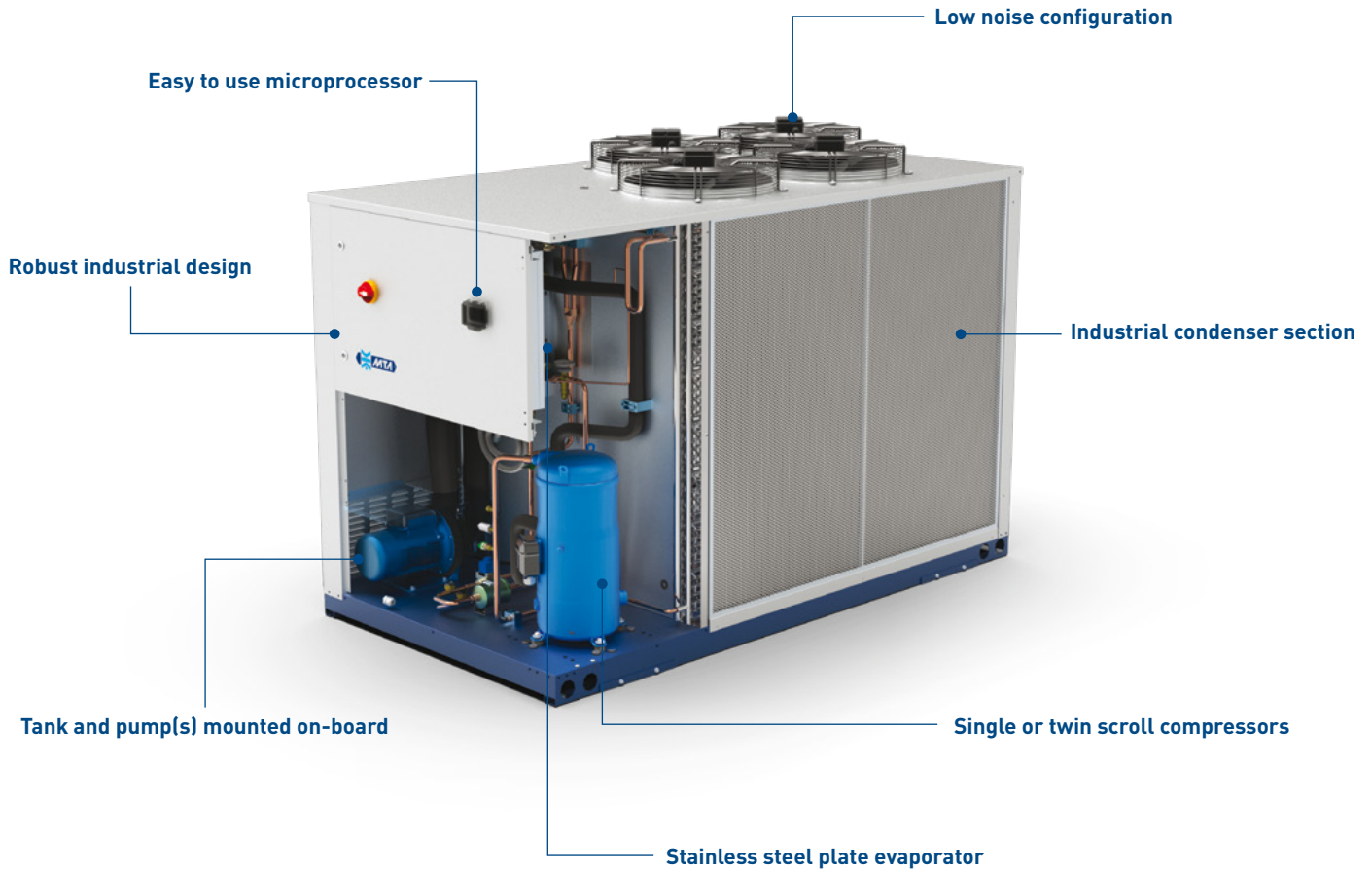
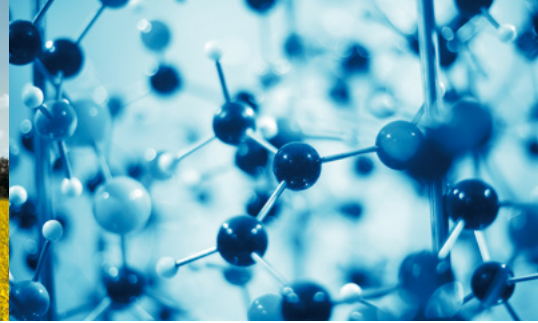
**SEPR HT5,44**  
UP TO

(REG. 2016/2281)

AMBIENT TEMPERATURE

**-20/+46 °C**





### Low noise

CYG offers low noise levels, with sound power levels down to below 67 dB(A) as standard. This is ideal in noise sensitive environments.

### Packaged and flexible

CYG meets your specific needs. Choose between a unit with or without a buffer tank, and without pump, with a single pump or with twin pumps.

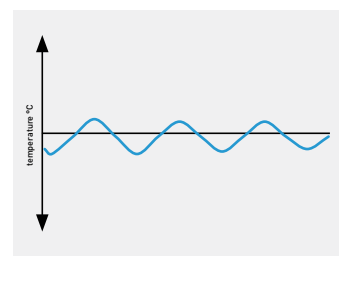
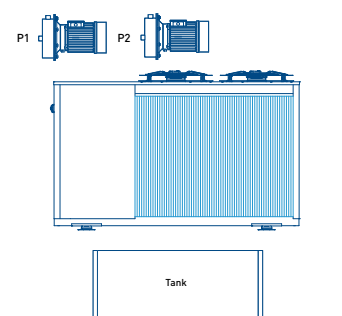
### Accurate control

Outlet liquid temperature control and a generously sized cold tank ensure accurate temperature control even in industrial applications with sudden load variations.

### Stainless steel evaporator

MTA's industrial chiller ranges offer differing evaporator configurations. CYG's stainless steel plate evaporator is ideal in multiple closed circuit industrial processes.

**Noise reduction down to 67 dB(A)**



## Standard features

- Refrigerant R454B;
- Hermetic scroll compressor (twin compressors from mod.211);
- Compressor crankcase heater;
- Industrial copper-aluminium condenser;
- Integrated hydronic module with pump, storage tank, expansion vessel, safety valve, filling/drain valve, pressure gauge and automatic bleed valve;
- Hydraulic threaded connections directly accessible from the unit's exterior;
- Brazed stainless steel plate evaporator;
- Axial fans with electronic speed control;
- Electrical panel protection grade IPX4;
- Phase monitor;
- Factory charged with refrigerant and non-freezing oil;
- Extensively factory tested (performance, operation, quality and safety).

## Options

- Winter package: minimum ambient temperature -20 °C, storage tank, medium head pressure pump, condenser air filters and antivibration mounts;
- Configuration with storage tank;
- Medium/low head pressure pump (depending on model);
- Double pumps (1 run/1 stand-by; on request);
- Anti-freeze heater on evaporator, pump and storage tank (if installed).

## Kits

- Replicated remote user display;
- Serial card (RS485 Modbus);
- xWEB300D PRO supervisor system;
- Soft starter;
- Condenser air filters;
- Antivibration mounts.

CYG		081	101	131	171	211	251	301
Nominal cooling capacity (1)	kW	26,69	35,03	45,20	50,93	61,27	71,89	80,83
Total absorbed power (1)	kW	6,03	8,15	10,63	11,49	14,73	15,91	19,12
EER (2)	-	4,43	4,30	4,25	4,43	4,16	4,52	4,23
SEPR HT (3)	-	5,09	5,04	5,05	5,25	5,07	5,44	5,24
Nominal cooling capacity (4)	kW	19,37	25,61	33,16	37,59	44,71	52,38	59,02
Total absorbed power (4)	kW	7,11	9,25	11,83	12,80	16,76	18,18	21,32
EER (5)	kW	2,72	2,77	2,80	2,94	2,67	2,88	2,77
Power supply	V/Ph/Hz	400 ± 10% / 3+N-PE / 50						
Circuits / Compressors	N°	1/1	1/1	1/1	1/1	1/2	1/2	1/2
Sound power (6)	dB(A)	75,1	75,6	76,1	76,9	81,3	81,9	82,3
Sound pressure (7)	dB(A)	47,1	47,6	48,1	48,9	53,3	53,9	54,3
Width	mm	810	810	1112	1112	1112	1112	1112
Height	mm	1184	1184	1464	1464	1552	1552	1552
Depth	mm	1998	1998	2102	2102	2503	2503	2503
Installed weight	kg	463	489	586	607	735	770	778

**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) Data referred to nominal conditions, external ambient temperature 25 °C and evaporator water temperature IN/OUT 20/15 °C;
- (2) Data referred to full load operation and nominal conditions, external ambient temperature 25 °C and evaporator water temperature IN/OUT 20/15 °C;
- (3) Data declared in compliance with European Regulation (EU) 2016/2281 regarding ecodesign requirements for cooling products and high temperature process chillers;
- (4) Data referred to nominal conditions, external ambient temperature 35 °C and evaporator water temperature IN/OUT 12/7 °C;
- (5) Data referred to full load operation and nominal conditions, external ambient temperature 35 °C and evaporator water temperature IN/OUT 12/7 °C;
- (6) Sound power on the basis of measurements made in compliance with ISO 3744;
- (7) Sound pressure at 10 m: average value obtained in free field on a reflective surface at a distance of 10 m from external side of unit's electrical panel and at a height of 1,6 m from unit support base. Values with tolerance ±2 dB. Sound levels refer to full load operation in nominal conditions, with circulation pump operating.



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](http://www.eurovent-certification.com) Certification applied to the units:  
- Air/Water up to 600 kW  
- Water/Water up to 1500 kW

Headquarters:  
**M.T.A. S.p.A. a socio unico**  
Viale Spagna, 8 ZI  
35020 Tribano (PD) Italy  
Tel. +39 049 9588611  
Fax +39 049 9588676  
[info@mta-it.com](mailto:info@mta-it.com)  
[www.mta-it.com](http://www.mta-it.com)



Cooling, conditioning, purifying.