



Conditioning the air, releasing new opportunities.

# CYGNUS

Air cooled water chillers from 4 to 65 kW

# H CYGNUS

Air to water heat pumps from 5 to 74 kW  
4 to 62 kW in chiller mode

# CYGNUS/MC

Condensing units from 4 to 68 kW

R407C 50 Hz



Love is in the air



Cooling, drying and caring.



# CYGNUS HCYGNUS CYGNUS/MC

## Low power consumption, low noise levels

The new air cooled Cygnus range, featuring standard chillers, heat pumps (HCygnus) and Condensing Units (Cygnus/MC) offer rotary or scroll compressors, plate evaporators and an integrated hydraulic kit with pump and tank. An important feature is the microprocessor control, which automatically regulates the fan speed in accordance with the instantaneous load required; **this allows the fan speed to be reduced at partial loads, thereby reducing both power consumptions and noise levels, a significant benefit for the user.** The defrosting control logic, unique to MTA, reduces the defrosting frequency and duration to a minimum, offering significant energy savings. Environmental friendly refrigerant R407C is used throughout the range; the reduced refrigerant charge minimizes Cygnus's environmental impact.



### ADVANTAGES

- Ideally suited to commercial and domestic chilled water air-conditioning applications;
- Fully packaged compact configuration, allows installation in limited spaces;
- Advanced and reliable design, featuring highest quality components,
- Allows high ambient temperature operation;
- Extremely low noise levels thanks to special low speed fans with crescent-shaped blades;
- Individually and fully tested (as per standard practice on all MTA products);
- User friendly control section with simple readout and graphic display;
- Simple to install and maintain, easily accessible components;
- Environmental friendly, with zero ODP refrigerant R407C.

- Integrated hydraulic kit complete with pump, buffer tank, expansion vessel, drain valve, water gauge, air bleed valve;
- Power supply: 230/1/50 (013-020), 400/3/50 (031-301);
- Microprocessor control;
- Stainless steel plate heat exchanger (copper braze welded);
- Pressostatic condensing pressure control;
- Protection grade IPX4.

### MAIN OPTIONS

- Configuration without hydraulic kit;
- Low head pressure pump;
- Anti-freeze heater fitted on the evaporator and heat pump;
- Remote control kit;
- Serial communication card;
- Phase control kit;
- Antivibration mountings;
- Condensing unit version (CYGNUS/MC).

### STANDARD FEATURES

- Refrigerant R407C
- Hermetic Rotary compressors (013-020) and Scroll compressors (031-301);

Model		CG-HCG-/MC	013	015	020	031	051	071	081	101	131	171	211	251	301	
Cygnus	Cooling capacity	kW	4.1	4.8	6.9	9.7	13.5	16.7	21.2	28.5	37.1	43.8	49.8	57.0	65.6	
	Absorbed power	kW	1.2	1.5	2.3	3.2	4.2	6.0	6.2	8.8	11.4	13.0	15.4	17.0	20.6	
	Max external air temp.	°C	47	47	46	47	46	45	47	46	46	46	46	46	45	
HCygnus	Cooling capacity	kW	3.9	4.5	6.5	9.3	12.7	15.9	20.4	27.4	35.5	41.7	48.4	54.2	61.9	
	Absorbed power	kW	1.2	1.5	2.3	3.2	4.2	6.0	6.2	8.7	11.3	12.9	14.8	17.0	20.5	
	Max external air temp.	°C	47	46	46	47	46	45	47	46	46	47	47	46	45	
	Heating capacity	kW	4.6	5.1	7.2	10.9	14.5	19.2	22.8	30.4	40.2	46.5	54.8	60.9	70.4	
/MC	Absorbed power	kW	1.3	1.6	2.3	3.2	4.2	6.0	6.4	8.9	11.3	13.4	15.5	17.9	20.6	
	Min. external air temp. (*)	°C	-10	-9	-7	-9	-8	-7	-6	-7	-8	-7	-7	-7	-6	
	Cooling capacity	kW	3.9	4.6	6.7	9.5	13.2	16.3	20.2	27.2	35.5	41.7	47.5	54.4	63.1	
	Absorbed power	kW	1.3	1.6	2.3	3.3	4.3	6.2	6.4	9.0	11.6	13.2	15.7	17.3	21.1	
Max external air temp.	°C	48	47	46	47	46	45	46	48	47	48	47	47	46		
Power supply	V/Ph/Hz	230±10%/1/50					400±10%/3/50									
Noise level	dB(A)	39.1	40.3	41.0	43.3	44.8	45.8	43.1	46.3	48.8	49.4	50.0	50.7	50.7	51.3	
Depth	mm	380	380	380	550	550	550	810	810	1112	1112	1112	1112	1112	1112	
Width	mm	978	978	978	1420	1420	1420	1960	1960	2060	2060	2470	2470	2470	2470	
Height	mm	985	985	985	1288	1288	1288	1203	1203	1417	1417	1595	1595	1595	1595	
Weight installed	kg	143	146	156	284	315	317	550	569	682	717	831	857	875	875	

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

(\*) Max condenser outlet water temperature 50 °C. Min. external air temperature -10 °C with reduction in water outlet temperature.

Condensing unit: Evaporating temperature 5 °C (DEW), external air temperature 35 °C.

Sound pressure level in hemispherical field at 10 m from condenser side and 1.2 m from ground.



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ISO 9001:2000 Certified



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