

CENTAURUS

Air cooled chillers with R407C equipped semi-hermetic piston compressors: Cooling capacity 241 - 839 kW.

FRUIT OF OVER 25 YEARS REFRIGERATION EXPERIENCE, CENTAURUS CAN BE ADAPTED TO THE MOST DIVERSE INDUSTRIAL NEEDS. RELIABLE PISTON COMPRESSORS, ADVANCED MICROPROCESSORS AND THE LATEST HIGH EFFICIENCY EVAPORATORS ARE STANDARD FEATURES.



RELIABLE TECHNOLOGY

Centaurus' reliability is the result of many years of experience and a comprehensive understanding of the problems encountered in industrial cooling, combined with impeccable quality standards and the use of top quality and premium brand components. Designed to function safely and reliably even in extreme operating conditions, Centaurus units guarantee constant performance for prolonged periods of operation.

ADVANCED MICROPROCESSOR

Thanks to its processing power the 32-byte programmable microprocessor permits energy efficiency maximization in all load conditions and the management of up to 4 units in master-slave mode. The microprocessor features STATUS CONTROL design, presenting the user with a full range of information concerning the status of the various controlled parameters.

Remote interfaceability is assured by means of a GSM modem and full compatibility with the most widely used Building Management System (BMS) communication protocols: BACnet, Lonworks, and ModBus.

EASY MANAGEMENT AND MAINTENANCE

Thanks to the microprocessor controller with a simple and intuitive multilingual interface, the operator can easily access the system's main operating parameters. All the main functional parameters are also available thanks to high and low pressure gauges, temperature and pressure sensors, and a liquid flow sight glass.

Troublefree and unimpeded access to the main components of the refrigerant circuit, plus the microprocessor's simple and intuitive graphic interface, combine to simplify maintenance activities, minimising downtimes and maintenance costs.



HIGH EFFICIENCY EVAPORATORS

Centaurus' direct expansion shell-and-tube evaporators are among the most technologically advanced available. Thanks to their construction and the facility for periodic disassembly and maintenance, they allow stable and reliable operation in even the harshest industrial applications. All evaporators are protected from freezing up by means of the microprocessor's antifreeze function and a differential pressure switch.

POWERFUL AND VERSATILE

Backed by over 25 years experience in the industrial sector, MTA designers are able to adapt Centaurus units to meet specific plant requirements. For example, special configurations with refrigerant R404A offer water temperatures down to -20 °C; perfect for cooling of food cold stores, or to supply the coils of mobile ice-skating rinks in the specific plant hire configuration.

VERSIONS

- C - standard;
- SC - low noise;
- SF - low noise for high ambient temperatures;
- SSF - super-silent.

ACCESSORIES

- Electronic fan speed regulation;
- Pre-coated condensing coils for aggressive atmospheres;
- Evaporator antifreeze heaters;
- Part-winding - automatic cut-outs;
- Replicated remote user terminal kit;
- Supervisor kits;
- 460/3/60 power supply;
- R22 refrigerant.

Model CENTAURUS		241	286	326	372	430	477	534	563	616	669	711	749	794	839
Cooling capacity (1)	kW	241	286	326	372	430	477	534	563	616	669	711	749	794	839
Absorbed power (1)	kW	78,6	93,2	113	133	146	160	173	188	205	225	233	256	269	285
Max external air temperature (1)	°C	45	44	43	43	44	44	43	43	45	44	43	43	43	43
Power supply	V/Ph/Hz	400±10%/3/50													
Noise level	dB(A)	67,6	68,4	66,6	67,3	68,3	67,7	67,2	66,7	67,7	67,1	67,1	68,5	67,9	67,3
Depth	mm	3295	3295	3295	3295	4260	4260	4260	4260	5165	5165	6100	6100	6100	6100
Width	mm	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190	2190
Height	mm	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350	2350
Installed weight	Kg	2181	2450	2778	2982	3474	3644	2806	3995	4635	5221	4821	5565	5749	5944

All data refers to standard units at the following nominal conditions:

(1) Evaporator water inlet-outlet 12-7 °C, external air temperature 35 °C;

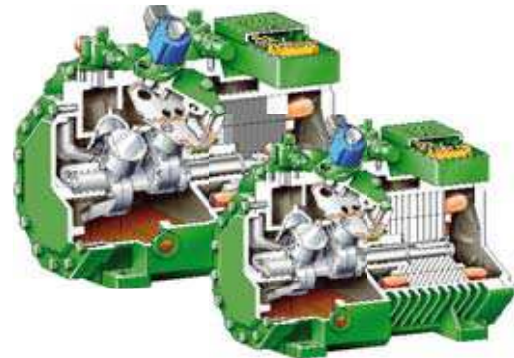
Sound pressure level in hemispherical field at 10 m from condenser side and 1.6 m from ground. Values with tolerance ± 2 dB.

The sound levels refer to operation of the unit under full load in nominal conditions.

UNIVERSALLY UTILISABLE COMPRESSORS

The latest generation of semi-hermetic piston compressors, equipped with mufflers as standard, can function with the most popular refrigerants, including R407C, R134a, R22, R404A and R507A. Each compressor features built-in protection against overheating (incorporated in the motor windings), a crankcase heater and an oil differential pressure switch. Thanks to the use of aluminium pistons with optimised geometry and the rugged construction of the valves, high reliability levels can be achieved combined with constant efficiency in relation to varying operating conditions. Their accessible housing allows for easy maintenance and repair interventions.

PISTON COMPRESSORS



Microprocessor controller with extensive display



Shell-and-tube evaporator with Victaulic connections



Easily removable condenser mesh filters



Axial fans with various rotational speeds

