

Unit Description

Water cooled water chillers featuring oil free centrifugal. Cooling capacity 300 - 1200 kW.

VERSIONS

- Chiller



Unit Features

- 400/3/50 power supply.
- Centrifugal turbocor compressors with magnetic bearings.
- Single refrigeration circuit with 1,2,3 or 4 compressors mounted in parallel.
- Continuous power output modulation by means of speed control.
- Electronic expansion valve.
- Microprocessor control.
- Shell and tube evaporator and condenser, optimised for use with refrigerant R134a.
- Protection grade IP44.
- Compressor suction and discharge valves.
- Liquid line valve and electrovalve.
- Evaporator water side differential pressure switch.
- Refrigerant R134a.

Elevated EER

Units fitted with several compressors in parallel maximise their EER also at partial loads, which represent more than the 50 % of the unit's total working time. EER is lower on units fitted with centrifugal compressors installed on independent circuits.

Unit Accessories

- Tower water or city water condenser.
- Rubber anti-vibration (110) or springs anti-vibration kit (220 - 440).

Equipment designed to ISO-9001 and all relevant directives. Product improvement is a continual process at ICS Air Conditioning and we reserve the right to change the design and specifications without notice or obligation.

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Unit Benefits

- Absence of friction with resulting benefits in terms of low noise emissions.
- Elevated IPLV and elevated EER at partial loads.
- Long compressor lifetime thanks to the absence of mechanical friction.
- Very low starting current (2 A).
- The variable compressor speed control allows the chiller to adapt it self to a wide range of power ratings.
- No vibration, low noise levels.
- Reduced weight due to the compact compressor technology.

Partial Loads

The standardised IPLV and ESEER indices establish the average weighted efficiency of a chiller and provides insight – in a more accurate manner than the EER value – into the relationship between the useful effect (energy removed from the rooms) and the energy expended (electrical power consumption) of an air conditioning unit throughout an entire season of operation.

The graphs show the importance of operation at partial load from the energy standpoint.

