

### Unit Description

Air cooled water chillers with R410A and R407C featuring tandem/triple scroll compressors. Cooling capacity 366 - 1079 kW.

#### VERSIONS

Chiller

Low ambient air temperature in cooling mode (down to  $-20\text{ }^{\circ}\text{C}$ )

Version with recovery super heaters

Version with total recovery condensers

Applications for water temperatures down to  $-10\text{ }^{\circ}\text{C}$

Special applications with dual set-point operation

Acoustic configurations- N (standard) - SN (low noise) - SSN (very low noise).



### Unit Features

- Multiple scroll compressors (4, 6, 9 or 12 depending on the model) connected in parallel (tandem or trio) on 2, 3 or 4 independent refrigeration circuits.
- Stainless steel brazed plate dual-circuit evaporators "dual-circuit".
- Shut-off valve and solenoid valve on the liquid line in each refrigeration circuit.
- Main switch.
- Phase monitor.
- Axial fans with progressive starting for condensing pressure control, arranged in two independent aeraulic sections.
- High and low pressure transducer.
- Thermostatic expansion valves, refrigerant fitters, sight glasses, solenoid valve on liquid line.
- Water differential pressure switch, air bleed valve and water drain valve.
- Water collectors for twin evaporator models.
- Factory tested and supplied with refrigerant charge and antifreeze oil.
- Environmentally friendly refrigerants with R410A and R407C zero ozone depletion potential.

### Unit Benefits

- Reduced noise levels, thanks also to the availability of three differing acoustic versions.
- High EER/COP levels, especially at partial loads.
- Allows start-up and operation in even the most severe conditions thanks to the unloading function.
- Simple to install and maintain, easily accessible Components.
- Compatible with the latest BMS supervision and interface systems.

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 Accessories

- Add-on external pumping unit with 1 or 2 pumps.
- Storage tank.
- Condenser coils designed for aggressive atmospheres.
- Metal mesh filters for condenser coil protection.
- Fan step regulation.
- Compressor suction and discharge valves.
- Electronic expansion valve.
- Antifreeze heater on evaporator, pumps and tank.
- Compressor crankcase heater.
- Anti-vibration springs kit.
- Serial connection to supervisor system.
- Master-slave configuration allowing the interconnection and control of up to 4 units in parallel.
- Replicated remote control interface.

### Partial Loads

#### ESEER AND IPLV OPERATING TIME PERCENTAGES:

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.

