

Unit description



Outdoor unit for the production of chilled water, equipped with oil-free centrifugal compressors, R134a refrigerant, axial EC fans, condensing coil with copper tubes and aluminum fins, shell and tube flooded evaporator, evaporative cooling system and electronic expansion valve. Base, supporting structure and panels are of galvanized epoxy powder coated steel. The unit is supplied with refrigerant and has been factory tested. In free cooling mode, the liquid is cooled by outdoor air, thus lowering the load of the compressors until it is reduced to zero. The evaporative cooling system is made of treated cellulose pads and a water circulator that keeps the pads wet. It lowers the air temperature before it reaches unit's coils, thus increasing mechanical cooling efficiency and allowing free-cooling benefits to begin at higher outdoor temperatures. The NG configuration complies with applications where it is not allowed or desired the use of ethylene glycol.

Versions

- **K** - Key efficiency, compact version
- **CA** - High energy efficiency units

Configurations

- - - Basic function
- **NG** - Function for free-cooling without use of glycole

Features

- **EXTENSION OF FREE-COOLING TEMPERATURE RANGE**
Thanks to the evaporative cooling system that decreases the outdoor air temperature, the unit can take full advantage of the free-cooling benefit also in climatic conditions that normally don't permit it.

- **ENERGY SAVING**
Energy saving guaranteed by free-cooling, which exploits the low external air temperatures; free-cooling control with optional modulating valve.
- **VERY HIGH EFFICIENCY**
Top-level seasonal efficiency thanks to technological solutions at the forefront: magnetic levitation centrifugal compressors, flooded evaporator, EC fans and advanced control algorithms.
- **WIDE RANGE**
Extended capacity range.
- **LOW INRUSH CURRENTS**
Reduced breakaway starting currents thanks to the revolutionary centrifugal compressor.
- **EXTREMELY SILENT OPERATION**
Extremely silent operation in line with the best on the market, and highly reduced vibrations
- **INTEGRATED HYDRONIC GROUP**
It consists of 2 pumps with 4-pole motor, fixed or variable speed, with high or low head options to satisfy the different installation requirements.

Accessories

- Modulating valve for water temperature control in Free-Cooling mode
- Hydronic group
- VPF (Variable Primary Flow) kit: variable flow pumps with on board regulation
- Fast restart
- Double power supply with automatic changeover (ATS) or motorized changeover
- Compressor power factor correction
- Set-up for remote connectivity with ModBus/Echelon protocol cards
- Touch Screen visual display
- Remote control keyboard (distance to 200m and to 500m)