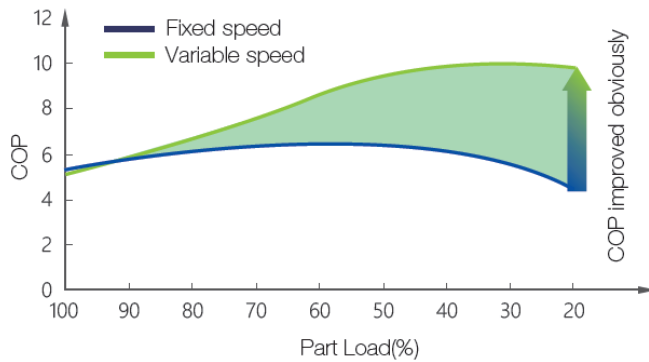
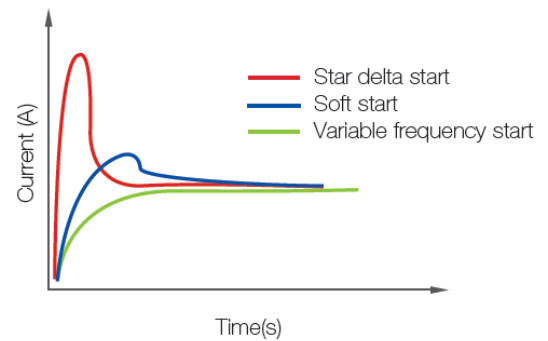


## Outstanding IPLV Performance



## Smaller Starting Current

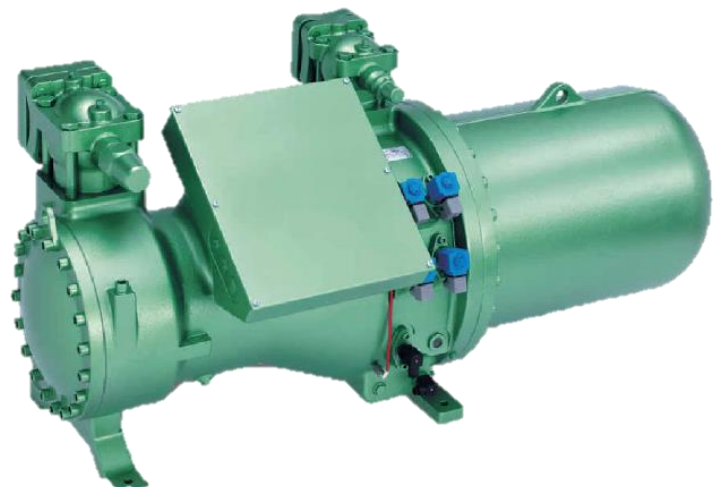


## Flooded evaporator and condenser

- Copper tube completely immersed in the boiling liquid refrigerant and therefore the unit performance and COP are enhanced obviously.
- Super high efficiency copper tube are designed with patent technology. The external screw on the tube increases the evaporation of the refrigerant and is beneficial for the drop condensation, so it reduces the heat transfer temperature difference between tube internal surface and external surface effectively;
- In order to achieve perfect water perturbation and turbulent heat transfer, the internal surface of the copper tube is also special designed;
- Because of the chilled water flows inside the tube, it's quite easy to clean and maintenance.

## Screw Compressor

- Semi-hermetic twin screw compressors with special designed for HFC 134a, featuring in high efficiency compression and operation under full load and part load condition;
- Precisely manufactured twin rotor and aerospace-grade bear result in reliable performance, low noise and stable operation;
- Direct-drives motor and least moving part make whole the unit without other energy lost which also contribute to better operation efficiency;
- According to the actual operation condition, the system model can be adjusted by dedicated Microprocessor. And the slide valve fulfills the stepless control to enhance the efficiency under part load condition.



## High Stability

- The chiller is strictly designed, manufactured and tested based on international or national standard, such as AHRI、 EN、 UNI、 JIS and GB/ T18430.1
- The built-in 3-stage oil separator and external 2-stage oil separator are dedicated for the best performance of gas-oil separation.
- The unique oil return kits are used to makes sure the performance.
- Each unit is fully tested by strict process for best reliability and to meet customer's request.
- The protection level of unit external panel comply with GB4208-2008 standard.

## Electronic Expansion Valve

The electronic expansion valve is featured by its precise control, high sensitivity and well adaption to the part load condition. So CLIMAVENETA cooperate with world leader supplier for best performance both for full load and part load condition.



## Convenient Maintenance

- Full computer controlling, menu displaying, unit self-checking as well as the load adjusting and safety is completely controlled by the microprocessor. Daily operation is only to switch on the unit.
- Multi-circuit design is better for standby request of the system
- The unit is available for functions such as fault protection, memorizing and alarming. All faults are clearly displayed.
- Each circuit has the check valve and "Pump Down" function for easy repairing.

## Safety of Electrical Devices

- The electric system is designed based on IEC60204-1-2005/ GB5226.1-2008 standard and the system comply with the EMC standard.
- The unit main power is interlocked with the bar breaker on the electric panel door. This special design aims to make sure the safety of the maintenance engineer.
- The electric component, such as the phase fault, phase unbalance, are all standard configuration for the chiller.

## Environment Friendly



- Adopting HFC134a
- Optimized refrigerant system for better energy saving, lower CO<sub>2</sub> emission and higher operation efficiency.

## Easy Installation

- Compact design for footprint area saving.
- The unit is oil and refrigerant charged before delivery, and it's completely factory tested under all range loading.

- The pressure difference type water flow switch is already installed on the chiller before delivery (we suggest to install water flow switch on piping).



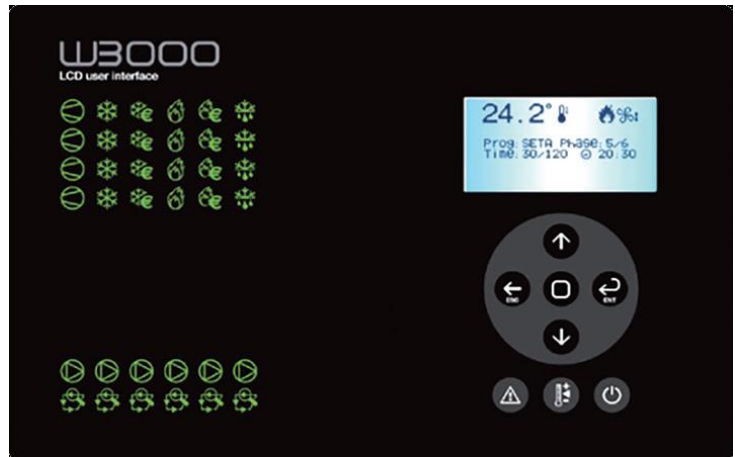
## **Latest Control System**

The chiller adopts a new control system with a friendly human-machine interface, excellent controls and adjustments ability, strong capabilities of function expansion, monitoring and management, as well as strong compatibility. The chiller also contains several optional accessories and adds remote and group control functions.

## **Friendly human-machine interface**

The operation screen is embedded in the unit for easy operation and good protection. The automatic control by the computer realizes unattended operation.

LCD screen can display data and parameter adjustment in various languages and menus. According to the tradition of Climaveneta, the status and parameters of the compressor are visually displayed individually to make sure the operating status clear at a glance.



## Unit control and operation management

The advanced microcomputer intelligent control system of W3000 contains specially designed control algorithm of Climaveneta. It highlights the energy efficiency and reliability of the unit. The balanced running time of FIFO compressor prolongs the life of machine. The automatic adjustment of the output load makes the machine more energy saving. Combining with the load shedding system of the compressor can achieve 25-100% stepless adjustment. The adjustments and settings of the operating parameters can adapt to different environments. The temperature and pressure protection using analog measurement can predict and prevent of failure and increase reliability.

## Network communication and building management control

The chiller supports BMS connection and can connect to common BMS systems such as Climaveneta, De'Longhi, MODBUS, LONWORKS, BACNET and so on.

## FWS network server

Microcomputer intelligent controller can be equipped with FMS network server to monitor, set and adjust parameters and control the unit operation through LAN or Internet.

## **Fault protection, alarm and analysis capabilities**

The microcomputer intelligent controller contains perfect functions of fault protection, alarm, recording and analysis. It has protection functions of high/low pressure switch, lack of phase, reverse phase, overload, overcurrent, overheat, exhaust temperature, water flow, frost and so on. The controller also achieves fault recording and alarm display. The unique “Black Box” fault recording and analyzing system can record 400 failures and more than 200 field data before each failure. It can diagnose and remove faults rapidly to improve the technical support effect. By connecting to the Climaveneta remote service program, it can find potential failures before they occur and take proper preventive treatments.