

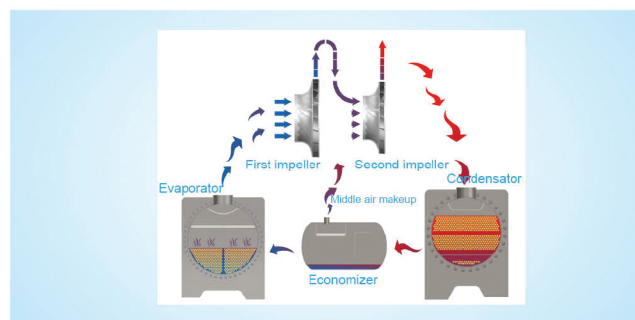
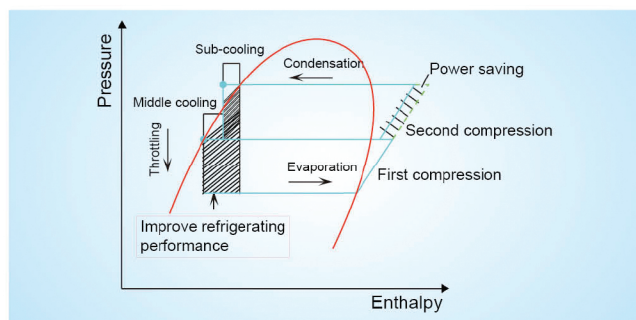
Product Features

Core Technology, High Efficiency

Two-stage Compression Technology

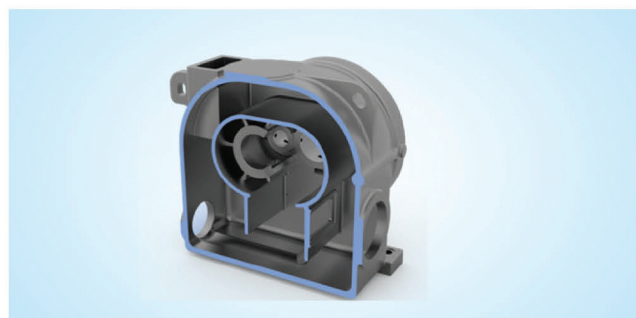
When compared to single-stage compression, two-stage compression technology has the following advantages:

- (1) 5~6% higher efficiency in refrigeration;
- (2) Lower running speed, higher reliability, and longer service life for compressor;
- (3) Large flow angle for impeller outlet, large surge margin and wider operating range;



Multiple Noise Reduction Technologies

The high-strength gear case to reduce vibration; 4-grade precision wheelwork to diminish mechanical friction; double-layer soundproof component; injection noise reduction design; different measures are taken to reduce the operating noise.



Double Independent Systems

For units with large cooling capacity, double compressors are adopted. The entire system is equal to the combination of two centrifugal chillers. Two systems are independent from one another; refrigerant of one side won't affect the refrigerant of the other side, thus high reliability; two compressors work independently, which will greatly improve the unit's partial load capacity and compressors' overall performance. In addition, the heat exchanger countercurrent single-flow shell and tube design lowers the water pressure, which can satisfy the demand of small water flow system.



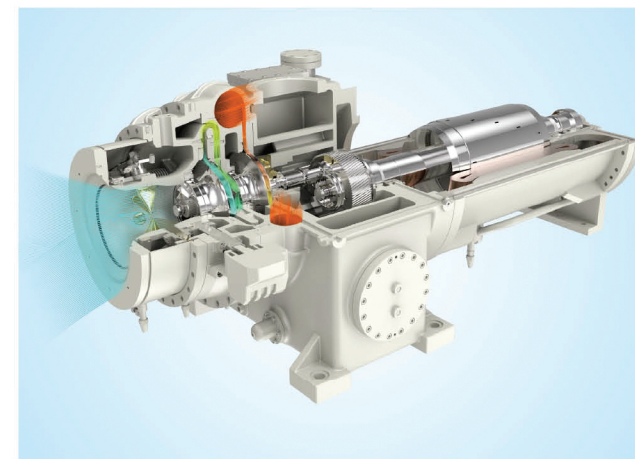
System Positive Pressure Design

System maintains positive pressure so that non-condensable gas will not enter the system during operation. The system is cleaner without the need to add an air extractor. Compared to negative pressure design, the unit is more compact and space saving.

Core Components, Stable and Reliable

Semi-hermetic Motor

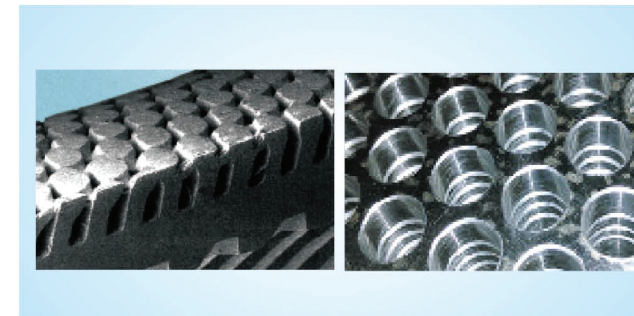
This is an efficient closed type motor that adopts injection cooling with liquefied refrigerant. It will not only lower the risk of refrigerant and lubricant leakage but also restrain heat dissipation, saving the cost for cooling devices in the machine room.



High-efficiency Heat Exchanger

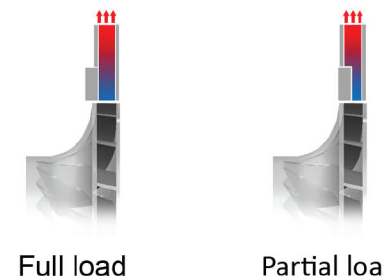
Heat exchangers are especially design for centrifugal chillers. They can keep refrigerant distribution in balance, maintain a proper temperature field, and improve heat exchange efficiency. They are highly efficient, not only lowering the heat transfer resistance but also increasing the cooling capacity and energy efficiency ratio.

To ensure the reliability, both the evaporator and the condenser adopt 3V-grooved tube plate design. The bottom of condenser is made with sub-cooler, which uses high-efficiency sub-cooling tubes. Maximum sub-cooling can be 5°C.



Variable Section Diffuser

The rear side of the impeller is designed with variable section diffuser. Under partial load, its axial movement is used to change the width of the airflow passage, so that the flow area of the diffuser is reduced, thereby improving the airflow velocity and stability, reducing airflow backflow, effectively improving the surge point of the unit, expanding the unit's operating range, reducing noise and vibration of the unit at full load and partial load.



On-board Startup Cabinet

Wiring is completed before ex-factory. User just needs to provide the power line, which has simplified the wiring procedure at user side. The startup cabinet is directly built on the unit, which is space-saving and making the structure more compact.

