

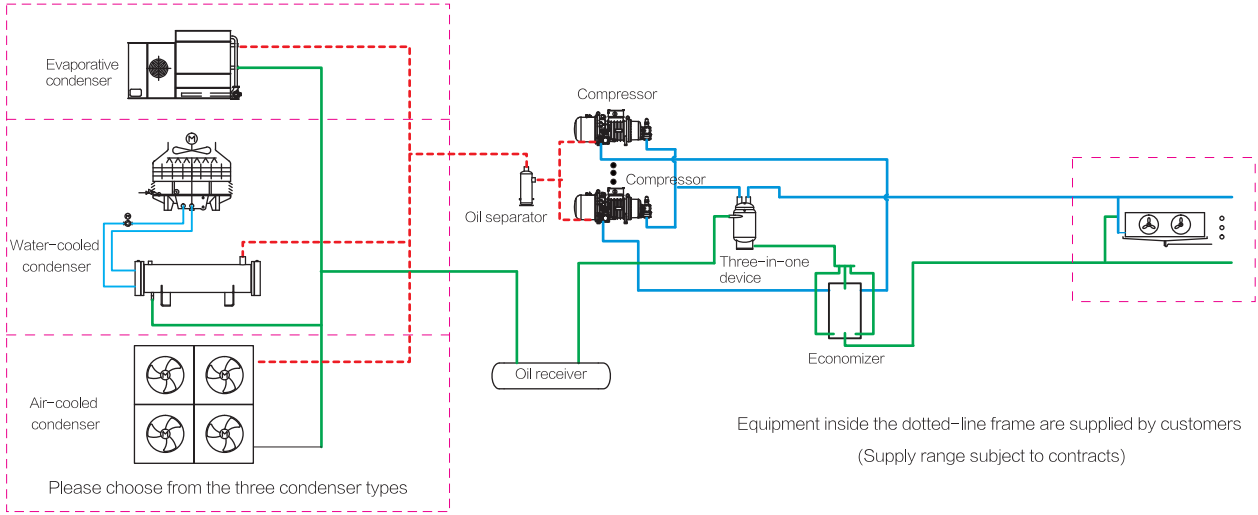
Low Temperature Screw Compressor Unit Series

Low temperature screw compressor units are Showman’s featured products, adopting RefComp SW series screw compressors, with power ranges from 20 to 600HP, and even reach to 900HP upon request from customers. The design and manufacturing of the units meet all demands of industrial refrigeration. The design and layout of all components maximize the reliability and maintainability for operation on site.

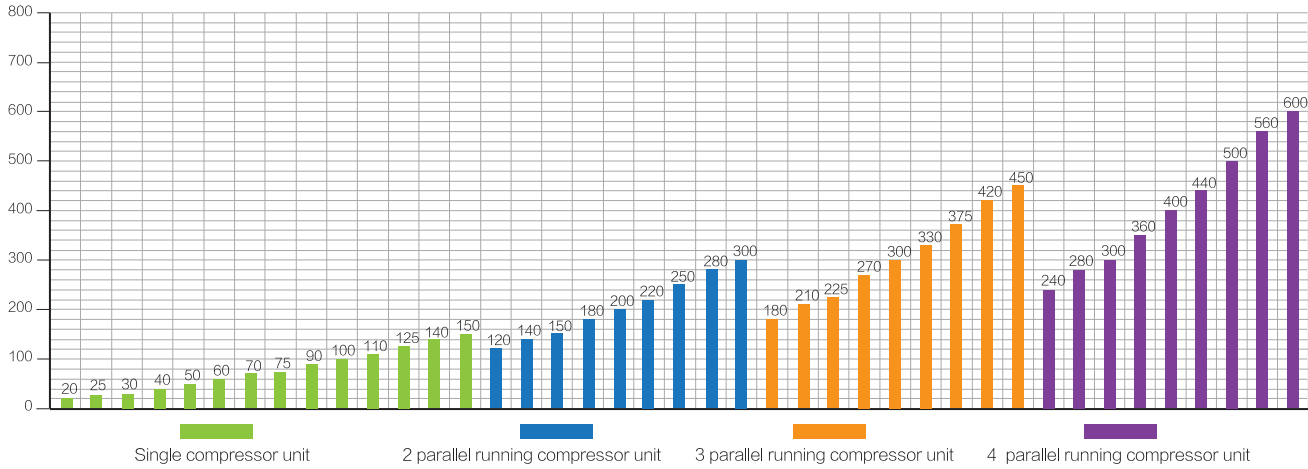


Refrigerant*	R22/R404A/R507A
Refrigeration capacity**	22 ~ 935kW
Power supply	380V 3P 50Hz
Compressor quantity***	1~6 set

*Please inform us if you choose other types of refrigerant;
**Based on standard working condition ~30/40℃, with refrigerant R22;
***Please inform us if choose multiple parallel running.



Power of compressor unit



Semi-hermetic
SW5L Screw Compressor Rack System

意大利 **RefComp**

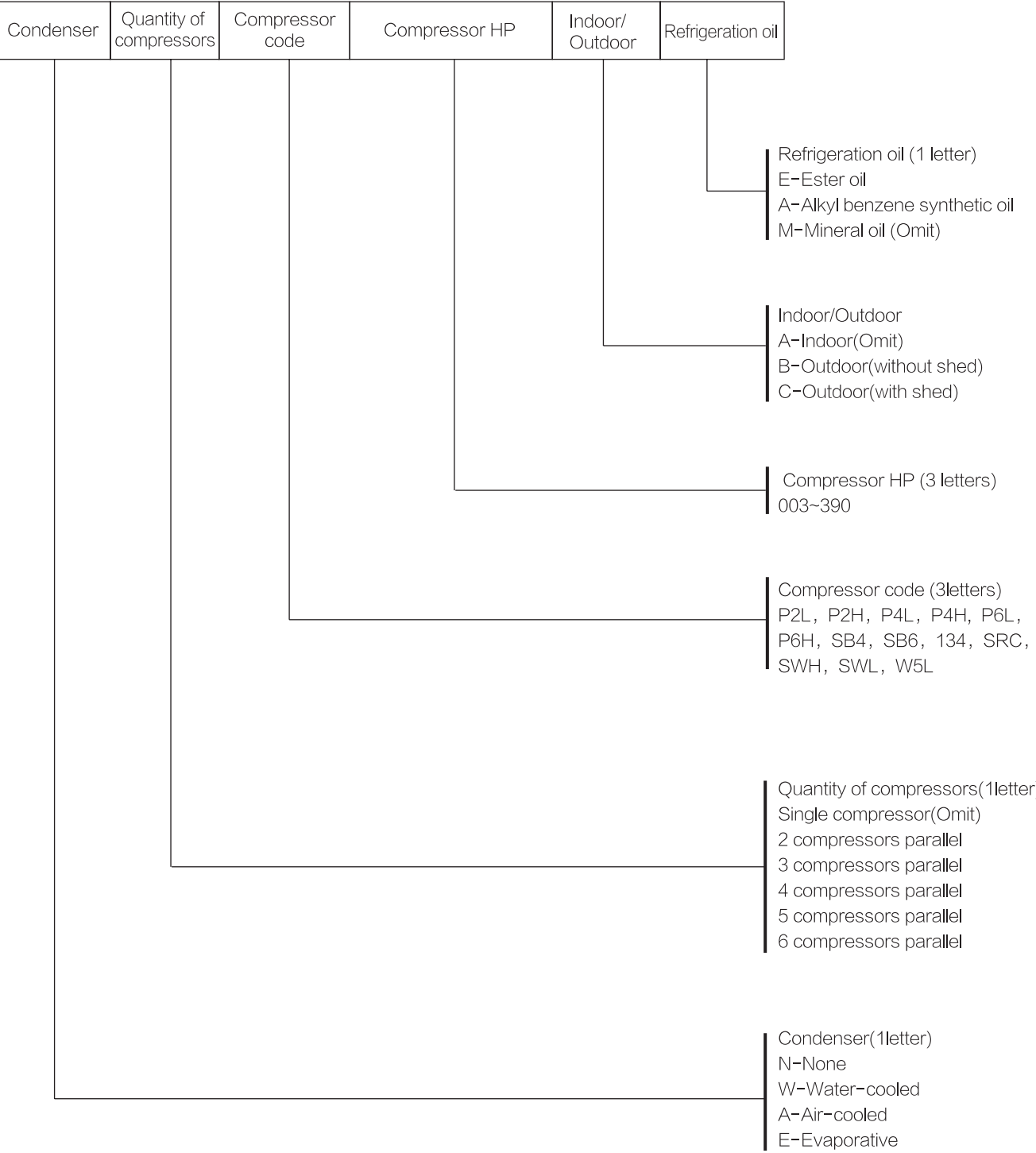
The World Famous Brand for Screw Compressor and Piston Compressor

Specialized in Commercial Refrigeration Compressor

25 Years of Exploration in Screw Technology for Energy-saving and Environment-protection.
The First R134a Screw Compressor in the World
The First Frequency-converter-integrated Screw Compressor in the World



Model Definition

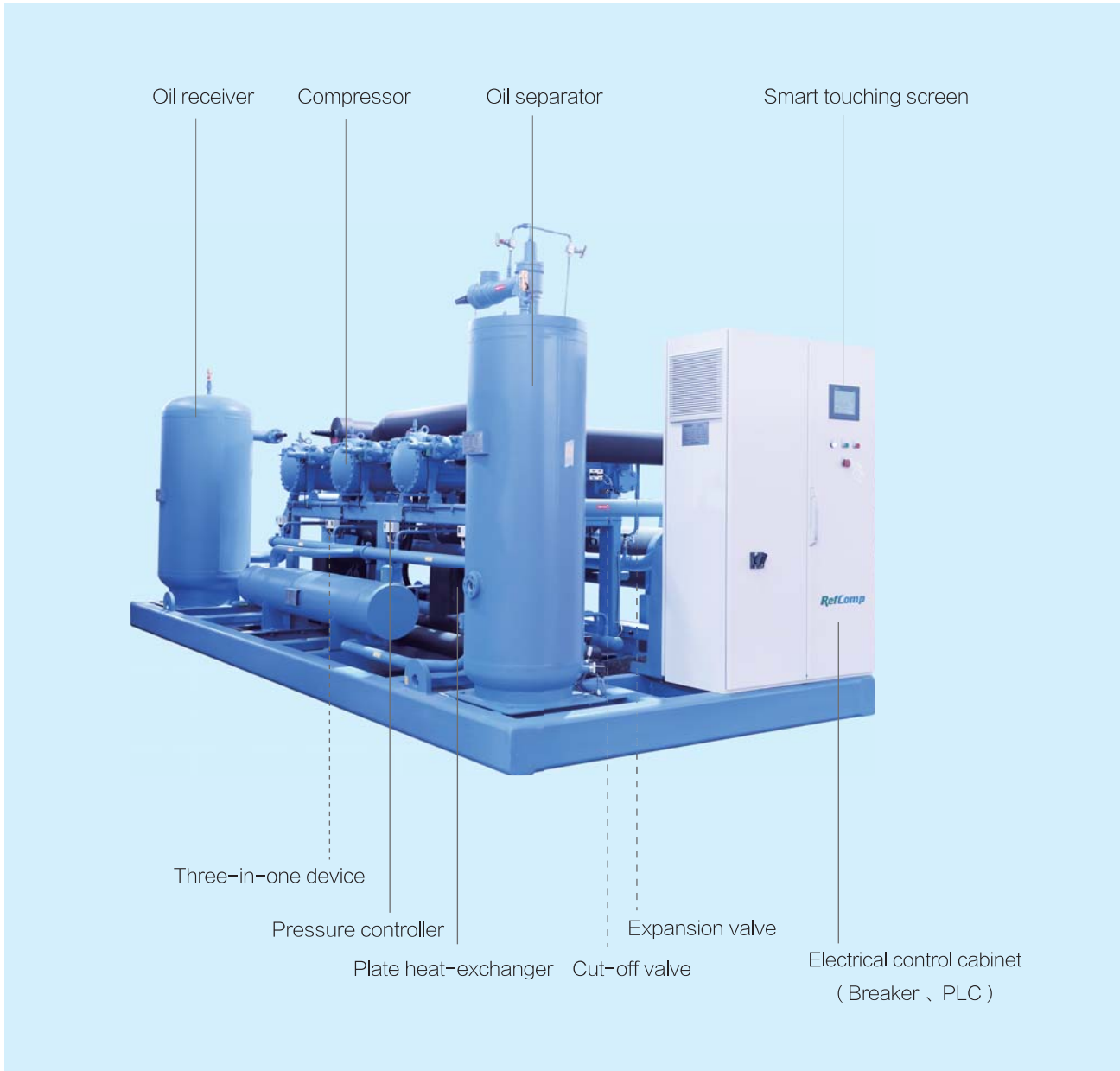


Note: N2SW3L080A, means 2sets SW3L8000(80HP) semi-hermetic compressors installed in one package without condenser, indoor-type 2compressors parallel package with alkyl benzene synthetic oil.
N2P6L030,shows 2sets SPL030(30HP) piston compressors installed in one package without condenser, indoor-type 2compressors parallel package with mineral oil.

Main Structure

Keeping faith of the advanced technology of RefComp compressor, Snowman has launched high-level RefComp compressor units and compressor condensing units.

Snowman also hold strict attitude to develop products and professional attitude to serve every customer.



Compressor

The world famous compressor manufacturer RefComp is a wholly-owned subsidiary of Snowman, with products of reliable quality and excellent performance, and has become a leader in air-conditioning and refrigeration compressor industry globally.

SW series screw compressors are suitable for cold storage applications and capable of multiple parallel running, with oil pressure control valve for energy adjustment.

Cut-off valve

Cut-off valves in the refrigeration system are always having leakage problem. Paying attention to this, Snowman requires cut-off valves with excellent flow conditions and accurate linear characteristics, as well as meeting the directives and requirements of pressure vessels for every country.

Water-cooled condenser

The shell-and-tube type condenser, to condense the high temperature and high pressure gas refrigerant into high pressure liquid refrigerant, are widely used in various kinds of condensing heat-exchanging processes. Based on the heat transfer features of refrigerant and cooling medium, the heat-exchanging pipes adopt unique design, which enlarges the heat-exchanging surface and increases the heat-exchanging efficiency; in the meantime, optimizes the pipes design as well as improves the heat-exchange and cooling efficiency.

Oil separator

In the cooling systems, there is always some lubricating oil exhausted along with gas refrigerant, and the oil separator separates the oil from the refrigerant to avoid the oil flowing into the internal system, which improves the heat-exchanger's efficiency, and in the meantime makes sure that lubricating oil back to compressor, to prolong the using life of the compressor and make the cooling system more efficient.

Three-in-one device

Three-in-one device is a machine which is combined with liquid receiver, suction accumulator and heat-exchanger, with three functions in one device. Hence, it greatly improves the efficiency of cooling system and avoids the liquid running into compressor.

Liquid receiver

Liquid receiver is for storing high pressure liquid refrigerant in the cooling system, to adjust and stable the circulation of refrigerant. In the meantime, it can also prevent high pressure liquid refrigerant from flowing into low pressure system, to stable the system functions. It has been widely used in the fields of air-conditioning and commercial cooling. There are two types of liquid receivers for option: horizontal (WZF) and vertical (LZF), with varieties of models.

Plate heat-exchanger

Alfa Laval and Danfoss are the globally-renowned brands for plate heat-exchangers which are compact in structure, light in weight, easy to install, with evenly-distributed flow, stable thermal performance and less charge of refrigerant.

Control cabinet

Refrigeration compressor rack system is equipped with control cabinets with components from Siemens, Schneider, ABB, Omron and other imported or joint venture brands, which automatically control the whole process as well as detect various analog quantities and switch status in real time, simplifying the operation with one-button operation mode, Units can be controlled remotely and seamlessly connected with third-party PC communication port.

Breaker

Circuit breakers are from the international top brand Schneider, easy to install in modular, with full range of certifications such as CCC, CE, UL, TUV, CCS, and in line with the EU RoHS directives.

PLC

Control system adopts Schneider M218 series PLC.

Pressure controller

As an important protection device, pressure controller raises a security barrier for compressor. Snowman has strict requirements on the quality of pressure controller.

Smart touching screen

Through the Schneider 64K true color touching screen, to control the whole operation process of refrigeration equipment.

Expansion valve

International famous brand thermal expansion valve, with stainless steel actuator, interchangeable flow components, accurate temperature filling, wide cooling capacity range, and low gap overlap.

Snowman commercial compressor unit adopts RefComp semi-hermetic screw compressor as the core component. Through optimization design, Snowman produce series of standard compressor units and compressor condensing units, which are applicable to a wide range of application fields such as pharmaceutical, chemical fiber, household electrical appliances, food, packaging, plastics, daily necessities, water conservancy and hydro power, construction (central air-conditioning) and others. The units can provide high, medium and low temperature of various ranges of cooling capacity, and offer every customer with the most economical, most efficient and safest solutions.

Product Features

- mechatronic integration structure, with small footprint, easy to operate and maintain;
- world-renowned compressor, with high cooling capacity;
- special economizer, with higher operation efficiency and lower operating costs;
- adaptable for a wide range of temperatures;
- unique design of gas and liquid separation, greatly reducing the damage caused by liquid shocks due to strong fluctuation of loads.

Humanized—beautiful appearance, easy maintenance

Strictly-chosen best components, for quality assurance and stable and reliable operation;

Compact modular design, to save space and investment costs;

Beautiful appearance, reasonable layout, detailed consideration and constant improvement;

Humanization design, with components easy to replace, low cost for maintenance;

Flexible pipe fixation, less vibration and noise.

Smart—one-touch operation, remote communication

Intelligent control, energy adjustable according to the real time loads;

Online remote control, to reduce labor costs;

Multi-step energy adjustment, more accurate in load matching.

Safe—multiple safety protection and alarm devices

Monitoring compressor motor and displacement temperature;

Monitoring motor rotating direction;

Monitoring default phase;

Monitoring oil flow, oil level and oil temperature;

Monitoring high and low pressure;

Hierarchical password protection, to prevent improper operation of non-professional persons.

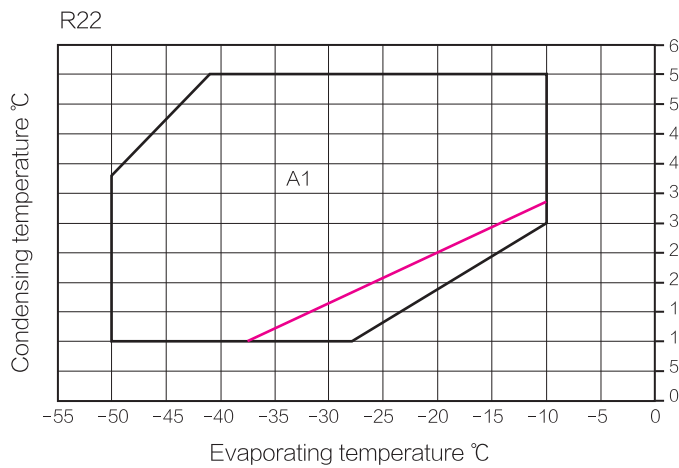
RefComp-SW5L Semi-hermetic High-efficiency Screw Compressor

Snowman SW5L semi-hermetic efficient screw compressor had a total of 20 models, with 85~850m³/h displacement range from 20Hp~250Hp. The inlet temperature ranges from -45℃ ~ 25℃ and exhaust temperature 40℃ ~ 120℃, suitable for Freon like R507A, R404A, R134a, R22 and R407C. Compressors are widely used in ice engineering, frozen food, marine refrigeration and deep-freezing fields.

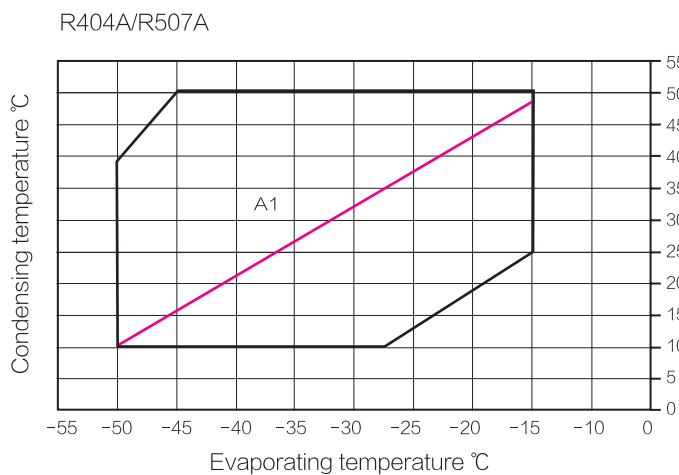
- SRM "I" type patented alignment with 5+7 combination teeth ratio, running stable and efficiently, effectively applied in low temperature refrigeration;
- New technology—maximum speed up to 5000rpm, dramatically increase single refrigeration capacity;
- INT69 SNY protection module, protection of high motor temperature and reverse as well as lack of phase;
- 6 pieces PTC thermistors to prevent the motor heat burn;
- Motor running state feedback and real-time monitoring.



Compressor applications when using refrigerant:



50Hz full load running
10K suction superheat
A1区=oil cooler is required



50Hz full load running
10K suction superheat
A1区=oil cooler is required