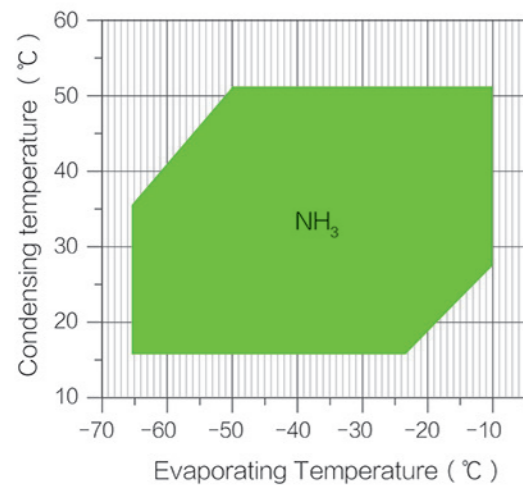


## Applications

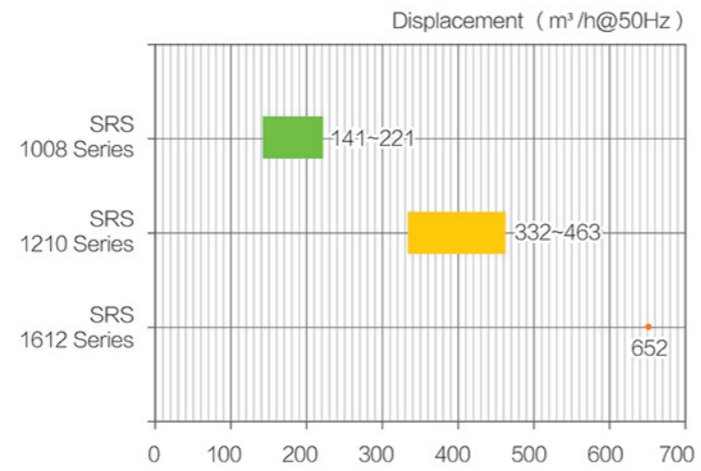
The compressor is widely used in food quick-freezing, drug and food freeze-drying, ship refrigeration, ultra low temperature cold storage and other fields.



## Working Conditions



## Displacement Comparison



## Technical Parameters

| Model      | Suction port diameter (mm) | Exhaust port diameter (mm) | Dimensions (mm) |       |        | Refrigeration capacity (kW) * |                           | Rated motor power (kW) |
|------------|----------------------------|----------------------------|-----------------|-------|--------|-------------------------------|---------------------------|------------------------|
|            |                            |                            | Length          | Width | Height | NH <sub>3</sub> -35/+35°C     | NH <sub>3</sub> -50/+35°C |                        |
| SRS-1008SS | 65                         | 25                         | 1334            | 665   | 455    | 31                            | 14                        | 29                     |
| SRS-1008LL | 65                         | 25                         | 1396            | 665   | 455    | 48                            | 22                        | 44                     |
| SRS-1210SS | 80                         | 40                         | 1472            | 725   | 467    | 74                            | 33                        | 66                     |
| SRS-1210LL | 80                         | 40                         | 1538            | 725   | 467    | 106                           | 48                        | 90                     |
| SRS-1612LS | 125                        | 65                         | 1982            | 784   | 685    | 152                           | 68                        | 115                    |

\* Refrigeration capacity at the rotational speed of 2,960 rpm and suction superheat of 5°C, and with an intercooler.

# SRMTEC

## Semi-hermetic Compound Two-stage Refrigeration Screw Compressor

### SRM Sweden

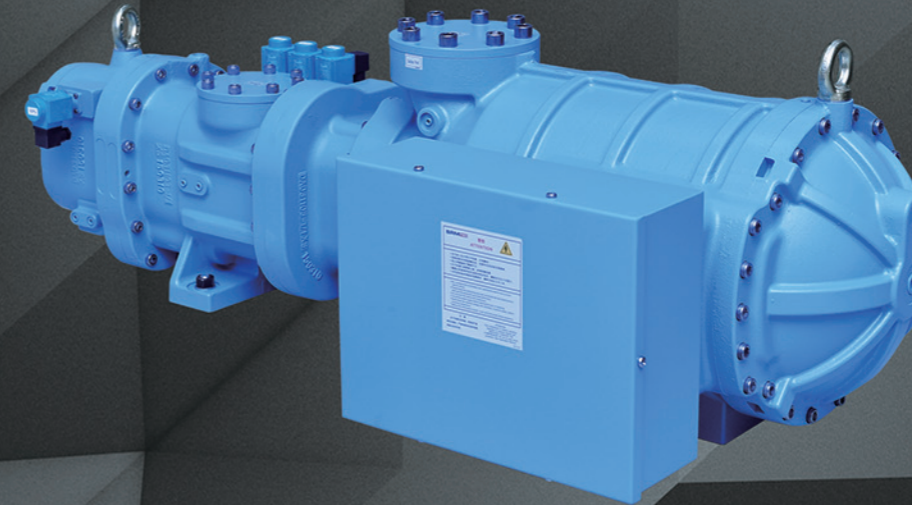
Subsidiary 100% owned by Snowman

The inventor and leader of screw compressor  
100-year legacy of technical quality & energy efficiency



Focus on screw technology  
for one hundred years

More than 3 million screw compressors all over the world  
are technologically licensed by SRM



### SRMTEC

Fujian Snowman Co., Ltd.

Address: West Dongshan Road, Minjiangkou Industrial Zone of Fuzhou, Fujian, China

Tel: 0086-591-28701111

Fax: 0086-591-28709222

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E-mail: info@snowkey.com



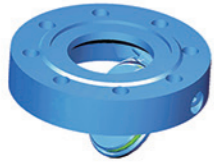
## SRMTEC semi-hermetic compound two-stage screw compressor

SRMTEC semi-hermetic compound two-stage screw compressor covers 5 models, with displacement of 141–652 m<sup>3</sup>/h, design pressure of 2.8 MPa and minimum available evaporating temperature of -65 °C. The design slope of the compressor is over 30° which is applicable to vehicles such as ships. Interior volume reduction ratio can be chosen to ensure operation of a high energy efficiency ratio under different working conditions. The compressor is applicable to various natural refrigerants and environmentally-friendly refrigerants such as R717, R404A, R507A, etc..



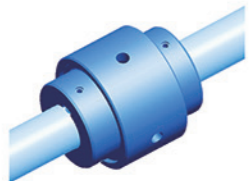
### Compressor body

- The high-strength housing is made of nodular cast iron, with working pressure of up to 2.8 Mpa;
- Special low temperature resistant castings guarantee the steady operation under low temperature conditions;
- Optimized design of suction flow path of low suction resistance and sufficient cooling of motor; with straight-through middle gas flue, to reduce the loss along the way; with little exhaust throttling loss and low energy consumption;
- Integrated oil line system that is easy to install with low failure rate;
- Small-sized design and compact structure.



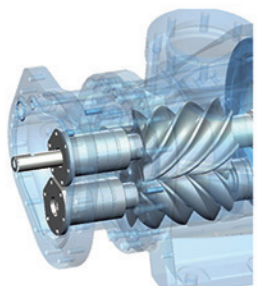
### Check valve

- Built-in suction check valves with low resistance to prevent refrigerant oil backflow during downtime.



### Coupling

- It adopts couplings with patented built-in rigid gear, featuring good correction capability in axial, radial and angular directions.



### Bearing

- Highly precise & wear-resistant rolling element and special type linear raceway with a designed service life of 100,000 h;
- Cage of special machined metal for large load capacity made to ensure long term running under any working condition.



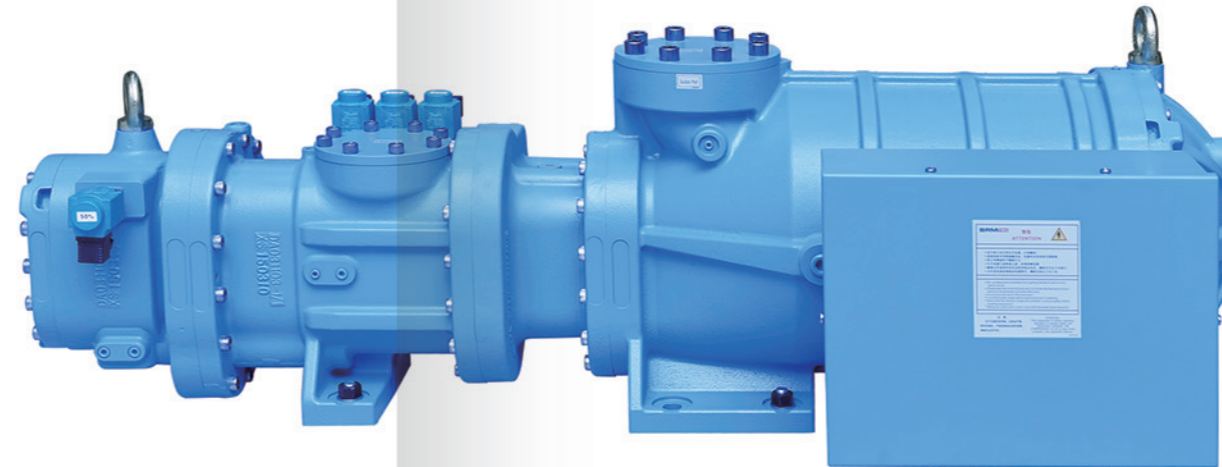
### Rotor

- Patented SRM “i” type profile, with high efficiency and stable operation;
- Rotor manufactured with quality forged steel is of high strength and wear resistance;
- The rotor is processed to micrometer precision with tight gearing, even stress and a long service life;
- Max. speed of 5,000 rpm by virtue of new technology, greatly enhancing refrigeration capacity by exceeding 50%;
- Male and female rotors are arranged vertically to prevent accumulation of refrigerant oil on the motor bottom, which is good for refrigerant to flow around the motor to cool it fully for high operation efficiency.



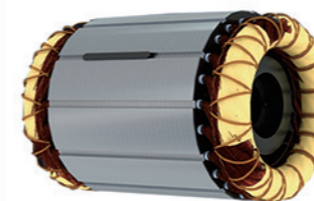
### Energy regulator

- Stepless energy regulation or stepped energy regulation based on optimal benefit;
- Hybrid regulating of slide valve and plunger with small size and superior performance;
- World unique explosion-proof device for energy regulation cylinder.



### VI (Interior volume reduction ratio)

- Selectable VI (Interior volume reduction ratio), operation of high efficiency under various working conditions.



### Motor

- Highly efficient permanent magnet synchronous motor made of special customized material, compatible with various refrigerant, such as R717, R404A, R507A, R410A, etc.. Either ammonia or freon can be utilized (asynchronous motor is optional for freon application);
- Frequency conversion control can be utilized to regulate motor rotation speed on the basis of load change, to reduce operation power of the motor and raise its operating efficiency under low load;
- Surrounding cooling with refrigeration oil and cooling by spraying coolant are employed as double cooling with high efficiency, to ensure long, stable and efficient operation of the motor.