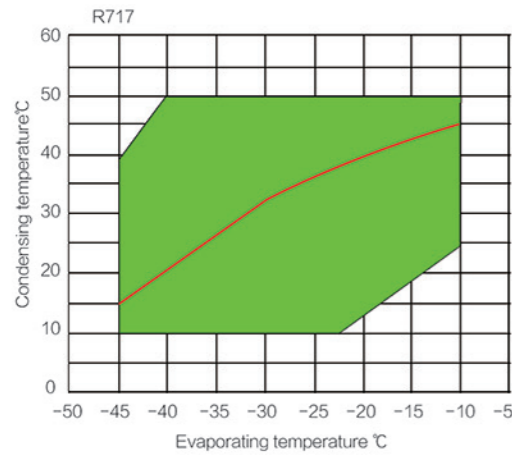
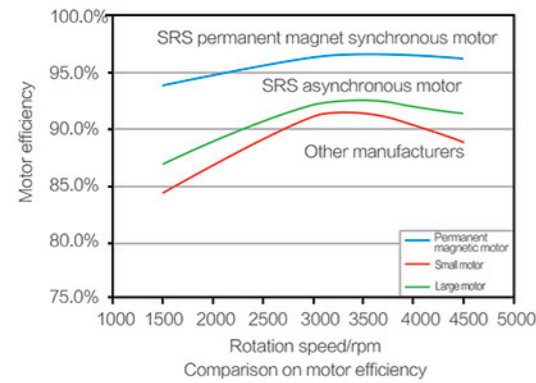


Working Conditions

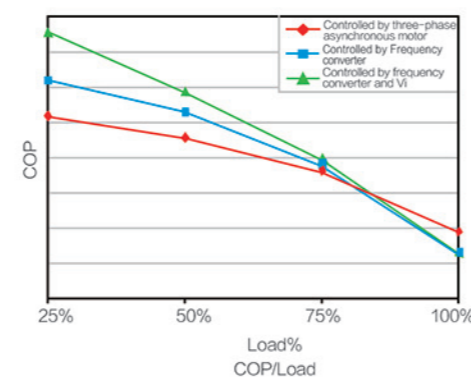


Energy-saving Analysis

Comparison on efficiency of permanent magnet synchronous motor and asynchronous motor:



Comparison on COP in different control ways:



Technical Parameters

Model	Dimension of intake tube (mm)	Dimension of exhaust tube (mm)	Dimensions (mm)			Displacement (m ³ /h)		Rated motor power (kW)
			Length	Width	Height	50Hz	60Hz	
SRS-08S	57	40	803	465	411	84	100	15.00
SRS-08M	57	40	803	465	411	100	120	18.75
SRS-08L	57	40	803	465	411	120	144	22.50
SRS-10S	57	40	890	490	390	140	168	30.00
SRS-10L	57	40	890	490	390	168	201	37.50
SRS-12S	76	57	1044	586	486	210	252	45.00
SRS-12M	76	57	1044	586	486	230	276	52.00
SRS-12L	76	57	1044	586	486	250	300	55.00
SRS-14S	89	76	1280	600	501	310	372	67.00
SRS-14M	89	76	1280	600	501	340	408	74.50
SRS-14L	89	76	1280	600	501	370	444	89.00
SRS-16S	108	76	1348	798	627	420	504	89.00
SRS-16M	108	76	1348	798	627	450	540	112.00
SRS-16L	108	76	1348	798	627	500	600	112.00

Notes: Please contact us for any demand on the technical parameters of the 554 ~850 m³/h (@50 Hz) compressor.

Semi-hermetic High-efficient Variable-frequency Refrigeration Screw Compressor

SRM Sweden

Wholly-owned subsidiary of Snowman

The inventor and leader of screw compressor

100-year legacy of technical quality & energy efficiency



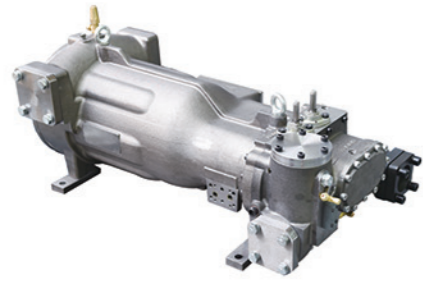
Focus on screw technology for one hundred years

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



SRMTEC SRS Semi-hermetic High-efficient Screw Compressor

There are 20 models of semi-hermetic variable-frequency screw compressor (SRS-08 to SRS-20), with displacement of 84 ~850 m³/h, power of 20 Hp~250 Hp, suction temperature of -45°C~10°C and discharge temperature of +40°C~+120°C, which apply to ammonia (R717) refrigerant. The compressor is widely used in food quick-freezing, ship refrigeration and ultra low temperature refrigeration and other fields.

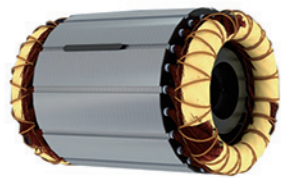


Compressor body

- High-strength intensity design with working pressure up to 28 bar ;
- Optimized design of suction gas 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 with a filter, stop valve, temperature sensor and oil flow switch configured, compact in structure.

Motor

- Specially customized materials are used to make it applicable to ammonia-related conditions;
- High-efficient permanent magnet synchronous variable frequency motors are used to greatly expand the refrigeration capacity and application , which has high power factor and low loss;
- With frequency converting control, it may improve the efficiency of a low-load motor in operation by adjusting the speed based on the variation in loads;
- High efficient cooling is achieved by double high-efficient cooling with refrigeration oil surrounded and refrigerant sprayed; to ensure long-term, stable and efficient operation.



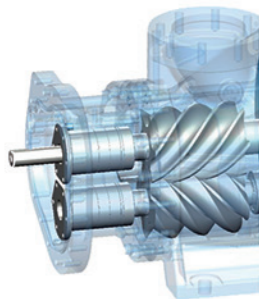
Motor protection

- INT69 SNY protection module is used to protect the device under excess temperature, reverse and default phase ;
- 6 PTC thermistors in series are used to prevent the motor burnt out due to high temperature;
- Feedback of status and real-time monitoring are made on operation.



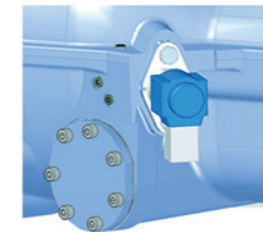
Bearing

- Multi bearings are combined to prevent the rotor from being worn axially/radially and achieve high load and low noise;
- Highly precise & wear-resistant rolling element and special profile spiral race, with a design life of 40,000 h.



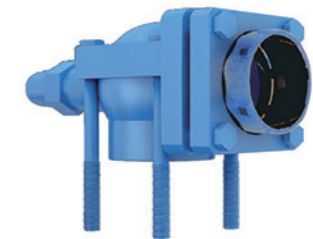
Rotor

- SRM "i" type patented profile with 5 + 7 best gear ratio combo, of high efficiency and steady operation. It is applicable to the refrigeration at low and medium temperature;
- 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;
- As a new technology, it has the maximum speed up to 5,000 rpm, significantly increasing the refrigeration capacity.



VI (Interior volume reduction ratio)

- Fixed Vi, extensive manual regulation or automatic stepless regulation is made to create a best efficiency;
- Vi regulation and motor speed control may substantially increase the COP (especially in the conditions of partial loading), with a huge advantage in variable working conditions.



Stop valve

- A built-in stop valve for suction or discharge is configured to reduce the resistance and effectively prevent the backflow of refrigerants during shut-down;
- Stop valve is 360° rotatable, easy to install, compact and flexible.



Energy regulator

- Stepless or stepped energy regulation may be made according to the working conditions;
- The slide valve is installed between the housing and rotor, presenting a reasonable and compact design with superior sealing performance.



Suction filter

Suction filters are configured at an interval of 100 μm to remove impurities from cold gas and protect the motor.