

Table of Technical Parameters

Model	Suction port diameter (mm)	Exhaust port diameter (mm)	Dimensions (mm)			Refrigeration volume (kW)	
			Length	Width	Height	CO ₂ -50/-5°C	NH ₃ +35/+80°C
SRH-12S	65	50	685	370	374	135	326
SRH-12M	65	50	877	370	374	166	406
SRH-16S	125	65	970	480	485	277	690
SRH-16M	125	65	1171	480	485	339	848
SRH-18S	150	80	1028	644	675	418	1057
SRH-18M	150	80	1250	644	675	516	1278
SRH-20S	150	100	1187	732	761	693	1746
SRH-20M	150	100	1392	732	761	812	2074
SRH-26S	250	150	1565	845	900	1187	3046
SRH-26M	250	150	1637	845	900	1482	3810
SRH-28S	250	200	1607	950	1012	1713	4433
SRH-28M	250	200	1785	950	1012	1923	4924
SRH-34S	350	250	1930	1028	1126	2682	6920
SRH-34M	350	250	2265	1028	1126	3181	8171

Notes: 1. Speed: 2,960rpm; 2. Suction superheat: 5°C.

Typical applications

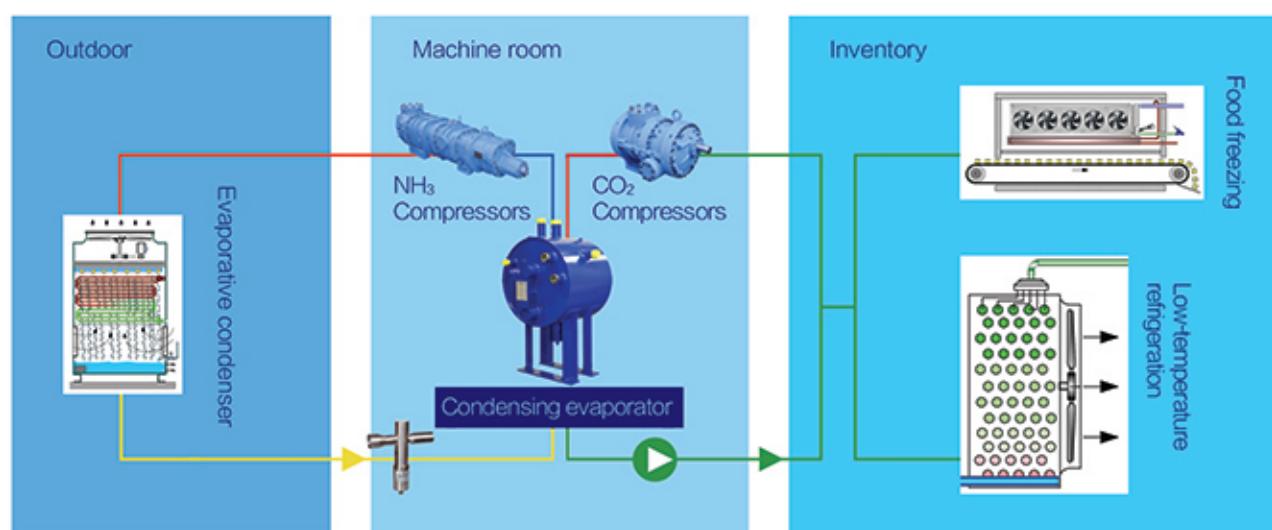
High-temperature ammonia heat pump

The high-temperature ammonia heat pump can utilize low-grade air, seawater and terrestrial heat and recycling industrial waste heat efficiently by converting the thermal energy and industrial waste heat that cannot be used directly into the hot air and hot water needed by human beings. The output temperature of the heat pump is up to 90°C. As ammonia is used as the refrigerant, the high-temperature ammonia heat pump is environmentally friendly, efficient and energy-saving, and carbon emissions can also be reduced.



NH₃/CO₂ cascade refrigeration system

As the high-temperature refrigerant is NH₃ and the low-temperature refrigerant is CO₂, the NH₃/CO₂ cascade refrigeration system is efficient, energy and environmentally friendly. When the evaporating temperature is above -35°C, NH₃ has the excellent thermal properties. CO₂ has excellent thermal properties and fluid properties at low temperature. Therefore, the system is capable of keeping high COP at the low evaporating temperature and is particularly suitable for low-temperature refrigeration.



SRMTEC

Open-type high-pressure Screw compressor

SRM Sweden

Wholly-owned subsidiary of Snowman

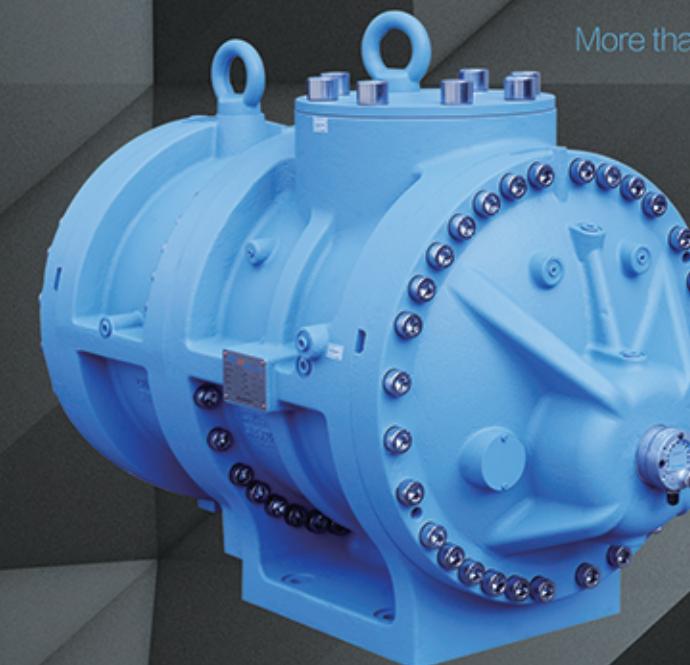
The inventor and leader of screw compressor

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

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Rotor



- The screw rotor as the core component is developed based on the SRM patented molded line with 6+8 best gear ratio combo. It has excellent compression properties under high pressure.
- The rotor is manufactured with high-quality forged steel, and has excellent overall mechanical properties, high strength and wear resistance.
- The rotor is processed to micrometer precision which results in tight gearing, even stress distribution and a long service life.
- As a new technology, the maximum speed is up to 6000rpm, thus the unit refrigeration capacity is greatly improved by 48%.



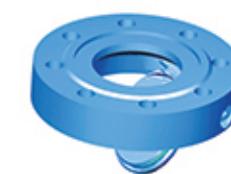
VI (Interior volume specific ratio)

With VI (interior volume specific ratio) stepless regulation function, ensuring high-efficiency operation under various conditions.



Shaft seal

- Innovative double-plate shaft seal structure to bear high pressure and ensures the sealing performance;
- Wear-resistant super hard sealing surface made of silicon carbide extends service life greatly;
- It is applicable to the compressor operating with a speed up to 10,000 rpm.



Check valve

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



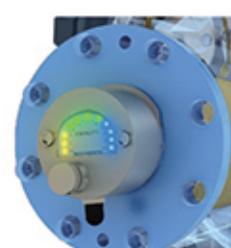
Bearing

- Heavy duty high speed loading bearings with precise positioning and high heat stability;
- Highly precise & wear-resistant rolling element and special type linear track with a design service life of 100,000 hrs;
- Cages made of special machined alloy for large load capacity ensure long-time operation under any working condition.



Housing

- The use of special nodular Iron of low expansion coefficient and high-strength ensuring high reliability and working pressure up to 6.3MPa;
- Circular container structure can withstand high pressure;
- Integrated of high-pressure oil injection system facilitating the installation and ensuring the reliable and stable mechanical performance;
- Small machine body with compact structure.



Energy regulation

- Patented regulation mechanism unique around the world;
- 10%-100% stepless energy regulation and intelligent controller for accurate position and rapid response;
- Load adjustment on demand, which can save energy by over 35% under part load;
- World unique explosion-proof device for energy control slide valve.

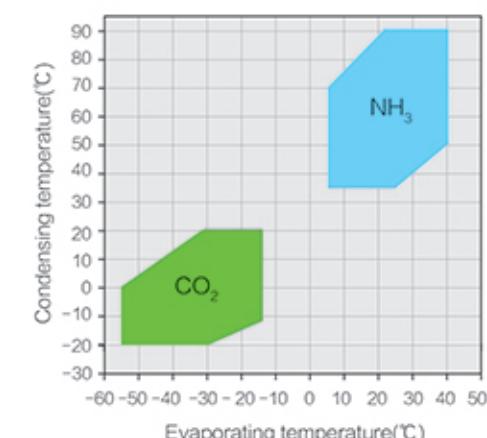
Introduction

Snowman SRM open-type high-pressure screw compressors offer 16 models in 7 series. The exhaust volume is 125-2,770m³/h at 2,960rpm, and the design pressure is 6.3MPa. The SRH series screw compressors use ammonia as the refrigerant for high-temperature heat pump and the CO₂/NH₃ cascade refrigeration system for low-temperature refrigeration. The combo of which uses of low-grade heat and recycles of waste heat efficiently. It can provide hot gas and hot water for various industries and cities. It is efficient and energy-saving, and carbon emissions can be reduced.

Application

The compressor can be widely applied in the petrochemical, industrial freezing, low-temperature refrigeration, food freezing, district heating, industrial water heating and other fields.

Applications scope



Exhaust volume comparison table

