



Refcomp SP8L5000 SP8L500E 50HP Semi-Hermetic Reciprocating Refrigeration Compressor

Our Product Introduction

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Basic Information

- Place of Origin: China
- Brand Name: Refcomp
- Certification: CE
- Model Number: SP8L5000, SP8L500E
- Minimum Order Quantity: 1
- Price: Discussed
- Packaging Details: WOODEN CASE
- Delivery Time: 1 Month
- Payment Terms: Western Union, T/T
- Supply Ability: 10000Pcs/Year



Product Specification

- Application: HVAC, Condensing Unit, Cold Room, Rack System
- Rated Power: 50HP/37KW
- Displacement: 186/224 M3/hr
- Refrigerant: R22, R407C, R134a, R404A, R507
- Oil Charge: 5L
- Highlight: SP8L5000 semi-hermetic compressor, 50HP reciprocating refrigeration compressor, SP8L500E semi-hermetic compressor



More Images



Product Description

Product Overview

The Refcomp SP8L5000 / SP8L500E is a 50HP semi-hermetic reciprocating refrigeration compressor built for dependable performance in demanding cooling systems. Its eight-cylinder design, flexible capacity control and service-friendly valve arrangement make it well suited to low-temperature refrigeration applications where load conditions vary throughout the day.

Key Features

Three-Stage Capacity Control

The SP8L5000 features three-stage capacity control, allowing compressor output to adjust as cooling demand changes. As a low-temperature reciprocating compressor, it helps match refrigeration capacity to actual system loads, reducing unnecessary full-load operation when less cooling is required.

360° Rotatable Suction & Discharge Valves

Both suction and discharge shut-off valves can rotate through 360°, providing greater flexibility when arranging refrigeration piping. This makes installation easier in different equipment layouts and allows installers to adapt pipe connections to the available space.

Precision Sliding & Thrust Bearing Design

The combination of sliding and thrust bearings accommodates axial and radial loads during operation. High-precision fitting and effective lubrication help minimize friction, vibration and operating noise, reducing mechanical wear and supporting stable long-term operation.

Partial-Winding Motor Starting

For the specified 60 Hz motor configuration, the compressor supports partial-winding starting to help reduce starting current compared with direct-on-line starting. This lowers the initial electrical demand during startup and makes motor starting easier to coordinate with the refrigeration system's electrical supply.

Product Image



Technical Specification

Model	SP8L5000, SP8L500E
Rated power	50HP / 37KW
Exhaust volume (50/60Hz)	186 / 224 m³/hr
Refrigerant Type	R22, R407C, R134a, R404A, R507
Weight	340KG
Oil Charge	5L
Voltage	400V/3/50Hz, 460V/3/60Hz PW
Starting current PW/DOL	237 / 316A
Max operating current	97A

Model SP		L (Low-Temp Compressor)				
		SP6L			SP8L	
		2700	3000	4000	5000	6000
		270E	300E	400E	500E	600E
Rated power	Hp/kW	27/20.2	30/22.4	40/29.9	50/37	60/45
Exhaust volume 50/60Hz	m³/hr	112.5/135	129.1/154.9	154.4/185.3	186/224	222/268
Cylinders		6	6	6	8	8
Weight	Kg	230	236	247	340	345
Oil Charge	dm³	4.2	4.2	4.2	5	5
Crankcase heater		230V-150W-50/60Hz			230V-200W-50/60Hz	
Exhaust pipe inner diameter Φ	mm/inches	35/1-3/8"	35/1-3/8"	42/1-5/8"	54/2-1/8"	54/2-1/8"
Suction pipe inner diameter Φ	mm/inches	54/2-1/8"	54/2-1/8"	54/2-1/8"	67/2-5/8"	67/2-5/8"
Energy regulation		100,66,33%	100,66,33%	100,66,33%	100,75,50%	100,75,50%
Standard motor		400V/3/50Hz 460V/3/60Hz PW			400V/3/50Hz 460V/3/60Hz PW	
Starting current PW/DOL	A	123/201	150/243	201/330	237/316	271/361
Starting current Y/D	A	—	—	—	—	—
Max operating current	A	48	54	75	97	115

Frequently Asked Questions

Q1: How do I select the right SP8L5000 for my refrigeration system?

When selecting a semi-hermetic reciprocating refrigeration compressor, consider the required cooling capacity, refrigerant, evaporating and condensing temperatures, ambient conditions and power supply. The SP8L5000 is an eight-cylinder semi-hermetic piston compressor, so its operating range should be matched to the actual refrigeration requirements.

Q2: How does the capacity control system benefit low-temperature refrigeration applications?

The three-stage adjustment allows compressor output to respond to changing cooling loads rather than operating continuously at full capacity. This provides greater flexibility when refrigeration demand fluctuates during daily operation.

Q3: What installation advantages do the rotatable shut-off valves provide?

The 360° adjustable valve arrangement allows more flexible suction and discharge piping directions. This simplifies pipe alignment and helps installers work around space limitations when integrating the compressor into an existing refrigeration system.

Q4: What should be checked before starting the compressor?

Confirm that the motor voltage, frequency and starter arrangement match the compressor's electrical specifications. For partial-winding starting, the starter wiring and motor connections should be checked carefully before commissioning to ensure correct operation.

