



Refcomp SP4HN1200 SP4HN120E Semi-Hermetic Type Refrigeration Compressor

Our Product Introduction

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Basic Information

- Place of Origin: China
- Brand Name: Refcomp
- Certification: CE
- Model Number: SP4HN1200, SP4HN120E
- Minimum Order Quantity: 1
- Price: Discussed
- Packaging Details: WOODEN CASE
- Delivery Time: 1 Month
- Payment Terms: Western Union, T/T
- Supply Ability: 100000Pcs/Year



Product Specification

- Oil Lubrication Method: Splash Lubrication
- Oil Charge: 2.6L
- Rated Power: 12HP/8.9KW
- Refrigerant: R22, R407C, R134a, R404A, R507
- Displacement 50/60Hz: 42/50.4 M3/hr
- Application: HVAC, Condensing Unit, Cold Room, Rack System
- Highlight: Refcomp SP4HN1200 refrigeration compressor, SP4HN120E semi-hermetic compressor, semi-hermetic type refrigeration compressor



More Images



Product Description

Refcomp SP4HN1200 SP4HN120E Semi-Hermetic Type Refrigeration Compressor

Product Overview

The SP4HN1200 semi-hermetic compressor is a 4-cylinder reciprocating unit designed for medium-to-high temperature liquid chilling and commercial HVAC applications.

Dynamic Balance Crankshaft Assembly

Designed with a custom-balanced crankshaft, high-strength connecting rods, and precision pistons, this compressor minimizes operational vibration and running noise. Wear-resistant pin bushings support continuous rotation and significantly prolong service life.

Heavy-Duty Sliding Bearing Structure

The internal structure incorporates precision sliding bearings and thrust washers to absorb axial and radial mechanical forces. Supported by continuous oil lubrication, the bearing mechanism delivers reliable running stability over long operational cycles.

Built-In Motor & INT6982 Protection

Driven by an efficient multi-voltage motor supporting part-winding start, the compressor features an integrated INT6982 protection module to shield windings against thermal overload. The motor insulation works reliably with common refrigerants including R22, R134a, R407C, and R404A.

Internal Overpressure Safety Valve

An internal safety relief valve connects the high and low-pressure chambers to guard against pressure surges. The valve automatically opens to equalize internal pressure whenever safe operational limits are exceeded, then reseats securely to protect critical components.

Application Areas

Commercial Water Chillers

Suitable for central HVAC chillers, packaged liquid cooling units, and air-conditioning systems.

Industrial Process Cooling

Designed for industrial fluid cooling equipment requiring continuous operation and precise temperature control.

Cold Storage Warehouses

Ideal for medium-temperature food holding facilities, agricultural post-harvest storage, and distribution centers.

Supermarket Parallel Racks

Applicable to multi-compressor rack configurations feeding commercial display cases and cold rooms.

Product Image



Technical Specifications

Model	SP4HN1200, SP4HN120E
Rated Power	12HP / 8.9KW
Exhaust Volume (50Hz/60Hz)	42 / 50.4 m³/hr
Refrigerant Type	R22, R407C, R134a, R404A, R507
Weight	146KG
Oil Charge	2.6L
Voltage	400V/3/50Hz, 460V/3/60Hz PW
Starting Current PW/DOL	75/125A
Max Operating Current	27A

Model SP		H (High-Temp Compressor)							
		SP4HF/SP4HN				SP4H			
		1000	1200	1500	2000	2200	2500	3000	3500
Rated power	Hp/kW	10/7.5	12/8.9	15/11.2	20/14.9	22/16.4	25/18.7	30/22.4	35/26.1
Exhaust volume 50/60Hz	m³/hr	35/42	42/50.4	49/58.8	56/67.2	64.7/77.6	75/90	86.1/103.3	102.9/123.5
Cylinders		4	4	4	4	4	4	4	4
Weight	Kg	143	146	152	155	193	206	209	238
Oil Charge	dm³	2.6	2.6	2.6	2.6	3.7	3.7	3.7	3.7
Crankcase heater		230V-220W-50/60Hz				230V-150W-50/60Hz			
Exhaust pipe inner diameter Φ	mm/inches	22/7/8"	28/1-1/8"	28/1-1/8"	28/1-1/8"	28/1-1/8"	28/1-1/8"	28/1-1/8"	35/1-3/8"
Suction pipe inner diameter Φ	mm/inches	28/1-1/8"	35/1-3/8"	42/1-5/8"	42/1-5/8"	42/1-5/8"	54/2-1/8"	54/2-1/8"	54/2-1/8"
Energy regulation		100,50%	100,50%	100,50%	100,50%	100,50%	100,50%	100,50%	100,50%
Standard motor		400V/3/50Hz 460V/3/60Hz PW				400V/3/50Hz ~460V/3/60Hz PW			
Starting current PW/DOL	A	71/110	75/125	86/144	106/168	102/170	123/201	150/243	178/290
Starting current Y/D	A	-	-	-	-	-	-	-	-
Max operating current	A	24	27	33	40	37	43	52	56

Company Introduction

Coolstart is a modern, large-scale refrigeration enterprise with over 20 years of technical expertise in the cooling industry. Specializing in reciprocating, scroll, screw, semi-hermetic, and rotary compressors, as well as cold storage and ice-making equipment, Coolstart delivers full OEM/ODM customization services to global partners. Our products are exported to numerous international markets, including Russia, the United States, the United Kingdom, the United Arab Emirates, and Saudi Arabia, earning widespread recognition for engineering quality and cost-effectiveness.



Frequently Asked Questions

How do I verify whether the SP4HN1200 model meets my system cooling load?

Evaluate required capacity, operating temperature range, and refrigerant type against the compressor displacement rate. Providing target working conditions allows engineering teams to verify exact sizing.

What key installation checks should be performed when mounting this unit?

Confirm line connection diameters, inspect mounting pad leveling, and verify electrical control panel capacity against the motor starting current.

How does the internal protection module safeguard motor operation?

The module continuously monitors winding temperature and breaks the control circuit during thermal spikes or supply phase abnormalities to prevent winding damage.

What warranty terms does Coolstart offer for semi-hermetic units?

Coolstart provides a standard one-year warranty across all compressor product lines covering manufacturing defects under standard operating conditions.

What details are required to obtain a formal quotation from Coolstart?

Please specify your required model, order quantity, preferred refrigerant, voltage specification, operating conditions, and project requirements to receive a quote within eight hours.

Request a Technical Quotation

Coolstart provides professional refrigeration technical support and competitive wholesale pricing for global B2B buyers. Contact our engineering team today to receive a formal technical quotation within 8 hours.

Please specify your required **Model, Quantity, Refrigerant, Voltage/Frequency, Operating Conditions, and Project Requirements** when submitting your inquiry.

