



Refcomp SP4L1800 SP4L180E Semi Hermetic Refrigeration Compressor for Freezing Cold Room

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Refcomp
- Certification: CE
- Model Number: SP4L1800, SP4L180E
- 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

- Refrigerant: R22, R407C, R134a, R404A, R507
- Application: HVAC, Condensing Unit, Cold Room, Rack System
- Displacement 50/60Hz: 75/90 M3/hr
- Rated Power: 18HP/13.3KW
- Oil Charge: 3.7L
- Highlight: Refcomp SP4L1800 refrigeration compressor, semi hermetic compressor for cold room, freezing compressor with warranty



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Product Description

Refcomp SP4L1800 SP4L180E Semi Hermetic Refrigeration Compressor for Freezing Cold Room

Product Overview

Low-Temperature High-Displacement Output

Delivering a displacement of up to 90 m³/h with 100% and 50% step capacity regulation, this semi hermetic refrigeration compressor handles changing thermal loads with steady operating efficiency.

Direct-Path Suction Architecture

Engineered with direct internal gas channels and optimized valve plate geometry to minimize pressure drop and maximize volumetric efficiency in low-temperature circuits.

Heavy-Duty Mechanical Shafting

Features a dynamically balanced 4-cylinder crankshaft, wear-resistant sleeve bearings, a 28 bar pressure-rated casing, and an INT69B2 motor thermal protection module.

Standard Service & Component Features

360° rotatable suction (42 mm) and exhaust (28 mm) shut-off valves

Factory-installed 230V / 150W crankcase heater

Accessible high-density internal suction gas filter

Product Image



Technical Specifications

Model	SP4L1800, SP4L180E
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Rated Power	18HP / 13.3KW
Exhaust Volume (50Hz/60Hz)	75 / 90 m³/hr
Refrigerant Type	R22, R407C, R134a, R404A, R507
Weight	186 KG
Oil Charge	3.7 L
Voltage	400V/3/50Hz, 460V/3/60Hz PW
Starting Current PW/DOL	102 / 170 A
Max Operating Current	33 A

Model SP		L (Low-Temp Compressor)							
		SP4LF/SP4LN				SP4L			
		600	800	1000	1200	1500	1800	2200	2500
		060E	080E	100E	120E	150E	180E	220E	250E
Rated power	Hp/kW	6/4.5	8/5.9	10/7.5	12/8.9	15/11.2	18/13.3	22/16.4	25/18.7
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	134	139	144	146	182	186	195	220
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"	35/1-1/8"	35/1-3/8"	42/1-5/8"	42/1-5/8"	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	43/70	54/88	71/110	75/125	88/146	102/170	102/170	123/201
Starting current Y/D	A	—	—	—	—	—	—	—	—
Max operating current	A	16	19	24	27	29	33	39	43

Frequently Asked Questions

What lubricant viscosity and oil type are recommended for low-temperature operation with this semi hermetic refrigeration compressor?

Synthetic POE lubricants are recommended for HFC/HFO refrigerants like R404A and R507, maintaining proper fluid lubrication and viscosity across low evaporating ranges.

How does power phase voltage unbalance affect motor longevity for model SP4L1800 (SP4L180E)?

Voltage unbalance between supply phases should not exceed 2%, as phase current disparities generate excess winding heat that can trip the INT69B2 module or degrade motor insulation.

What guidelines apply when conducting standing pressure leak tests on a completed rack or package?

Pressurize the circuit using dry nitrogen without exceeding the 28 bar housing pressure rating, and verify all valve flanges and gasket joints with bubble solution.

What precautions prevent liquid slugging following automated evaporator defrost cycles?

Install suction line accumulators to intercept unevaporated liquid returning from evaporators, ensuring smooth gas-only intake upon compressor restart.



