

Refcomp SW3L-16000 170HP Semi-Hermetic Screw Compressor for Cold Storage Room

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Refcomp
- Certification: CE
- Model Number: SW3L-16000
- 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

- Voltage: 400V/3/50Hz, 460/3/60Hz
- Application: HVAC, Condensing Unit, Cold Room, Rack System
- Rated Power: 170HP/127KW
- Displacement: 510/612 M3/hr
- Refrigerant: R22, R134a, R507, R404A, R407C, R410a
- Highlight: **Refcomp SW3L-16000 screw compressor**, **170HP semi-hermetic compressor**, **screw compressor for cold storage**



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Our Product Introduction

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Product Description

Product Overview

The Refcomp SW3L-16000 is a 170HP semi-hermetic screw compressor engineered for cold storage and industrial refrigeration applications. It combines an optimized asymmetric rotor profile, flexible capacity regulation, and precision multi-bearing support to deliver efficient, stable compression across demanding cooling loads.

Key Features

Optimized Asymmetric Rotor Design

The SW3L-16000 semi-hermetic screw compressor features RefComp's asymmetric 5/6-tooth rotor profile, promoting smooth engagement and reduced vibration. Its optimized geometry helps the twin-screw compressor achieve efficient compression and stable mechanical operation.

Flexible Capacity Regulation

Stepped or stepless slide-valve regulation allows this variable-capacity screw compressor to adjust output according to changing cooling demands. This helps improve load matching and avoids unnecessary full-capacity operation during periods of lower refrigeration demand.

Precision Multi-Bearing Support

Multiple precision bearings support axial and radial rotor loads, helping maintain stable alignment during compression. Effective lubrication and accurate fitting reduce friction and operating noise, supporting smoother operation and limiting mechanical wear.

Efficient Motor Starting & Cooling

The semi-hermetic screw compressor uses star-delta starting to reduce initial motor current compared with direct-on-line starting. Its suction-gas cooling arrangement helps remove motor heat, supporting stable motor temperatures during refrigeration operation.

Product Image



Technical Specification

Model	SW3L-16000
Rated power	170HP / 127KW
Displacement 50/60Hz	510 / 612 m³/hr
Weight	710 KG
Capacity Regulation	25%, 50%, 75%, 100% 4-step; 25%–100% stepless
Standard Motor	Y/△ – 400V/3/50Hz – 460/3/60Hz
Star/Delta Start Current	374 / 1155 A
Max operating current	236 A

Model		SW3L(Low Temperature)						
		10500	11500	13000	16000	18000	20000	22000
Nominal Power	HP/KW	105/78	115/89	130/98	170/127	180/135	200/149	220/164
Displacement 50/60Hz	m^3/hr	341/409	380/456	445/534	510/612	562/674	600/720	700/840
Weight	Kg	530	665	675	710	1030	1050	980
Discharge Pipe Inner Diameter	mm / in	54/(2-1/8")	80/ (3-1/8")	80/ (3-1/8")	80/ (3-1/8")	80/ (3-1/8")	80/ (3-1/8")	80/ (3-1/8")
Suction Pipe Inner Diameter	mm / in	80/(3-1/8")	92/ (3-5/8")	92/ (3-5/8")	92/ (3-5/8")	104.8/ (4-1/8")	104.8/ (4-1/8")	104.8/ (4-1/8")
Oil Line Connector	mm / in	Φ16mm / (5/8")SAE						
Capacity Regulation		25%, 50%, 75%, full load 4-step regulation or 25%~full load stepless regulation						
Protection Module		INT69 SNY						
Standard Motor		Y/△ - 400V/3/50Hz - 460/3/60Hz						
Star/Delta Start Current	A	318/953	276/876	354/1155	374/1155	453/1333	543/1645	543/1645
Max Operating Current	A	163	196	210	236	250	270	300

Frequently Asked Questions

Q1: How do I determine whether the SW3L-16000 is suitable for my refrigeration system?

For an industrial refrigeration screw compressor application, provide the required cooling capacity, refrigerant, evaporating and condensing temperatures, power supply, and expected load conditions. Confirm that the system requirements fall within the compressor's approved operating range.

Q2: Does the SW3L-16000 require an external oil separator?

Yes. The SW3 series is designed without an integrated oil separator, so a properly matched external oil separation and return system is required. Verify the oil circuit, filtration, and flow-protection arrangements before installation.

Q3: What electrical checks should be completed before commissioning?

Check that the available power supply matches the motor specifications and that the star-delta starter is correctly wired. Verify phase sequence, motor protection connections, and electrical safeguards according to the manufacturer's wiring diagram.

Q4: What should I check if the compressor stops due to a protection alarm?

If the semi-hermetic screw compressor stops following an INT69 SNY alarm, inspect motor temperature, phase sequence, phase loss, and protection wiring. Identify and correct the underlying fault before restarting the equipment.

Coolstart Shenzhen Coolstart Refrigeration Equipment Co., Ltd

86-13922880636 info@coolstartcn.com coldroomunit.com

Room 1801, Building 1, Kangli city, No. 66 Pingji Road, Longgang District, Shenzhen, Guangdong,China