

Refcomp SW3H-12500 125HP Twin-Screw Type Refrigeration Compressor for Cold Storage

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Refcomp
- Certification: CE
- Model Number: SW3H-12500
- 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

- Refrigerant: R22, R134a, R507, R404A, R407C, R410a
- Voltage: 400V/3/50Hz, 460/3/60Hz
- Displacement: 341/409 M3/hr
- Application: HVAC, Condensing Unit, Cold Room, Rack System
- Rated Power: 125HP/89KW
- Highlight: **Refcomp SW3H-12500 twin-screw compressor**, **125HP refrigeration compressor for cold storage**
, **semi hermetic compressor cold storage**



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Our Product Introduction

Product Description

Product Overview

The Refcomp SW3H-12500 is a 125 HP semi-hermetic twin-screw refrigeration compressor engineered for cold storage and other demanding refrigeration applications. It combines an optimized asymmetric rotor profile, flexible capacity regulation, and a compact integrated housing to deliver reliable, efficient performance under varying load conditions.

Key Features

Optimized Asymmetric Rotor Design

The SW3H-12500 screw type refrigeration compressor uses RefComp's asymmetric 5/6-tooth rotor profile with an optimized length-to-diameter ratio. This design supports smooth rotor engagement, reduces vibration, and helps improve compression efficiency.

Flexible Capacity Regulation

Four-step or stepless capacity regulation allows compressor output to follow changing cooling demand. The slide-valve mechanism helps the system respond to partial loads, reducing unnecessary full-capacity operation and improving load matching.

Compact Housing & Improved Gas Flow

This semi-hermetic screw compressor features optimized internal gas passages that reduce intake resistance and flow losses. Its integrated housing combines key components into a compact arrangement, simplifying equipment layout and system installation.

High-Precision Suction Filtration

The built-in 100 µm suction filter captures impurities from incoming refrigerant gas before they reach the motor. This helps reduce internal contamination and protects critical components from foreign particles, supporting cleaner and more reliable compressor operation.

Product Image



Technical Specifications

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Model	SW3H-12500
Rated power	125 HP / 89 kW
Displacement (50/60 Hz)	341 / 409 m³/hr
Weight	545 kg
Capacity regulation	25%, 50%, 75%, 100% 4-step; 25%–100% stepless
Standard motor	Y/△ – 400V/3/50Hz – 460V/3/60Hz
Star/Delta start current	318 / 953 A
Max operating current	196 A

Model		SW3H(High Temperature)							
		4000	5000	6000	7500	9000	10500	11500	12500
Nominal Power	HP/KW	40/30	50/37	60/45	75/55	90/67	105/78	115/89	125/89
Displacement 50/60Hz	m^3/hr	118/142	150/180	175/210	205/246	237/284	286/343	318/382	341/409
Weight	Kg	245	255	265	410	420	535	540	545
Discharge Pipe Inner Diameter	mm / in	42/(1-5/8")	42/(1-5/8")	42/(1-5/8")	54/(2-1/8")	54/(2-1/8")	54/(2-1/8")	54/(2-1/8")	54/(2-1/8")
Suction Pipe Inner Diameter	mm / in	54/(2-1/8")	54/(2-1/8")	54/(2-1/8")	67/(2-5/8")	67/(2-5/8")	80/(3-1/8")	80/(3-1/8")	80/(3-1/8")
Oil Line Connector	mm / in	Φ16mm / (5/8")SAE							
Capacity Regulation		25%, 50%, 75%, 100% 4-step regulation or 25%~100% stepless regulation							
Protection Module		INT69 SNY							
Standard Motor		Y/△ - 400V/3/50Hz - 460/3/60Hz							
Star/Delta Start Current	A	131/398	134/406	182/547	139/459	193/580	338/1015	318/953	318/953
Max Operating Current	A	75	90	105	124	140	180	182	196

Frequently Asked Questions

Q1: How do I determine whether the SW3H-12500 is suitable for my refrigeration system?

When selecting a screw type refrigeration compressor, provide the required cooling capacity, refrigerant, evaporating and condensing temperatures, power supply, and expected load conditions. These details help verify whether the compressor matches the system's actual operating requirements.

Q2: What should I consider when replacing an existing screw compressor?

For a refrigeration screw compressor replacement, compare the mounting dimensions, suction and discharge connections, oil-line fittings, and control interfaces. Verify compatibility with the existing refrigeration system before ordering.

Q3: What electrical checks are required before commissioning?

Before starting this 125 HP screw compressor, verify that the site power supply matches the motor specifications. Check the star-delta starter wiring, phase sequence, protection circuits, and motor connections against the manufacturer's electrical diagram.

Q4: What should I do if the motor protection module reports a fault?

If the INT69 SNY protection module indicates motor overheating, phase loss, or reverse phase sequence, inspect the corresponding electrical and operating conditions. Identify and correct the fault before restarting the screw type refrigeration compressor.

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