

Bitzer 4PES-12-40P 4PCS-10.2-40P Semi Hermetic Reciprocating Refrigeration Compressor

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Bitzer
- Certification: CE
- Model Number: 4PES-12-40P,4PCS-10.2-40P
- 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

- Displacement: 48.5 M3/hr
- Rated Power: 12HP
- Refrigerant: R22
- Oil Charge: 2.6L
- Cylinders: 4
- Application: HVAC, Condensing Unit, Cold Room, Rack System
- Highlight: **Bitzer semi hermetic compressor**, **4PES-12-40P refrigeration compressor**, **4PCS-10.2-40P reciprocating compressor**



More Images



for more products please visit us on coldroomunit.com

Our Product Introduction

Product Description

Product Overview

The 4PES-12-40P is the updated successor to the previous 4PCS-10.2-40P model. This semi-hermetic reciprocating refrigeration compressor uses R22 refrigerant and is configured for medium- and low-temperature applications, including cold-storage rooms and supermarket refrigeration systems, when operating conditions fall within its application range.

Key Features

Wide Application Range

Suitable for medium- and low-temperature refrigeration duties such as cold-storage rooms and supermarket refrigeration systems, provided the operating conditions remain within the approved application envelope.

Compact Design for Flexible Installation

The semi-hermetic piston compressor features a compact housing that helps reduce installation space requirements. This gives equipment manufacturers greater flexibility when integrating refrigeration equipment into limited machinery spaces and designing compact refrigeration units.

50% Cooling Capacity Regulation

The four-cylinder configuration supports 50% capacity unloading, allowing cooling output to better match changing system loads. This helps reduce unnecessary full-capacity operation and provides greater flexibility for commercial refrigeration systems with fluctuating cooling demand.

Part-Winding Motor Starting

The 40P configuration uses a part-winding (PW) motor connection. When paired with a compatible starter, the staged energization of motor windings provides a suitable starting arrangement for refrigeration equipment and simplifies electrical system integration.

Product Image



Technical Specification

for more products please visit us on coldroomunit.com

Model	4PES-12-40P
Old Model	4PCS-10.2-40P
Rated power	12 HP
Displacement (1450/min)	48.5 m³/hr
Oil charge	2.6 L
Weight	139 KG
Capacity regulation	50%
Voltage	380-420YY/3/50, 440-480YY/3/60
Max operating current	22.7 A
Max power consumption	14 kW

Model	Motor Version	Displace-ment (1450/min)	Cylinders	Oil charge	Weight	Pipe Connections				CR - Steps -	Motor connection	Electrical data	
						DL Dischargeline		SL Suction line				Max. operating current	Max. power consumption
		m3/h		L	kg	mm	pouce	mm	pouce	%	Volt	Amp.	kW
4VES-6Y	3	34.7	4	2.6	129	22	7/8	28	1-1/8	50	PW 380-420YY/3/50 440-480YY/3/60	10	6
4VES-7(Y)	2				129							16.6	11
4VES-10(Y)	1				139							19.9	12
4TES-8Y	3	41.3	4	2.6	134	28	1-1/8	35	1-3/8			12.1	7
4TES-9(Y)	2				134							19.9	13
4TES-12(Y)	1				141							25.1	14
4PES-10Y	3	48.5	4	2.6	139	28	1-1/8	35	1-3/8			13.6	8
4PES-12(Y)	2				139			35	1-3/8			22.7	14
4PES-15(Y)	1				147			42	1-5/8			28.2	16
4NES-12Y	3	56.2	4	2.6	141	28	1-1/8	35	1-3/8			15.9	9
4NES-14(Y)	2				141			35	1-3/8			26.6	17
4NES-20(Y)	1				150			42	1-5/8			33.2	19
4JE-13Y	3	63.5	4	4	179	28	1-1/8	42	1-5/8			19.8	11
4JE-15(Y)	2				190							30.8	19
4JE-22(Y)	1				190							37.2	21
4HE-15Y	3	73.7	4	4	183	28	1-1/8	42	1-5/8			22.5	13
4HE-18(Y)	2				190			42	1-5/8			36.7	22
4HE-25(Y)	1				194			54	2-1/8			44	25
4GE-20Y	3	84.6	4	4.5	192	28	1-1/8	54	2-1/8			25.9	16
4GE-23(Y)	2				192							43.9	27
4GE-30(Y)	1				206							51.2	28
4FE-25Y	3	101.8	4	4.5	196	28	1-1/8	54	2-1/8			32.1	19
4FE-28(Y)	2				207							52.8	31
4FE-35(Y)	1				207							62.1	35

Frequently Asked Questions

Q1: Which refrigeration applications are suitable for the 4PES-12-40P?

This R22 compressor is configured for medium- and low-temperature refrigeration applications. Typical examples include commercial cold-storage rooms and supermarket refrigeration systems operating within the compressor's approved conditions.

Q2: How does the 50% capacity regulation benefit refrigeration systems?

The capacity-control arrangement allows the compressor to operate at reduced cooling output when the full refrigeration load is not required. This helps improve load matching and avoid unnecessary full-capacity operation.

Q3: What should be considered when connecting the part-winding motor?

Confirm that the starter supports the PW connection and matches the compressor's electrical specifications. Check the supply voltage, frequency, motor wiring and electrical protection before commissioning.

Q4: What information is needed when selecting this compressor for a cold-storage project?

When evaluating a compressor for low-temperature cold rooms, provide the required cooling capacity, refrigerant, evaporating temperature, condensing temperature, ambient conditions and power supply. These details help verify operating compatibility before ordering.

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