

Bitzer 4DES-5-40S 4DC-5.2-40S 5HP R22 Reciprocating Semi Hermetic Compressor

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Bitzer
- Certification: CE
- Model Number: 4DES-5-40S,4DC-5.2-40S
- 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

- Rated Power: 5HP
- Cylinders: 4
- Application: HVAC, Condensing Unit, Cold Room, Rack System
- Displacement: 26.8 M3/hr
- Refrigerant: R22
- Highlight: **Bitzer 4DES-5-40S semi hermetic compressor**, **5HP R22 reciprocating compressor**, **Bitzer 4DC-5.2-40S compressor**



More Images





for more products please visit us on coldroomunit.com

Our Product Introduction

Product Description

Product Overview

The Bitzer 4DES-5-40S is the updated successor to the previous 4DC-5.2-40S model. This 5HP reciprocating semi-hermetic compressor is part of the BITZER ECOLINE series, delivering up to 12% higher COP compared with previous product generations through optimized valve design and reduced internal losses.

Key Features

Optimized Valve Plate & Efficient Gas Exchange

The 4DES-5-40S features an optimized valve plate, efficient suction and discharge valve assemblies, and reduced clearance volume to minimize internal losses and improve gas exchange efficiency.

Wear-Resistant Drive Components

A surface-hardened crankshaft, low-friction bearings, aluminum pistons and high-hardness alloy piston rings contribute to a durable mechanical design. These components help reduce friction and mechanical wear, supporting stable operation and reducing the need for frequent component replacement.

Low Noise & Reduced Vibration

Balanced compressor mass distribution and a specially designed discharge valve cover help reduce exhaust pulsation and operating vibration. This contributes to quieter operation and smoother running, improving the operating environment around refrigeration equipment.

Optional 50% Capacity Unloading

As a 26.8 m³/h reciprocating compressor, the four-cylinder 4DES-5-40S can be fitted with an optional capacity-control head for 50% unloading. This allows cooling output to better match partial-load demand, helping reduce unnecessary full-capacity operation and improve system flexibility.

Product Image



Technical Specification

for more products please visit us on coldroomunit.com

Model	4DES-5-40S
Old Model	4DC-5.2-40S
Rated Power	5 HP
Displacement (1450/min)	26.8 m³/hr
Oil Charge	2 L
Weight	86 KG
Capacity Regulation	50%
Voltage	220-240Δ/3/50, 265-290Δ/3/60, 380-420Y/3/50, 440-480Y/3/60
Max Operating Current	25.2/14.5 A
Max Power Consumption	8.1 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
4FES-3(Y)	2	18.1	4	2	82	16	5/8	22	7/8	50	Δ / Y 220-240Δ/3/50 380-420Y/3/50 265-290Δ/3/60 440-480Y/3/60	16.5/9.5	5.3
4FES-5(Y)	1				86							18.8/10.8	5.8
4EES-4(Y)	2	22.7	4	2	84	16	5/8	28	1-1/8			21.2/12.2	6.9
4EES-6(Y)	1				86							23.7/13.6	7.6
4DES-5(Y)	2	26.8	4	2	86	22	7/8	28	1-1/8			25.2/14.5	8.1
4DES-7(Y)	1				89							28.7/16.5	8.9
4CES-6(Y)	2	32.5	4	2	91	22	7/8	28	1-1/8			30.8/17.7	9.7
4CES-9(Y)	1				91							35.1/20.2	11.3

Frequently Asked Questions

Q1: Which refrigerant does the 4DES-5-40S use?

The 4DES-5-40S uses R22 refrigerant. Ensure that the refrigeration system and lubricant are compatible with R22 before installation.

Q2: What information is needed when selecting this compressor for a refrigeration system?

When selecting a commercial refrigeration compressor, provide the required cooling capacity, refrigerant, evaporating temperature, condensing temperature, ambient conditions and power supply. These details help determine whether the compressor matches the intended application.

Q3: What operating conditions are suitable for the R22 configuration?

The supplied ECOLINE application information lists the R22 configuration for medium- and low-temperature applications, with condensing temperatures up to 62°C. This reciprocating semi-hermetic compressor should be selected according to the actual evaporating and condensing conditions.

Q4: What should be checked before initial startup?

Before commissioning this reciprocating semi-hermetic compressor, verify the motor voltage and connections, starter and protection settings, suction and discharge piping, oil charge and system cleanliness. Confirm that the electrical supply and operating conditions match the compressor requirements.

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