

4TES-12-40P 4TCS-12.2-40P 12HP R22 Bitzer Semi Hermetic Reciprocating Compressor

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Bitzer
- Certification: CE
- Model Number: 4TES-12-40P,4TCS-12.2-40P
- 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: 41.3 M3/hr
- Oil Charge: 2.6L
- Rated Power: 12HP
- Refrigerant: R22
- Cylinders: 4
- Application: HVAC, Condensing Unit, Cold Room, Rack System
- Highlight: **Bitzer 12HP reciprocating compressor**, **R22 semi sealed compressor**, **4TES-12-40P Bitzer compressor**



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Our Product Introduction

Product Description

Product Overview

The 4TES-12-40P is the updated successor to the previous 4TCS-12.2-40P model. This BITZER semi-hermetic reciprocating compressor uses R22 refrigerant and is suitable for air-conditioning and medium-temperature refrigeration applications, including air-conditioning chillers and commercial cooling systems.

Key Features

Air-Conditioning Application & Refrigerant Compatibility

Configured for R22 refrigerant, the compressor serves air-conditioning chillers and commercial cooling systems as well as medium-temperature refrigeration duties. The maximum condensing temperature is 62°C.

Compact Design for Flexible Installation

The compact construction of this semi-hermetic refrigeration compressor helps reduce installation space requirements. This gives equipment manufacturers greater flexibility when integrating the compressor into packaged chiller units and commercial refrigeration equipment.

Flexible Cooling Capacity Regulation

An optional capacity-control head provides 50% unloading, allowing cooling output to better match changing system demands. This helps avoid unnecessary full-capacity operation and improves flexibility when refrigeration loads fluctuate.

Part-Winding Motor Starting

The part-winding motor configuration allows the windings to be energized in stages when used with a compatible starter. This provides a practical starting arrangement for refrigeration equipment and helps simplify electrical system integration.



Technical Specification

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Model	4TES-12-40P
Old Model	4TCS-12.2-40P
Rated power	12 HP
Displacement (1450/min)	41.3 m³/hr
Oil charge	2.6 L
Weight	141 KG
Capacity regulation	50%
Voltage	380-420YY/3/50, 440-480YY/3/60
Max operating current	25.1 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: Is the 4TES-12-40P suitable for air-conditioning chiller applications?

Yes. Its R22 configuration is suitable for air-conditioning and medium-temperature refrigeration applications, with a maximum condensing temperature of 62°C. Actual evaporating and condensing conditions should be checked when selecting a compressor for an air-conditioning chiller.

Q2: How does the optional capacity-control system work?

The optional capacity-control head allows the four-cylinder compressor to unload to 50% capacity. This helps match cooling output to partial-load requirements, particularly in commercial air-conditioning systems with changing cooling demand.

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

Use a compatible part-winding starter and verify the motor wiring, power supply and starting sequence. The electrical protection settings should also be checked before commissioning.

Q4: What information is needed when requesting a replacement or new compressor selection?

Provide the required cooling capacity, refrigerant, evaporating temperature, condensing temperature, ambient conditions and electrical supply. For replacement projects, also provide the existing compressor model and connection details to help verify compatibility.

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