

Copeland CR35K6E-TF5-875

Copeland Hermetic Compressor CR35K6E-TF5-875 User Manual

Model: CR35K6E-TF5-875

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Copeland Hermetic Compressor, Model CR35K6E-TF5-875. This compressor is designed for use in various refrigeration and air conditioning applications, including packaged systems, geothermal, and heat pump applications. Please read this manual thoroughly before attempting any procedures to ensure proper handling and to prevent potential hazards.

The Copeland CR series compressors are known for their efficiency, durability, and reliability in systems requiring a wide range of evaporative capacity.

2. SAFETY INFORMATION

WARNING: Installation, service, and maintenance of this compressor must be performed by qualified and experienced personnel only. Failure to comply with safety instructions can result in serious injury, death, or property damage.

- Always disconnect power before servicing the unit.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Handle refrigerants with care. Refer to local regulations for proper handling and disposal.
- Ensure proper ventilation when working with refrigerants.
- Do not operate the compressor if any components are damaged.
- This compressor operates at high voltage (208/230V, 3 Phase). Exercise extreme caution.



Figure 1: Front view of the Copeland Hermetic Compressor CR35K6E-TF5-875. This image shows the main body of the compressor, electrical connection box, and refrigerant line connections.

3. SPECIFICATIONS

Feature	Detail
Model Number	CR35K6E-TF5-875
Brand	Copeland
Refrigerant	R22
Capacity	35,000 BtuH at 45°F
Voltage	208/230V
Phase	3 (Three)
Connection Size (Suction)	3/4" Sweat
Connection Size (Liquid)	1/2" Sweat
Mounting Base	7-1/2" x 7-1/2"
Special Feature	Hermetic Design
Power Source	Electric, Corded Electric
Recommended Uses	Industrial systems, geothermal, heat pump applications
Manufacturer	Copeland
Color	Black



Figure 2: Side view of the Copeland Hermetic Compressor CR35K6E-TF5-875, showing the lower refrigerant line connections and mounting feet.

4. SETUP AND INSTALLATION

Installation of the Copeland Hermetic Compressor requires specialized knowledge and tools. It is strongly recommended that installation be performed by a certified HVAC technician.

4.1 Pre-Installation Checks

- Verify that the compressor model matches the system requirements (refrigerant type, voltage, capacity).
- Inspect the compressor for any shipping damage. Do not install if damage is present.
- Ensure the mounting surface is level and capable of supporting the compressor's weight.
- Confirm that the electrical supply matches the compressor's voltage and phase requirements (208/230V, 3 Phase).

4.2 Mounting

1. Position the compressor on the designated mounting base (7-1/2" x 7-1/2").
2. Secure the compressor using appropriate vibration isolation mounts to minimize noise and stress on refrigerant lines.

4.3 Refrigerant Line Connections

- Connect the 3/4" suction line and 1/2" liquid line using proper brazing techniques.
- Ensure all connections are leak-free. Use nitrogen purge during brazing to prevent oxidation.
- Evacuate the system to a deep vacuum (typically 500 microns or less) to remove non-condensable gases and moisture.
- Charge the system with the correct type and amount of R22 refrigerant as specified by the system manufacturer.

4.4 Electrical Wiring

- Connect the 208/230V, 3-phase power supply to the compressor's electrical terminals according to the wiring diagram provided with the system.

- Ensure all electrical connections are tight and secure.
- Install appropriate overcurrent protection devices.
- Verify correct phase rotation for 3-phase compressors to ensure proper motor operation.

5. OPERATING INSTRUCTIONS

Once properly installed and charged, the compressor will operate as part of the overall refrigeration or air conditioning system. The following are general operating principles:

- The compressor is designed to cycle on and off based on the system's thermostat or control signals to maintain desired temperature.
- Ensure the system is adequately charged with R22 refrigerant. Low or high refrigerant levels can lead to inefficient operation or damage.
- Monitor system pressures and temperatures to ensure operation within design limits.
- Avoid frequent short cycling, which can reduce compressor lifespan.

6. MAINTENANCE

Regular maintenance is crucial for the longevity and efficient operation of your Copeland compressor. All maintenance should be performed by qualified personnel.

6.1 Routine Checks (Monthly/Quarterly)

- Inspect for any unusual noises or vibrations during operation.
- Check for refrigerant leaks using an electronic leak detector.
- Monitor system pressures and temperatures.
- Inspect electrical connections for tightness and signs of overheating.

6.2 Annual Maintenance

- Perform a comprehensive system check, including refrigerant charge verification.
- Clean the condenser and evaporator coils to ensure optimal heat transfer.
- Check the compressor oil level and condition if accessible and recommended by the system manufacturer.

7. TROUBLESHOOTING

This section provides general guidance for common issues. For complex problems, consult a qualified technician.

7.1 Compressor Not Starting

- **No Power:** Check circuit breakers, fuses, and electrical connections.
- **Control Issue:** Verify thermostat settings and control board signals.
- **Overload Protection:** Compressor may be tripped on internal overload. Allow time to cool and reset. Investigate cause of overload (e.g., high head pressure, low voltage).
- **Incorrect Wiring:** Ensure correct 3-phase wiring and phase rotation.

7.2 Insufficient Cooling/Heating

- **Low Refrigerant Charge:** Check for leaks and recharge system.

- **Dirty Coils:** Clean condenser and evaporator coils.
- **Airflow Restrictions:** Check filters and ductwork.
- **Compressor Malfunction:** If compressor runs but does not pump effectively, it may indicate internal damage.

7.3 Excessive Noise or Vibration

- **Loose Mounting:** Check and tighten mounting bolts.
- **Refrigerant Slugging:** Ensure proper superheat and subcooling.
- **Internal Compressor Issue:** If noise persists, the compressor may require replacement.

8. DISPOSAL

When the compressor reaches the end of its service life, it must be disposed of in accordance with all local, state, and federal regulations. Refrigerants must be recovered by certified technicians before disposal. Do not vent refrigerants into the atmosphere.

9. WARRANTY AND SUPPORT

Information regarding the specific warranty terms for the Copeland Hermetic Compressor CR35K6E-TF5-875 was not available in the provided product data. For warranty details and technical support, please contact your authorized Copeland distributor or the point of purchase. Ensure you have your model number (CR35K6E-TF5-875) and serial number ready when seeking support.



Figure 3: Seal indicating a genuine Copeland Compressor. Always ensure you are using authentic Copeland parts for optimal performance and reliability.

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This manual is for informational purposes only. Specifications are subject to change without notice.

Related Documents - CR35K6E-TF5-875





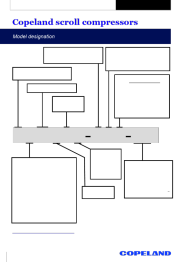


Copeland Scroll®
ZRK5 Compressor
Cross Reference Guide



[Copeland Scroll ZRK5 Compressor Cross Reference Guide | Emerson Climate Technologies](#)

This guide provides a comprehensive cross-reference for Copeland Scroll ZRK5 compressors, listing single-phase and three-phase models. It includes equivalent models from Bristol, Tecumseh, Carlyle, LG, and Danfoss, along with detailed specifications and voltage code information.

	<p>KeepRite "C" Generation Condensing Units - Price List and Specifications</p> <p>This document provides the price list and specifications for KeepRite's "C" Generation of Indoor and Outdoor Air Cooled Condensing Units, including KEH, KEZ, and KES lines. It details model nomenclature, standard features, available options, and pricing for various configurations.</p>
	<p>Copeland™ Stream Digital Semi-Hermetic Compressors: Application Guidelines</p> <p>Comprehensive application guidelines for Copeland™ Stream Digital semi-hermetic compressors (4M*D and 6M*D series), covering product description, installation, electrical connections, operation, and maintenance. Includes safety instructions, design features, and troubleshooting tips.</p>
	<p>Copeland Scroll Compressors ZP*K6 Series: Application Engineering Bulletin AE4-1400 R2</p> <p>Technical bulletin detailing the application, features, safety, and service procedures for Emerson's Copeland Scroll ZP*K6 R-410A compressors, covering installation, operation, and troubleshooting for HVAC/R systems.</p>
	<p>Copeland Scroll ZB Series Large Refrigeration Compressors Emerson Technical Specifications</p> <p>Explore the technical specifications, features, and protection systems of Emerson's Copeland Scroll ZB Series large refrigeration compressors. This document details models, performance data, CoreSense and Kriwan protection modules, and essential safety controls for commercial refrigeration applications.</p>
	<p>Copeland Scroll Compressor Model Designation Guide</p> <p>A technical guide to understanding and deciphering Copeland scroll compressor model numbers, covering motor types, capacity, voltage, and application ranges.</p>

CR35K6E-TF5

HCFC, R-22, 60 Hz, 3- Phase, 200/230 V

Air Conditioning

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Electrical Components

Internal Protector	071-0501-13	Single Protection
Part No:		
Vendor Part Number	Vendor Name	
3464112	T I	

Motor	065-2001-26	Single Compression
Manufacturer	4775	1.05
	1.05	1.05

Matthew Meier

02/14/2018

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Document Links VENDORS |||

CR35K6E-TF5 HCFC, R-22, 60 Hz, 3- Phase, 200/230 V Air Conditioning Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability. Electrical Components Internal Protector Part No: 071-0501-13...

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CR35K6E-TF5

HCFC, R-22, 60Hz, 3- Phase, 200/230 V

Air Conditioning

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

Service Parts

Reference	Component	Quantity	Description	Comment
1	527-0044-08	1	SPRINGER MOTOR MOUNT ASSEMBLY	
14	525-0001-26	1	POWER COILS MOUNTED FLAT	
16	516-0177-08	1	REFRIG SERVICE GROUP	
12	608-0201-02	1	CIRCUIT BOARD KIT 400M	
10	918-0009-06	1	HEAT EXCHANGER KIT	ALUMINUM 2X12X21X1/2 LANCE

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CR35K6E-TF5 HCFC, R-22, 60Hz, 3- Phase, 200/230 V Air Conditioning Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability. Service Parts Reference 1 14 99 12 10 Component 527-0044-08 52...

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CR35K6E-TF5

HCFC, R-22, 60 Hz, 3- Phase, 200/230 V

Air Conditioning

Production Status: Available for sale to all U.S. customers. Please check with your local Emerson Climate Technologies Representative for international availability.

DRAWINGS

12 11 10 PART NUMBER	497-3831-00 H	497-3831-01	497-3831-02	497-3831-03
497-3831-04	497-3831-05	497-3831-06	497-3831-07	497-3831-08
497-3831-09	497-3831-10	497-3831-11	497-3831-12 G	497-3831-13
497-3831-14	497-3831-15	497-3831-16	497-3831-17	497-3831-18
497-3831-19	497-3831-20	497-3831-21	497-3831-22	497-3831-23
497-3831-24	497-3831-25	497-3831-26	497-3831-27	497-3831-28
497-3831-29	497-3831-30	497-3831-31	497-3831-32	497-3831-33
497-3831-34	497-3831-35	497-3831-36	497-3831-37	497-3831-38
497-3831-39	497-3831-40	497-3831-41	497-3831-42	497-3831-43
497-3831-44	497-3831-45	497-3831-46	497-3831-47	497-3831-48
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RSD Refrigeration Supplies Distributor - Comprehensive Price List

Explore the extensive price list from RSD Refrigeration Supplies Distributor, featuring a wide range of HVAC and refrigeration parts, components, tools, and accessories from leading manufacturers like Acme, Browning, Copeland, Honeywell, and more. Updated June 11, 2021.

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REMINDER LIST	
Generally speaking, when you replace a compressor, you will need to replace parts to complete the repair. The list below will help you remember the parts and accessories you should consider before returning to the job.	
Air Leak Test Kits	367-068
Combs	190-182
Relays	162-166
Start Kits	112-113
Start Relays	164-165
Start Capacitors	158
Run Capacitors	168-169
Overcharge Heaters	113-115
Fittings	330-335
Time Delay Relays	364-369
Abrasive Cloth	327
Accumulators	184
Wax Nuts	169
Compressor Wires & Leads	117
Pressure Controls - High	130-131
Pressure Controls - Low	131-132
Sight Glasses	132-134
Liquid Line Filters	184-185
Suction Line Filters	189-192

LINE LOCATIONS	

CONNECTION TYPE	
 UP	 DOWN
 ANGLED UP	 STUB OUT

COMPRESSORS

[\[pdf\]](#) Catalog

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ASSETS DOCUMENTS ITEMS EN |||

REMINDER LIST Generally speaking, when you replace a compressor, you will need additional parts to c ... R42K6E-TFD 55-25100-12S CR47KQ-TFD CR53KQE-TFD-970 CR53KQE-TFD CRNQ-050E-TFD-970 CRNQ-050E-TFD **CR35K6E-TF5-875** CR35K6E-TF5 CR42K6E-TF5-875 CR42K6E-TF5 CR47KQE-TF5-970 CR47KQE-TF5 55-25100-11S ...

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Bard
since 1914

Climate Control Solutions

Service Parts List

Effective Date: August 1, 2017
Part No. 2110-006

Table of Contents

Part Number Range

<u>C Series</u>
<u>E Series</u>
<u>U Series</u>
<u>S100 Series</u>
<u>S400 Series</u>
<u>S500 Series</u>
<u>S800 Series</u>
<u>S900 Series</u>
<u>100—Through 199—Series</u>
<u>200—Through 299—Series</u>
<u>300—Through 399—Series</u>
<u>400—Through 499—Series</u>
<u>500—Through 599—Series</u>
<u>600—Through 699—Series</u>
<u>700—Through 799—Series</u>
<u>800—Through 899—Series</u>
<u>900—Through 999—Series</u>

A quick search function is also available by hitting Control and F at the same time on the keyboard. Type part number in the box.

[\[pdf\]](#) Parts List Reference Guide Guide Decleration of Conformity Warranty

2150 006 Bard Service Parts Cross Reference Guide NP 08 01 2017 Bard® 5051 083BX Insc
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Service Parts List Effective Date: August 1, 2017 Part No. 2150-006 Table of Contents Part Number Ra ... TF5-875 COMPRESSOR CR28K6E-TFD-875 COMPRESSOR CR30K6E-PFV-875 COMPRESSOR CR35K6E-PFV-875 COMPRESSOR **CR35K6E-TF5-875** COMPRESSOR CR35K6E-TFD-875 COMPRESSOR CR38K6E-PFV-875 COMPRESSOR CR38K6E-TF5-875 COM...

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Service Parts List

Effective Date: July 1, 2016

Part No. 2150-006

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Part Number Range

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[S400 Series](#)
[S600 Series](#)
[S800 Series](#)
[100 through 199 Series](#)
[200 through 299 Series](#)
[300 through 399 Series](#)
[400 through 499 Series](#)
[500 through 599 Series](#)
[600 through 699 Series](#)
[700 through 799 Series](#)
[800 through 899 Series](#)
[900 through 999 Series](#)

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Service Parts List Effective Date: July 1, 2016 Part No. 2150-006 Table of Contents

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COMPRESSOR CR38K6E-TF5-875 COM...

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