# **Copeland**<sup>™</sup> Certified Parts



## Capacitors

Single phase refrigeration systems require compressors with high torque capability. Start capacitors are used in conjunction with single phase compressors to increase torque values. Start



capacitor microfarads are high and only stay in the circuit for a short time. Emerson start capacitors have Underwriter Laboratory recognition and Canadian Standards Association certification. All Emerson start capacitors meet EIA Standards 463B for heavy duty (Type 1) requirements. All Emerson start capacitors are supplied with a bleed-resistor soldered to terminals.

Benefits of the bleed-resistor:

- Helps prevent sticking relay contacts and erratic relay operation even during short cycling.
- Prevents arcing and overheating of relay contacts.
- The resistor depletes capacitor charge quickly versus a start capacitor without a resistor.

## Crankcase Heaters

The reliability of Copeland crankcase heaters specifications has been established at nominal voltage ratings of 120, 240,



480, and 600. The Copeland crankcase heaters coincide with standardized nominal service voltage specified by ARI and NEMA.

- UL<sup>®</sup> Approved
- Immersion type
- Belly band

## Contactors

Copeland contactors are certified and UL approved.

- Silver cadmium oxide contacts for longer life
- Quiet, reliable operation with adjusting magnet armatures
- Compact design
- Snap-on accessories
- Quick connect terminals

• Non-position sensitive for convenient mounting Contactor pricing and availability can be found on the Emerson wholesaler portal. Copeland contactors have the standard 12 months Copeland warranty for parts.

# Oil

All suppliers are vetted through our internal supplier quality audit called the Emerson Supplier Audit Check (ESAC). This quality audit conducted by supplier quality engineers is well beyond normal industry ISO site audits requirements. A Certificate of Analysis (COA) is provided to Emerson by the supplier to ensure each batch of oil meets our Copeland product specifications.

Supplier must use only Emerson approved sources for raw materials to control consistency and quality of our product. Any and all process changes must be pre-approved by Emerson's supplier quality formal written approval process.



## Motors

RoHS compliant, robust, comparatively simple structures, and can run on commercial or residential power.





## Wholesaler Popularity

#### Contactor

Contactor		
Part number	Description	Sales %
912-0001-12	Contactor 1 NO/1NC, 15 - 75 Amps	15.37%
912-3040-02	Contactor 3 POLE, 40 Amp IND. 208/240V	13.39%
912-3040-00	Contactor 3 POLE, 40 Amp IND 24V	6.90%
912-3060-02	Contactor 3 POLE, 60 Amp IND 208/240V	5.88%
912-3050-02	Contactor 3 POLE, 50 Amp IND 208/240V	5.81%
912-3075-02	Contactor 3 POLE, 75 Amp IND 208/240V	5.17%
912-2040-00	Contactor 2 POLE, 40 Amp IND 24V	4.64%
912-3040-01	Contactor 3 POLE, 40 Amp IND 120V	4.49%
912-3030-02	Contactor 3 POLE, 30 Amp IND. 208/240V	4.38%
912-2030-00	Contactor 2 POLE, 30 Amp IND. 24V	3.85%
Total		<b>69.88</b> %

#### Current/Potential Relay

Part number	Description	Sales %
940-0001-55	Potential Relay Max. 195 PU, 105 D O @ 95°F	17.85%
940-0001-79	Potential Relay Max. 175 PU, 90 D O @ 95°F	10.39%
940-0001-60	Potential Relay Max. 193 PU, 115 D O @ 95°F	9.35%
940-0001-68	Potential Relay Max. 252 PU, 121 D O @ 95°F	8.59%
940-C411-82	Current Relay Max. 17.80 amps, D O 14.2 amps	5.30%
940-0001-61	Potential Relay Max. 328 PU, 121 D O @ 95°F	4.12%
940-0001-50	Potential Relay Max. 345 PU, 125 D O @ 95°F	4.11%
940-0001-48	Potential Relay Max. 153 PU, 45 D O @ 95°F	3.78%
940-0001-62	Potential Relay Max. 152 PU, 77 D O @ 95°F	3.65%
940-0001-54	Potential Relay Max. 252 PU, 121 D O @ 95°F	3.32%
Total		70.46%

#### Run/Start Capacitor

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Part number	Description	Sales %
914-0008-51	Start Cap 145-175 MFD 220V	10.74%
914-0006-03	Start Cap 189-227 MFD 330V	7.37%
914-0053-04	Start Cap 189-227 MFD 165V	6.28%
914-0006-01	Start Cap 130-156 MFD 330V	5.46%
914-0036-04	Start Cap 145-175 MFD 250V	4.76%
914-0006-10	Start Cap 270-324 MFD 330V	4.39%
914-0008-63	Start Cap 540-648 MFD 110V	4.09%
914-0036-03	Start Cap 88-106 MFD 330V	3.82%
914-0037-18	Run Cap 40 MFD 440V	3.58%
914-0037-14	Run Cap 20 MFD 440V	3.49%
914-0053-00	Start Cap 145-175 MFD 110V	3.47%
914-0037-12	Run Cap 40 MFD 370V	3.11%
Total		60.56%

## Relays

• Relays specified by Emerson are regulatory compliant to Restriction of Hazardous Substances Directive (RoHS), Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), and UL listed.



- Current Relay
- These relays have been specified, tested, and validated to have a 98.6% life probability of achieving 100K life cycles.



- These relays have been specified to meet the High Torque Start requirements of our compressors in both low and high voltage conditions.
- Quick connects with multiple connection points enables the start of auxiliary components during compressor start-up.

#### Service

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Part number	Description	Sales %
998-E022-01	1 Gallon POE 3MAF Oil	17.42%
998-E022-00	1 Quart POE 3MAF Oil	4.44%
998-0500-00	DTC Valve 3/8" Sweat	4.36%
998-0524-10	Solid State Protector Module Kit 120/240V	3.97%
998-0162-00	Sentronic Oil Sensor Kit	3.41%
998-0002-04	Sight Glass Kit	2.99%
998-0500-01	DTC Valve 1/4" Flare	2.34%
Total		41.27%

#### Crankcase Heater

Part number	Description	Sales %
918-0047-02	Crankcase Heater 66/93 Watt 480V	21.24%
918-0043-01	Crankcase Heater 70 Watt 480V	15.13%
918-0043-00	Crankcase Heater 70 Watt 240V	10.96%
918-0028-01	Crankcase Heater 100 Watt 240V 5/8 amp Fuse	6.08%
918-0047-01	Crankcase Heater 93 Watt 240V	5.49%
918-0028-00	Crankcase Heater 100 Watt 120V 1 1/4 amp Fuse	3.85%
918-0052-00	Crankcase Heater 40 Watt 240V Ø 138.9	3.66%
918-0047-00	Crankcase Heater 93 Watt 120V	3.63%
918-0097-01	Crankcase Heater 20 Watt 240V	3.31%
918-0041-00	Crankcase Heater 40 Watt 240V Ø 168.15	2.86%
Total		76.21%

#### Fan Motor

Part number	Description	Sales %
950-0265-00	Motor 1/6 HP 208-230V 1PH w/5MFD	42.50%
950-0344-00	Motor 50 Watt 208-230V 1PH w/Bracket	14.69%
950-0264-01	Motor 50 Watt 208-230V 1PH	11.79%
950-0266-04	Motor 1/4 HP 208-230V 1PH w/5MFD 1500 RPM	9.17%
950-0248-00	Motor 1/2 HP 208-230V 1PH w/7.5 MFD	4.36%
950-0250-00	Motor 1/4 HP 208-230V 1PH w/5MFD 1625 RPM	3.49%
950-0108-00	Motor 1/3 HP 208-230V 1PH 4MFD 1625 RPM	2.27%
950-0344-03	Motor 50 Watt 460 1PH 1500 RPM	2.04%
Total		90.31%

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