

Copeland - A Proven Performer



R-22, R-404A, R-507 High Efficiency Refrigeration Duty Compressors.

For Medium and High Temperature Refrigeration Applications.

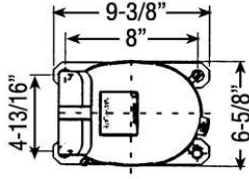
- Unprecedented performance and reliability
- Proven reciprocating technology
- Low oil circulation rate
- Durable
- Energy efficient
- Designed for refrigeration duty



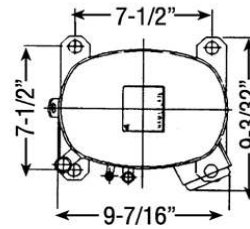
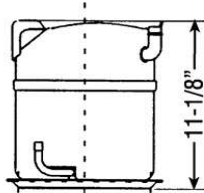
Refrigeration AFTER MARKET COMPRESSORS

Copeland Refrigeration Compressors

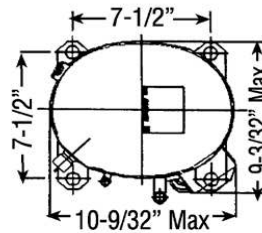
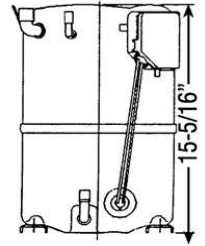
Typical Compressor Families



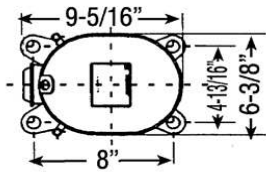
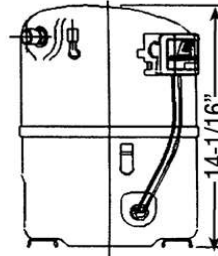
“R” Family



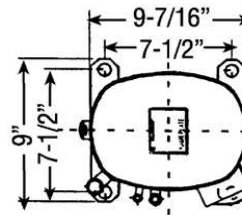
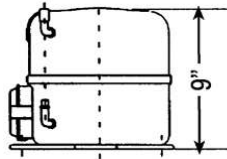
“CS*3” Family



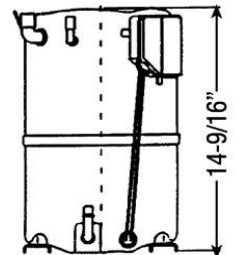
“CS*6” Family



“J” Family



“CR” Family



Terminology & Definitions

- RLA** The maximum current a compressor should draw under any operating conditions.
- LRA** The current drawn by a motor which is locked and cannot rotate. It occurs instantly during start up.
- MCC** Maximum continuous current or the minimum “rated load amp” value that may be used to comply with U.L. and N.E.C. requirements that the motor compressor protection system will not permit a continuous current in excess of 156% of the rated load amp.
- R-507** Average performance for this refrigerant is slightly different versus the 404A data published in this catalog. Capacity and mass flow are approximately 3% higher. Watts and amps are approximately 2% higher. Separate performance data on R-507 will not be published.

Bill of Material Information

xxxx-xxxx-xxx-~~xxx~~ The last 3 digits of any model is a unique bill of material.

xxxx-xxxx-xxx-~~9xx~~'s Wholesaler service compressors used to replace the above bills of material in most situations which include oil, protector, terminal box cover, and mounting parts in a single carton.
examples: -959 or -970

The Second Digit xxxx-xxxx-xxx-x~~5~~ Rotalock connection(s) or a valve welded on the suction side.
 xxxx-xxxx-xxx-x~~8~~ Sweat connections with terminal flag kit, no electrical components. Copeland “CR” Compressors primarily

The Third Digit xxxx-xxxx-xxx-xx~~0~~ No electrical components with the compressor.
 xxxx-xxxx-xxx-xx~~8~~ Electrical components mounted.
 xxxx-xxxx-xxx-xx~~9~~ Electrical components remote, in the box with the service compressor.





Refrigeration AFTER MARKET COMPRESSORS

Copeland Refrigeration Compressors

Copeland R-404A/507 Extended Medium Temperature Compressors

Copeland Compressor Family Series
Either a number or a letter established for each product model.

Compressor nominal capacity at rating conditions to two significant digits.

Compressor Motor Types

Phase	Description	Code
1	Capacitor Run - Capacitor Start	C
1	Induction Run - Capacitor Start	I
1	Capacitor Run - Permanent Split Capacitor	P
3	Three Phase	T

Bill of Material* (See Opposite Page)

Electrical Codes

60 Hz	50 Hz	Code
115-1	-	A
208/230-3	200/220-3	C
460-3	380/420-3	D
575-3	550-3	E
265-1	220/240-1	J
-	380/420-3	M
208/230-1	200-1	V
-	220/240-1	Z
200/230-3	200/240-3	5

Compressor Motor Protection

Type Protection	Code
External Thermal Protection - One Protector (Line Break)	A
Use with Contactor Internal Inherent Protection - One Protector (Line Break) Use with Contactor	F

Capacity Multiplier
C = 100
K = 1000

Model Variation
A number or letter, assigned to indicate different model types within any one family series.

Code Description

Code	Description
R	High Temperature
S	Medium Temperature
F	Low Temperature
T	Two Speed

Comp. Motor Nominal (HP)

1/2	0050
3/4	0075
1	0100
1-1/4	0125
1-1/2	0150
1-3/4	0175
2	0200
2-1/4	0225
2-3/4	0250
3	0275
3-1/2	0350
4	0400
4-1/2	0450
5	0500
7-1/2	0750
9	0900
10	1000
12	1200

60 Hertz				Nominal Performance ±5% After 72 Run-In Conditions (°F): Evap/Cond/Return Gas/Liquid/Ambient								Amperage Ratings		
R404A/507 Extended Med Temp.				20/120/40/120/95 °F				-10/120/40/120/95 °F						
Copeland Part Number	HP	Volt / Phase	CFM	BTUH	WATTS	AMPS	EER	BTUH	WATTS	AMPS	EER	RLA	LRA	MCC
RS43C1E-CAA-958	0.5	115-1	113	4170	944	10.6	4.4	1720	600	7.2	2.9	10.1	51	14.2
RS43C1E-IAA-958	0.5	115-1	113	4170	944	10.6	4.4	1720	596	8.1	2.9	10.1	51	14.2
RS43C1E-CAV-958	0.5	208/230-1	113	4170	944	5.6	4.4	1720	600	4.3	2.9	5.4	24.1	7.5
RS43C1E-IAV-958	0.5	208/230-1	113	4170	944	5.6	4.4	1720	600	4.3	2.9	5.7	24.1	8
RS64C1E-CAA-958	0.75	115-1	162	6460	1470	12.9	4.4	2860	1050	9.3	2.7	15.2	59	21.2
RS64C1E-IAA-958	0.75	115-1	162	6460	1470	12.9	4.4	2860	1050	9.3	2.7	17.5	76.7	24.5
RS64C1E-PAA-958	0.75	115-1	162	6460	1470	12.9	4.4	2860	1050	9.3	2.7	15.2	59	21.2
RS64C1E-CAV-958	0.75	208/230-1	162	6450	1460	6.4	4.4	2860	1050	4.6	2.7	7.7	37	10.8
RS64C1E-IAV-958	0.75	208/230-1	162	6450	1460	8.6	4.4	2860	1050	6.2	2.7	9.2	45	12.9
RS97C1E-CAA-959	1.5	115-1	245	9590	1940	19.4	4.9	3820	1250	14.4	3.1	19.6	95	29
RS97C1E-CAV-959	1.5	208/230-1	245	9590	1940	9.7	4.9	3820	1250	7.2	3.1	11	51	15.4
RS97C1E-TFC-959	1.5	208/230-1	245	9400	1890	6.3	5	3750	1210	4.7	3.1	7	35	9.8
CS12K6E-PFV-970	2	208/230-1	320	12000	1930	8.8	6.2	3990	1120	5.4	3.6	10.9	56	15.3
CS12K6E-PFJ-970	2	265-1	320	12000	1930	7.6	6.2	3990	1120	4.7	3.6	10.9	55	15.2
CS12K6E-TF5-970	2	208/230-3	320	11700	1860	5.8	6.3	3830	1090	3.6	3.5	7.5	51	10.5
CS14K6E-PFV-970	2.5	208/230-1	350	14100	2280	10.3	6.2	5440	1420	6.6	3.8	12.4	61	17.4
CS14K6E-PFJ-970	2.5	265-1	350	14100	2280	8.9	6.2	5440	1420	5.7	3.8	12.5	58	17.5
CS14K6E-TF5-970	2.5	208/230-3	350	13800	2210	6.9	6.2	5330	1370	4.5	3.9	9.1	55	12.8
CS14K6E-TFD-970	2.5	208/230-3	350	13800	2210	3.4	6.2	5330	1370	2.2	3.9	4.7	28	6.6
CS20K6E-PFV-970	3	208/230-1	535	20000	3120	14.9	6.4	7050	1850	10	3.8	18.6	96	26
CS20K6E-TF5-970	3	208/230-3	535	19600	3030	10	6.5	6910	1800	6.7	3.8	11.4	75	16
CS20K6E-TFD-970	3	460-3	535	19600	3030	5	6.5	6910	1800	3.4	3.8	5.1	40	7.1
CS27K3E-PFV-970	4	208/230-1	665	26500	4420	20.3	6	9370	2460	12.2	3.8	23.9	95.4	33.5
CS27K3E-TF5-970	4	208/230-3	665	26000	4290	13.1	6.1	9070	2495	8.1	3.6	15.6	82	21.4
CS27K3E-TFD-970	4	460-3	665	26000	4290	6.6	6.1	9070	2495	4.1	3.6	8.5	41	11.8
CS33K3E-PFV-970	5	230/230-1	756	31600	5290	25.3	6	11500	3070	15.8	3.8	30.7	125	43
CS33K3E-TF5-970	5	208/230-3	756	31200	5190	15.2	6	11700	2920	9.9	4	20.7	90	29
CS33K3E-TFD-970	5	380/460-3	756	31200	5190	7.6	6	11700	2920	5	4	9.9	45	13.8



Copeland R-22 High & Medium Temperature Compressors

60 Hertz				Nominal Performance								Amperage Ratings *		
				Conditions (°F): Evap/Cond/Return Gas/Liquid/Ambient										
R-22 High Temp.				45/130/65/95 °F				20/120/65/120/95 °F						
Copeland Part Number	HP	Volt / Phase	CFM	BTUH	WATTS	AMPS	EER	BTUH	WATTS	AMPS	EER	RLA	LRA	MCC
JRF4-0050-IAA-958	0.5	115-1	113	7360	1090	13	6.8	4320	850	11.6	5.1	13.6	71	19
JRF4-0050-IAV-958	0.5	208/230-1	113	7360	1090	7	6.8	4320	850	5.8	5.1	6.4	34	9
RRGA-0100-PAA-950	1	115-1	161	10800	1390	12.6	7.8	6170	1050	9.8	5.9	13.2	60	18.5
RRGA-0100-PAV-950	1	208/230-1	161	10800	1390	6.3	7.8	6170	1050	4.9	5.9	6	33.5	8.4
CRA1-0150-PFV-970	1.5	208/230-1	242.5	16960	1870	8.3	9.1	9430	1430	6	6.6	10.8	48	15.1
CRA1-0150-TF5-970	1.5	208/230-1	242.5	17190	1810	5.8	9.5	9690	1350	5	7.2	9.3	58	13
CRA1-0150-TFC-970	1.5	208/230-1	242.5	17190	1810	2.9	9.5	9690	1350	3	7.2	4.1	17.4	5.7
REK3-0125-PFV-959	1.25	115-1	174.7	12500	1440	6	8.7	7090	1110	5.1	6.4	7	34.2	9.8
REK3-0125-TFC-959	1.25	208/230-1	174.7	12400	1370	3.8	9.1	7370	1020	3.1	7.2	4.7	31	6.6
REK3-0125-TFD-959	1.25	208/230-1	174.7	12400	1370	1.9	9.1	7370	1020	1.6	7.2	2.6	15	3.7
RSE4-0075-IAA-958	0.75	115-1	135	8620	1250	15.2	6.9	5060	940	13.2	5.4	14.3	66.3	20
RSE4-0075-IAV-958	0.75	208/230-1	135	8620	1250	15.2	6.9	5060	940	6.6	5.4	7.1	35.5	10
R-22 Medium Temp.				20/120/40/120/95 °F				0/110/40/110/95 °F						
Copeland Part Number	HP	Volt / Phase	CFM	BTUH	WATTS	AMPS	EER	BTUH	WATTS	AMPS	EER	RLA	LRA	MCC
RSE4-0075-IAA-958	0.75	115-1	135.3	4770	930	6.5	5.1	2630	690	5.8	3.8	14.3	66.3	20
RSE4-0075-IAV-958	0.75	208/230-1	135.3	4770	930	3.3	5.1	2630	690	2.9	3.8	7.1	35.5	10
RSN6-0075-IAA-958	0.75	115-1	162.4	6200	1190	15	5.2	3680	870	13	4.2	14.3	66.3	20
RSN6-0075-IAV-958	0.75	208/230-1	162.4	6200	1190	7.5	5.2	3680	870	6.5	4.2	6.9	45	9.6
RSL2-0101-CAA-959	1	115-1	244.5	9620	1760	18.2	5.5	5500	1300	14.8	4.2	18	78	25.2
RSL2-0101-CAV-959	1	208/230-1	244.5	9620	1760	9.1	5.5	5500	1300	7.4	4.2	10.4	51	14.5

*Terminology, Definitions and Bill of Material Information on page 2.

Available At Your:

