

AFE05C4E-IAA

HFC, R-134a, 60Hz, 1- Phase, 115 V

Extended Medium Temp, A-Line



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

Performance

Evap(°F)/Cond(°F)	-10 / 120	20 / 120
RG(°F)/Liq(°F)	40.0 / 120.0	40.0 / 120.0
Capacity (Btu/hr)	584	1465
Power (Watts):	189	294
Current (Amps):	2.95	3.55
EER (Btu/Wh):	3.10	5.00
Mass Flow (lbs/hr):	10	26
Sound Power (dBA):	0 Avg	0 Max
Vibration (mils(peak- Record Date:	0.0 Avg	0.0 Max
	2012-11-12	

Mechanical

Number of Cylinders:	1	Displ(in ³ /Rev):	0.45
Bore Size(in):	0.96	Displ(ft ³ /hr):	54.81
Stroke(in):	0.63		
Overall Length (in):	10.50	Mounting Length (in):	6.50
Overall Width (in):	6.40	Mounting Width (in):	4.00
Overall Height (in):	7.38	Mounting Height (in):	7.75 *
Suction Size (in):		5/16 Stub	
Discharge Size (in):		1/4 Stub	
Oil Recharge (oz):		10	
Initial Oil Charge (oz):		12	
Net Weight (lbs):		22.1	
Internal Free Volume (in ³):			
Horse Power:			
*Overall compressor height on Copeland Brand Product's specified mounting grommets.			

Electrical

LRA-High*:	22.0	MCC (Amps):	5.2	UL File No:	SA-2337
LRA-Half Winding:		RPM:	3500	UL File Date:	03-Mar-1999
LRA Low*:		Max Operating Current:			
RLA(=MCC/1.4;use for contactor selection):		3.7			
RLA(=MCC/1.56;use for breaker & wire size		3.3			
*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.					
Type	Part No	Low MFD	High MFD	Volts	User Description
Start Capacitor	014-0053-26	145.0	175.0	250	

Alternate Applications

Refrigerant	Freq (Hz)	Phase	Voltage	Application
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Service Parts

<u>Reference</u>	<u>Component</u>	<u>Quantity</u>	<u>Description</u>	<u>Comment</u>
10	005-0947-01	1	COVER - TERMINAL	
4	527-C001-02	1	SPACER-MOUNTING	
13	910-0477-00	1	VALVE KIT BOLT ON VALVE	CAN BE USED ON MODELS THAT HAVE
2	914-0053-10	1	CAP START KIT	
5	918-0054-00	1	HEATER-CRANKCASE KIT	
5	918-0054-01	1	HEATER-CRANKCASE KIT	
1	940-C411-63	1	RELAY-CURRENT KIT	
3	971-0554-42	1	EXTERNAL PROTECTOR KIT	

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Electrical Components

External Protector

Part No: 071-0681-03 Usage Description

Vendor Part Number

T0919/J5

Vendor Name

ELECTRICA

Stator

Part No: MAF1963

Resistance: +/-5% Start Wdg: 8.30 Run Wdg: 2.00

Current Relays

Part No: 040-0163-11 Usage Description

9660C-3018-163

SENSATA

Start Capacitor

Part No: 014-0053-26 Low MFD: 145.00

Type: Start Capacitor High MFD: 175.00

User Description: Volts: 250

RATING CONDITIONS

40 °F Return Gas
0 °F Subcooling
95 °F Ambient Air Over

60 Hz Operation

EXTENDED MEDIUM TEMPERATURE

HFCs Require Use of Polyol Ester Lubricant Approved
on Form 93-11

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COPELAWELD® HFC-134A
COMPRESSOR
IAA 115-1-60

Evaporating Temperature °F (Sat Dew Pt Pressure, psig)

-25(-3.4) -20(-1.8) -15(0) -10(1.9) -5(4.1) 0(6.5) 5(9.1) 10(12) 15(15) 20(18)

Condensing Temperature °F (Sat Dew Pt Pressure, psig)	140 (229)C				410	504	613	737	877	1035	1210
	P				193	209	226	244	264	286	311
	A				2.9	3	3.1	3.25	3.35	3.5	3.6
	M				8	9.9	12.1	14.6	17.4	20.6	24.2
	E				2.1	2.4	2.7	3	3.3	3.6	3.9
	%				33.4	36	38.3	40.3	41.8	42.8	43.3
	130 (199)C			410	500	602	719	851	998	1160	1345
	P			175	191	207	223	240	259	279	303
	A			2.85	2.95	3	3.1	3.2	3.35	3.45	3.6
	M			7.3	9	11	13.2	15.7	18.5	21.6	25.1
	E			2.4	2.6	2.9	3.3	3.5	3.9	4.2	4.5
	%			34.1	36.3	38.3	40.1	41.5	42.4	42.9	42.9
	120 (171)C	322	398	486	584	695	819	957	1110	1280	1465
	P	140.5	158	173	189	203	219	235	252	272	294
	A	2.7	2.8	2.85	2.95	3	3.1	3.2	3.3	3.4	3.55
	M	5.2	6.6	8.2	9.9	11.9	14.1	16.5	19.2	22.3	25.6
	E	2.3	2.5	2.8	3.1	3.4	3.8	4.1	4.4	4.7	5
	%	31.9	34.2	36.2	38	39.6	40.8	41.7	42.2	42.2	41.8
	110 (146)C	375	461	557	663	781	912	1055	1215	1390	1580
	P	139.5	156	171	186	200	214	229	245	263	284
	A	2.7	2.8	2.85	2.9	3	3.1	3.2	3.25	3.35	3.45
	M	5.7	7.2	8.8	10.6	12.6	14.8	17.1	19.8	22.7	26
	E	2.7	3	3.3	3.5	3.9	4.3	4.6	5	5.3	5.6
	%	33.6	35.6	37.3	38.8	39.9	40.8	41.2	41.3	41	40.2
	100 (124)C	426	520	624	738	863	999	1150	1315	1490	1685
	P	138.5	155	169	183	196	209	223	238	254	273
	A	2.7	2.75	2.85	2.9	2.95	3.05	3.15	3.2	3.3	3.4
	M	6.2	7.8	9.5	11.3	13.2	15.3	17.7	20.2	23.1	26.2
	E	3	3.4	3.7	4	4.4	4.8	5.2	5.5	5.8	6.2
	%	34.6	36.4	37.8	38.9	39.6	40.1	40.2	39.9	39.2	38
	90 (104)C	474	576	687	808	938	1080				
	P	137.5	153	167	180	192	204				
	A	2.7	2.75	2.8	2.85	2.95	3				
	M	6.7	8.3	10	11.9	13.8	15.9				
	E	3.5	3.8	4.1	4.5	4.9	5.3				
	%	35.1	36.6	37.7	38.5	38.9	39				

Nominal Performance Values (±5%) based on 72 hours run-in. Subject to change without notice. Current @ 115 V

C:Capacity(Btu/hr), P:Power(Watts), A:Current(Amps), M:Mass Flow(lbs/hr), E:EER(Btu/Watt-hr), %:Isentropic Efficiency(%)