ZR54K5E-PFV

HFC, R-407C, 60 Hz, 1 - Phase, 208/230 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.

Summary

Performance		
Evaporator Temp. (°F)	45	50
Condensing Temp. (°F)	130	100
Return Gas Temp. (°F)	65	70
Liquid Temp. (°F)	115	85
Capacity (BTU/hr)	50100	69400
Power (W):	4850	3250
Current (Amps):	21.8	14.8
EER(BTU/Wh):	10.3	21.4
Mass Flow (lbs/hr):	729	855
Sound Data @ 45 / 130		
Sound Power (dBA):	70 Avg	75 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2015-10-13	

Mechanical	
Displacement (in^3/Rev):	4.40
Displacement (ft^3/Hr):	
Overall Length (in):	9.69
Overall Width (in):	9.69
Overall Height (in):	16.94
Mounting Length (in):	7.50
Mounting Width (in):	7.50

Mounting Height (in):	17.17
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	42
Oil Recharge (oz):	34
Net Weight (lbs):	72.5
Internal Free Volume (in^3):	179
Horse Power:	4.5

*Overall compressor height on Copeland Brand Product's specified mounting grommets.

Electrical

LRA High* (Amps):	146.0
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	39.5
Max Operating Current (Amps):	34.0
RLA, MCC/1.4(use for contactor selection)(Amps):	28.2
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	25.3
RPM:	3500
Box IP :	21
UL File No:	SA-2337
UL File Date:	

*Low and High refer to the low and high nominal voltage ranges for which the motor is approved.

Capacitors

Type	Part No	Low MFD	High MFD	Volts	User Description
Run Capacitor	014-0064-27	80.0	0.0	370	
Start Capacitor	014-0061-27	88.0	106.0	330	OPTIONAL

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
No data available in table				

Service Parts

Service Parts

Reference	Component	Quantity	Description	Comment
1	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
1	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
2	527-0116-00	1	SPACER-MOUNTING ASSM	
4	914-0037-38	1	RUN CAP KIT	
14	529-0060-24	1	POWER CABLE-MOLDED PLUG	

Accessories

Accessories

Category	Part Number	Description
Crankcase Heaters	018-0095-00	Crankcase Heater, 240V, 70W, 21" Lead Length
Crankcase Heaters	018-0096-04	Crankcase Heater, 240V, 40W, 48.25" Lead Length
Crankcase Heaters	018-0096-03	Crankcase Heater, 575V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-02	Crankcase Heater, 480V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-01	Crankcase Heater, 120V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-00	Crankcase Heater, 240V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0095-09	Crankcase Heater, 277V, 70W, 21" Lead Length
Crankcase Heaters	018-0096-05	Crankcase Heater, 480V, 40W, 48.25" Lead Length
Crankcase Heaters	018-0095-08	Crankcase Heater, 400V, 70W, 48" Lead Length
Crankcase Heaters	018-0095-06	Crankcase Heater, 575V, 70W, 48" Lead Length

Electrical Components

Electrical Components

Part No: 071-0510-10

Usage Description: Internal Protector

Vendor Part Number

Stator

Part No: 546-5010-03

Usage Description: Stator

16HM143

Vendor Name

SENSATA

Potential

Part No: 040-0166-37

Usage Description: Potential Relay

Vendor Part Number

RVA2AE6D-946

Vendor Name

ELECTRICA

Run Capacitor

Part No: 014-0064-27

Low MFD: 80.0

Type:Run Capacitor

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

Resistance: +/-7%

Start Wdg: 0.77

Run Wdg: 0.46

Start Capacitor

Part No: 014-0061-27

Low MFD: 88.0

Type:Start Capacitor

High MFD: 106.0

Usage Description: Start Capacitor

Volts: 330

Nomenclature

ZR54K5E-PFV

Family Series

Z: Scroll

Application Range

R: A/C - R-22/407C/134a

Capacity

54K: Capacity Multiplier-1000

Oil Type

E: Polyol Ester

Motor Type

P: 1 Phase/Capacitor Run, Permanent Split Capacitor

Motor Protection

F: Internal Inherent Protection

Voltage

V: 60Hz (208/230-1) 50Hz (-)

Miscellaneous

Alternate Application

Refrigerant	Freq	Phase	Voltage	Application
HCFC R-22	60	1 Ø	208/230 V	R1

Nomenclature

ZR54K5E-PFV

Date	Data Group	Field	Old Data	New Data
13-Apr-2010	Rating	PubCode		Y
17-Nov-2010	2 Pt Perf	Amp Cond 1	14.8	21.8
17-Nov-2010	2 Pt Perf	Amp Cond 2	21.8	14.8
17-Nov-2010	2 Pt Perf	Cap Cond 1	69400	50100
17-Nov-2010	2 Pt Perf	Cap Cond 2	50100	69400
17-Nov-2010	2 Pt Perf	EER Cond 1	21.4	10.3
17-Nov-2010	2 Pt Perf	EER Cond 2	10.3	21.4
17-Nov-2010	2 Pt Perf	MassFlow Cond 1	855	729
17-Nov-2010	2 Pt Perf	MassFlow Cond 2	729	855
17-Nov-2010	2 Pt Perf	Ret Gas Cond 1	70	65