

ZP16K7E-PFV

HFC, R-410A, 60 Hz, 1 - Phase, 208/230 V

Air Conditioning

Production Status: This compressor and/or application of this compressor is not available to U.S. OEM customers. A field replacement is currently available through a U.S. Copeland Wholesaler. Please check with your local Copeland Representative for international availability.

Summary

Performance		
Evaporator Temp. (°F)	45.00	50
Condensing Temp. (°F)	130.00	100
Return Gas Temp. (°F)	65.00	70
Liquid Temp. (°F)	115.00	85
Capacity (BTU/hr)	15950	21600
Power (W):	1580	986
Current (Amps):	6.9	4.3
EER(BTU/Wh):	10.1	21.9
Mass Flow (lbs/hr):	233	265
Sound Data @ 50 / 115		
Sound Power (dBA):	66 Avg	71 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2023-05-19	
Mechanical		
Displacement (in ³ /Rev):	.92	
Displacement (ft ³ /Hr):		
Overall Length (in):	9.70	
Overall Width (in):	9.70	
Overall Height (in):	14.90	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

Mounting Height (in):	15.70
Suction Size (in),Type:	3 / 4 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	21
Oil Recharge (oz):	17
Oil Type:	3MA
Net Weight (lbs):	47.4

Internal Free Volume (in³):

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

Electrical

LRA High* (Amps):	45.7
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	16
Max Operating Current (Amps):	11
RLA, MCC/1.4(use for contactor selection)(Amps):	11.4
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	10.3
RPM:	3500
Box IP :	21
UL File No:	SA2337- 20200323
UL File Date:	2020-03-23

*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	014-0064-06	30.0	0.0	370	
Start Capacitor	014-0061-27	88.0	106.0	330	

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
No data available in table				

Service Parts

Service Parts				
Reference	Component	Quantity	Description	Comment
99	100-0605-02	1	SCREW- TAPTITE W/ LOCKWASHER	
99	527-0044-15	1	SPACER - MOUNTING ASSM	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	914-0036-03	1	CAP START KIT	
99	914-0037-10	1	RUN CAP KIT W/CLAMP	
99	918-0052-00	1	CRANKCASE HEATER KIT	240V 40W WRAP AROUND
99	918-0052-01	1	CRANKCASE HEATER KIT	120V 40W WRAP AROUND
99	940-0001-79	1	RELAY-POTENTIAL KIT	
99	943-0120-00	1	SECURE START 1PH SINGLE PACK	
99	971-0066-00	1	MODULE-P210 ASSM	CORESENSE DIAGNOSTICS 2-WIRE

Accessories

Accessories		
Category	Part Number	Description
Motor Protection	543-0067-00	Comfort Alert (Fixed Speed Geothermal)
Motor Protection	543-0032-00	Comfort Alert (Fixed Speed L Terminal)
Motor Protection	543-0010-01	Comfort Alert (Fixed Speed Two Wire)
Motor Protection	543-0038-02	Commercial Comfort Alert (Single Stage)

Category	Part Number	Description
CoreSense	971-0066-00	CoreSense™ Diagnostics Module (2-Wire Module, 1-Phase Only)
CoreSense	971-0067-00	CoreSense™ Diagnostics Module (3-Wire Module, 1-Phase Only)
Crankcase Heaters	998-7026-00	Crankcase Heater Enclosure Box
Crankcase Heaters	018-0094-01	Crankcase Heater, 120V, 40W
Crankcase Heaters	018-0096-01	Crankcase Heater, 120V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0094-00	Crankcase Heater, 240V, 40W

Electrical Components

Electrical Components	
<p>Stator</p> <p>Part No: 546-5143-01</p> <p>Resistance: +/-7%</p> <p>208</p> <p>230</p> <p>Half Wdg:</p> <p>1.86</p> <p>1.54</p> <p>ACL:</p> <p>0.000</p>	<p>Stator</p> <p>Part No: 846-5143-01</p> <p>Resistance: +/-7%</p> <p>208</p> <p>230</p> <p>Half Wdg:</p> <p>1.86</p> <p>1.54</p> <p>ACL:</p> <p>0.000</p>
<p>Potential</p> <p>Part No: 040-0166-37</p> <p>Usage Description: Potential Relay</p> <p><u>Vendor Part Number</u></p> <p>RVA2AE6D-946</p> <p><u>Vendor Name</u></p> <p>ELECTRICA</p>	<p>Part No: 014-0061-27</p> <p>Low MFD: 88.0</p> <p>Type:Start Capacitor</p> <p>High MFD: 106.0</p> <p>Usage Description:</p> <p>Volts: 330</p>
<p>Run Capacitor</p> <p>Part No: 014-0064-06</p> <p>Low MFD: 30.0</p> <p>Type:Run Capacitor</p>	

High MFD: 0.0

Usage Description: Run Capacitor

Volts: 370

Nomenclature

ZP16K7E-PFV

Family Series

Z: Scroll

Application Range

P: A/C - R-410A/B

Capacity

16K: 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
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No data available in table

Nomenclature

Bill-of-Materials

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