

ZP61K5E-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)	61500	83000
Power (W):	5860	3950
Current (Amps):	27.2	19.4
EER(BTU/Wh):	10.5	21
Mass Flow (lbs/hr):	904	1020
Sound Data @ 45 / 130		
Sound Power (dBA):	68 Avg	73 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-01	
Mechanical		
Displacement (in^3/Rev):	3.49	
Displacement (ft^3/Hr):		
Overall Length (in):	9.30	
Overall Width (in):	9.30	
Overall Height (in):	16.90	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

Mounting Height (in):	17.70
Suction Size (in),Type:	1 1 / 4 Rotalock
Discharge Size (in),Type:	1 Rotalock
Initial Oil Charge (oz):	42
Oil Recharge (oz):	36
Oil Type:	3MA
Net Weight (lbs):	77.2
Internal Free Volume (in^3):	173.0

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

Electrical

LRA High* (Amps):	178
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	48
Max Operating Current (Amps):	37.80
RLA, MCC/1.4(use for contactor selection)(Amps):	34.3
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	30.8
RPM:	3500
Box IP :	21
UL File No:	SA2337-20031217
UL File Date:	2014-03-21

*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	

Alternate Applications

Refrigerant	Voltage	Phase	Frequency	Application
No data available in table				

Service Parts

Service Parts				
Reference	Component	Quantity	Description	Comment
99	527-0116-00	1	SPACER-MOUNTING ASSM	
99	529-0060-24	1	POWER CABLE-MOLDED PLUG	
99	914-0036-03	1	CAP START KIT	
99	914-0037-38	1	RUN CAP KIT	
99	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
99	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
99	940-0001-79	1	RELAY-POTENTIAL KIT	
99	998-0034-02	1	SERV ADAPTOR KIT 7/8 STUB	SWEAT TO ROTALOCK ADAPTER KIT SUCTION
99	998-0034-08	1	ADPTR 11/4-12 TO 7/8 ID	ROTALOCK TO SWEAT ADAPTER KIT SUCTION
99	998-0034-15	1	SERV ADAPTOR KIT 1/2 STUB	SWEAT TO ROTALOCK ADAPTER KIT DISCHARGE

Accessories

Accessories		
Category	Part Number	Description
Motor Protection	543-0067-00	Comfort Alert (Fixed Speed Geothermal)
Motor Protection	543-0012-00	Comfort Alert (Fixed Speed Heat Pump)
Motor Protection	543-0032-00	Comfort Alert (Fixed Speed L Terminal)
Motor Protection	543-0010-01	Comfort Alert (Fixed Speed Two Wire)
Motor Protection	543-0069-01	Comfort Alert (Two Stage Geothermal)

Category	Part Number	Description
Motor Protection	543-0033-02	Comfort Alert (Two Stage UT with power savings)
Motor Protection	543-0033-01	Comfort Alert (Two Stage UT)
Motor Protection	543-0038-02	Commercial Comfort Alert (Single Stage)
Motor Protection	543-0071-00	Commercial Comfort Alert (Two Stage Modified)
Motor Protection	543-0038-01	Commercial Comfort Alert (Two Stage)

Electrical Components

Electrical Components	
Stator Part No: 546-5022-08 Usage Description: Stator Resistance: +/-7% Start Wdg: 0.97 Run Wdg: 0.37 Part No: 014-0061-27 Low MFD: 88.0 Type:Start Capacitor High MFD: 106.0 Usage Description: Volts: 330	Potential Part No: 040-0166-37 Usage Description: Potential Relay <u>Vendor Part Number</u> RVA2AE6D-946 <u>Vendor Name</u> 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

Nomenclature

ZP61K5E-PFV
Family Series Z: Scroll Application Range P: A/C - R-410A/B Capacity 61K: 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
No data available in table				
Nomenclature				
ZP61K5E-PFV				

Bill-of-Materials

ZP61K5E-PFV - BILL OF MATERIALS	
<u>130 - Common U.S. OEM Bill Of Materials</u>	
Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Molded Plug
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-1000-00_015.pdf
<u>160 - Common U.S. OEM Bill Of Materials</u>	

Suction Connection	Rotalock
Suction Size	1 1/4"
Discharge Connection	Rotalock
Discharge Size	1"
Electrical Connection	Molded Plug
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-1042-00.pdf

491 - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Molded Plug
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	Yes
Module Voltage	
Reference Drawing	497-1318-00_003.pdf

498 - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"

Electrical Connection	Molded Plug
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	Yes
Module Voltage	
Reference Drawing	497-1318-00_003.pdf

499 - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Molded Plug
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	Yes
Module Voltage	
Reference Drawing	497-1318-00_003.pdf

4U1 - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	

Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-1789-00_010.pdf

800 - Common U.S. Service Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Molded Plug
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-1000-00_015.pdf

803 - Common U.S. Service Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Molded Plug
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-1000-00_015.pdf

830 - Common U.S. Service Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Molded Plug
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-1000-00_015.pdf

1. ALL TOLERANCES ± 1.50 [0.060]
UNLESS OTHERWISE SPECIFIED.
2. THE SUCTION TUBE, DISCHARGE TUBE,
AND CIRCLE FENCE RADIAL DIMENSIONS
ARE TO BE GAUGED FROM THE CENTER OF
THE MOUNTING HOLE PATTERN.
3. TUBE ENDS MUST BE PLUGGED.
4. MOUNTING KIT:

4X (246.0) [(9.69)] MAX

4X 235.5 [(9.27)] NOM

4X 190.5 [(7.50)]

4X Ø 18.35 - 19.50
[.722 - .768]

108.6 - 114.6
[4.28 - 4.51]

112.4 - 118.4
[4.43 - 4.66]

102.0 - 108.0
[4.02 - 4.25]

14° ± 2°

45° ± 4°

94° ± 5°

Ø 12.78-12.95

A-A

