

ZR36K3-PFV

HCFC, R-22, 60 Hz, 1 - Phase, 208/230 V

Air Conditioning

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

Summary

Performance		
Evaporator Temp. (°F)	45.00	45
Condensing Temp. (°F)	130.00	100
Return Gas Temp. (°F)	65.00	65
Liquid Temp. (°F)	115.00	85
Capacity (BTU/hr)	36900	43400
Power (W):	3290	2260
Current (Amps):	14.9	10.5
EER(BTU/Wh):	11.2	19.2
Mass Flow (lbs/hr):	540	560
Sound Data @		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2004-10-12	
Mechanical		
Displacement (in^3/Rev):	3.02	
Displacement (ft^3/Hr):		
Overall Length (in):	9.70	
Overall Width (in):	9.70	
Overall Height (in):	15.20	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	
Mounting Height (in):	16.00	

Suction Size (in),Type:	3 / 4 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	42
Oil Recharge (oz):	38
Oil Type:	MIN
Net Weight (lbs):	64.0
Internal Free Volume (in^3):	161.0

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

Electrical	
LRA High* (Amps):	95
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	25.8
Max Operating Current (Amps):	19.00
RLA, MCC/1.4(use for contactor selection)(Amps):	18.4
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	16.5
RPM:	3500
Box IP :	21
UL File No:	SA2337-19940614
UL File Date:	1994-06-14

*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	014-0054-40	50.0	0.0	370	
Run Capacitor	014-0064-29	50.0	0.0	370	

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	914-0037-40	1	RUN CAP KIT	
99	918-0043-00	1	HEATER-CRANKCASE	240V 70W WRAP AROUND
99	918-0043-01	1	HEATER-CRANKCASE	480V 70W WRAP AROUND

Accessories

Accessories		
Category	Part Number	Description
Electrical Components	085-0160-00	3 Phase Voltage Monitor. For use with all Copeland 3 Phase Compressors. Consult model family nomenclature for electrical definition in the model number.
Crankcase Heaters	918-0043-07	Crankcase Heater Kit, 120V, 70W, Wrap Around, 48" Lead Length
Crankcase Heaters	918-0043-00	Crankcase Heater Kit, 240V, 70W, Wrap Around, 48" Lead Length
Crankcase Heaters	918-0043-01	Crankcase Heater Kit, 480V, 70W, Wrap Around, 48" Lead Length
Crankcase Heaters	918-0043-02	Crankcase Heater Kit, 575V, 70W, Wrap Around, 48" Lead Length
Crankcase Heaters	018-0096-01	Crankcase Heater, 120V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0096-01	Crankcase Heater, 120V, 40W, 21.75" Lead Length
Crankcase Heaters	018-0095-07	Crankcase Heater, 120V, 70W, 48" Lead Length

Category	Part Number	Description
Crankcase Heaters	018-0095-07	Crankcase Heater, 120V, 70W, 48" Lead Length
Crankcase Heaters	018-0096-00	Crankcase Heater, 240V, 40W, 21.75" Lead Length

Electrical Components

Electrical Components	
Stator Part No: 546-5079-09 Usage Description: Stator Resistance: +/-7% Start Wdg: 1.39 Run Wdg: 0.65	Run Capacitor Part No: 014-0054-40 Low MFD: 50.0 Type:Run Capacitor High MFD: 0.0 Usage Description: Run Capacitor Volts: 370
Run Capacitor Part No: 014-0064-29 Low MFD: 50.0 Type:Run Capacitor High MFD: 0.0 Usage Description: Run Capacitor Volts: 370	

Nomenclature

ZR36K3-PFV
Family Series Z: Scroll Application Range R: A/C - R-22/407C/134a Capacity 36K: Capacity Multiplier-1000 Oil Type : --

Miscellaneous

Alternate Application				
Refrigerant	Freq	Phase	Voltage	Application
No data available in table				
Nomenclature				
ZR36K3-PFV				

Bill-of-Materials

ZR36K3-PFV - BILL OF MATERIALS	
<u>130 - Common U.S. OEM Bill Of Materials</u>	
Suction Connection	Stub
Suction Size	3/4"
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	
<u>160 - Common U.S. OEM Bill Of Materials</u>	
Suction Connection	Stub
Suction Size	3/4"
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

230 - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
Suction Size	3/4"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Flag Terminal
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-2546-01_058.pdf

260 - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
Suction Size	3/4"
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

806 - Common U.S. Service Bill Of Materials

Suction Connection	Stub
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Suction Size	3/4"
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Discharge Connection	Stub
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Discharge Size	1/2"
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Electrical Connection

Mounting Assembly	Not Available
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Sight Glass

Crankcase Heater

Schrader Valve

Tandem Ready

Module Voltage

Reference Drawing

830 - Common U.S. Service Bill Of Materials

Suction Connection	Stub
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Suction Size	3/4"
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Discharge Connection	Stub
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Discharge Size	1/2"
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Electrical Connection	Molded Plug
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Mounting Assembly	Available
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Sight Glass

Crankcase Heater

Schrader Valve

Tandem Ready

Module Voltage

Reference Drawing

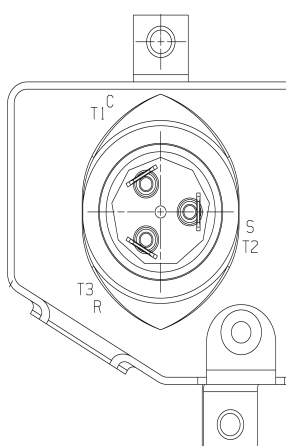
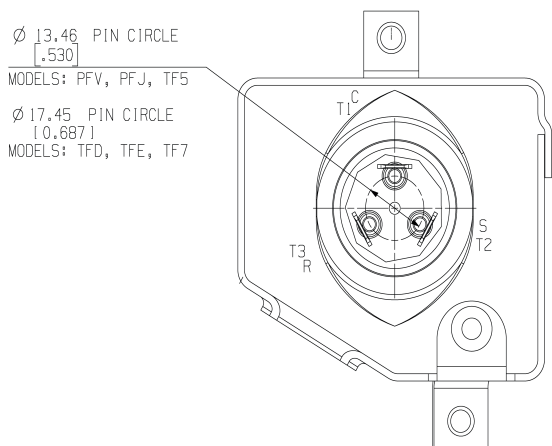
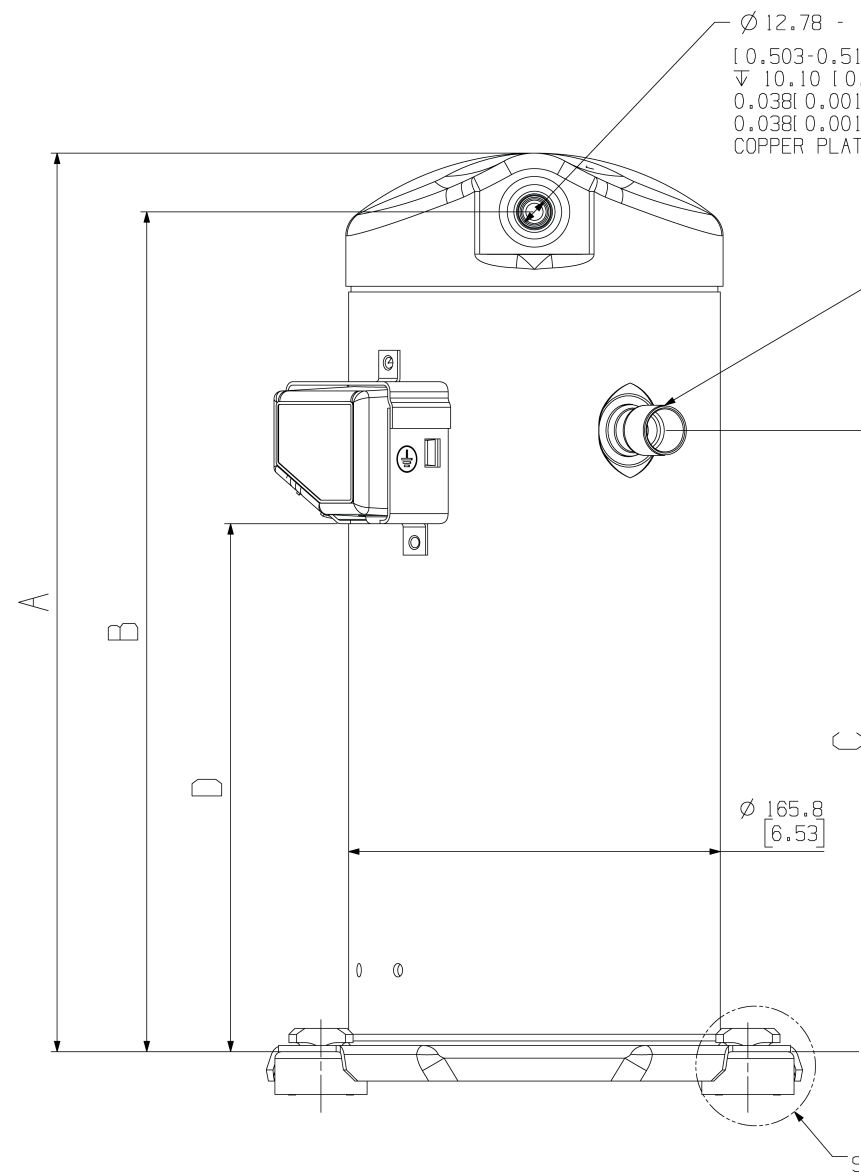
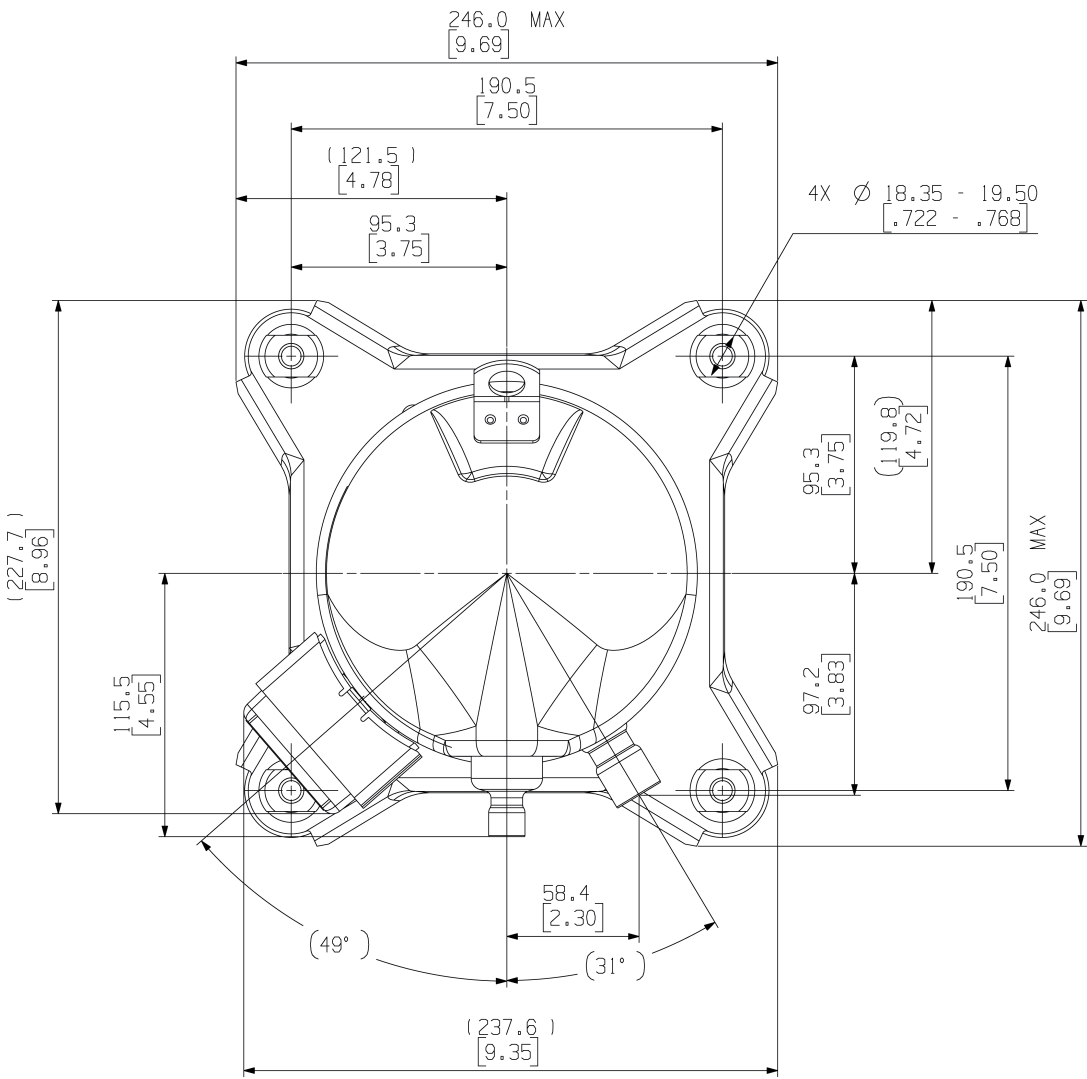
922 - Common U.S. Service Bill Of Materials

Suction Connection	Stub
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Suction Size	3/4"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Flag Terminal
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-2546-01_058.pdf

930 - Common U.S. Service Bill Of Materials

Suction Connection	Stub
Suction Size	3/4"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Flag Terminal
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	



SPECIFICATIONS

ES NO. DESCRIPTION

ES92-155 CONVERSION-METRIC

NOTES:

1 ALL TOLERANCES ± 1.5 [0.06] UNLESS OTHERWISE SPECIFIED.

DUE TO ACCUMULATED ASSEMBLY TOLERANCES THE LISTED COMPONENTS MAY VARY FROM THE MOUNTING HOLES AS SHOWN BELOW:

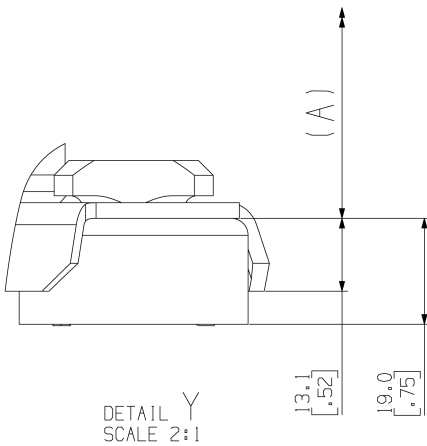
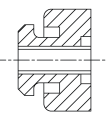
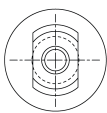
ALL FITTINGS : ± 3.0 [0.12]

2 MOUNTING KIT.

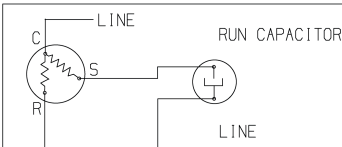
3. TUBE ENDS MUST BE PLUGGED.

2

GROMMET DUROMETER	4 FOOT KIT
35-45	527-0116-00



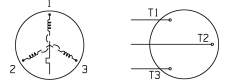
COMPRESSOR WIRING DIAGRAM SINGLE PHASE MOTOR WITH INTERNAL PROTECTION



USE COPPER CONDUCTORS ONLY. USE THIS EQUIPMENT ON A GROUNDING SYSTEM ONLY. USE MINIMUM 75° C WIRE FOR AMPACITY DETERMINATION. INTERNAL MOTOR PROTECTION ALLOW THE TIME FOR RESET. OVERCURRENT PROTECTION DEVICE RATING AND TYPE MUST BE IN ACCORDANCE WITH REGULATORY AGENCY AND PRODUCT APPROVALS-SEE SYSTEM NAMEPLATE.

COMPRESSOR WIRING DIAGRAM THREE PHASE MOTOR WITH INTERNAL PROTECTION

USE COPPER CONDUCTORS ONLY. USE THIS ON A GROUNDING SYSTEM ONLY. USE MINIMUM 75° C WIRE FOR AMPACITY DETERMINATION. INTERNAL MOTOR PROTECTION- DETERMINATION. INTERNAL MOTOR PROTECTION- ALLOW TIME FOR RESET. PRIMARY SINGLE PHASE FAILURE PROTECTION IS PROVIDED. CRANKCASE HEATER, WHEN APPLIED, MUST BE CONNECTED ONLY TO ITS RATED VOLTAGE. OVERCURRENT PROTECTION DEVICE RATING AND TYPE MUST BE IN ACCORDANCE WITH REGULATORY AGENCY AND PRODUCT APPROVALS - SEE SYSTEM NAMEPLATE. TO CORRECT IMPROPER MOTOR ROTATION, SWITCH ANY TWO SUPPLY LINES.



MOTOR WINDING CONNECTION

ECN308152	58	REMOVED ZR30K3E-PFV/TF5,ZR22K3/K3E-PFV	07-13-18	SZ	ZH	AW
ECN306209	57	REMOVED ZR30K3/K3E-TFD, TFE	11-09-17	SPC	PBM	JAS
ECN301014	56	ADD OPTIONAL VIEW	02-08-17	AZ	LG	AW
ECN008250	55	ADDED MODEL ZB19/21/26	03-24-14	LG	LB	VC
ECN005734	54	REMOVED ZR34KTE-TFD MODEL	01-17-14	EL	LG	WS
ECN007492	53	ADDED ZR36KCE-PFV MODEL	01-13-14	EL	LG	WS
ECN007793	52	REDRAWN WITH NX & ADDED ZR42K3-TF7	01-09-14	EL	LG	WS
32-0993-029	0	RELEASED	03-24-93	RB		
ENG NOTICE NO.	REV.NO.	REVISIONS	DATE	BY	CHKD	APPR



INTERPRET PER ASME Y14.5M-1994 AND EMERSON CLIMATE TECHNOLOGIES, INC. DESIGN STANDARDS DS2002 DO NOT SCALE DRAWING
CRITICAL PRODUCT CHARACTERISTICS
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE MILLIMETER OR (INCH)
1-PLACE
2-PLACE
ANGULAR
THIRD ANGLE PROJECTION

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MATERIAL SPECIFICATION		DRAWN BY EL	SUPERSEDES DWG. NO. / REV. NO. 497-2546-00/051	
N/A		DATE 01-09-14	SCALE 3:4	DATE FORMAT: MM-DD-YY
TITLE REF DWG-WELD COMP ASSM		DRAWING NUMBER 497-2546-00	SHEET 1 OF 1 5	