

ZP61KCE-TFD

HFC, R-410A, 60 Hz, 3 - Phase, 460 V , [Also Available with Variable Frequency Drives](#)

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)	61500	76000
Power (W):	5700	4010
Current (Amps):	8.3	6.3
EER(BTU/Wh):	10.8	19
Mass Flow (lbs/hr):	910	945
Sound Data @		
Sound Power (dBA):	74 Avg	79 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2007-01-05	
Mechanical		
Displacement (in^3/Rev):	3.54	
Displacement (ft^3/Hr):		
Overall Length (in):	9.70	
Overall Width (in):	9.90	
Overall Height (in):	17.40	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	
Mounting Height (in):	18.20	

Suction Size (in),Type:	1 1 / 4 Rotalock
Discharge Size (in),Type:	1 Rotalock
Initial Oil Charge (oz):	56
Oil Recharge (oz):	52
Oil Type:	3MA
Net Weight (lbs):	88.8
Internal Free Volume (in^3):	274.0

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

Electrical	
LRA High* (Amps):	62
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	15.2
Max Operating Current (Amps):	11.80
RLA, MCC/1.4(use for contactor selection)(Amps):	10.9
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	9.7
RPM:	3500
Box IP :	21
UL File No:	SA2337-19930726
UL File Date:	1993-07-26

*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
No data available in table					

Alternate Applications				
Refrigerant	Voltage	Phase	Frequency	Application
R-410A HFC	380/420	3	50	Air Conditioning

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	918-0043-00	1	HEATER-CRANKCASE	240V 70W WRAP AROUND
99	918-0043-01	1	HEATER-CRANKCASE	480V 70W WRAP AROUND
99	921-0235-00	1	CONNECTOR BLOCK KIT - SCROLL	
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
99	998-0034-18	1	ADAPTER 1-14 TO 1/2 ID	ROTALOCK TO SWEAT ADAPTER KIT DISCHARGE
99	998-0510-90	1	VLV KIT 7/8"SWT / 11/4-12UNC	SUCTION ROTALOCK

Accessories

Accessories		
Category	Part Number	Description
(1) Variable Frequency Drive	EVH-322012-R21BEN	Copeland EVH VFD , 4 HP, 230 VAC, 3Ø, 12A, With DC link Choke & Add on EMI filter, Removeable LCD Display, IP21, BACnet/Modbus
(1) Variable Frequency Drive	EVH-322012-R54BEN	Copeland EVH VFD , 4 HP, 230 VAC, 3Ø, 12A, With DC link Choke & Add on EMI filter, Removeable LCD Display, IP54, BACnet/Modbus
(1) Variable Frequency Drive	EVH-322012-R21BDN	Copeland EVH VFD , 4 HP, 230 VAC, 3Ø, 12A, With DC link Choke (Standard EVH), Removeable LCD Display, IP21, BACnet/Modbus
(1) Variable Frequency Drive	EVH-322012-R54BDN	Copeland EVH VFD , 4.0 HP, 230 VAC, 3Ø, 12A, With DC link Choke (Standard EVH), Removeable LCD Display, IP54, BACnet/Modbus

Category	Part Number	Description
(1) Variable Frequency Drive	EVH-344012-R21BEN	Copeland EVH VFD , 7.5 HP, 400 VAC, 3Ø, 12A, With DC link Choke & Add on EMI filter, Removeable LCD Display, IP21, BACnet/Modbus
(1) Variable Frequency Drive	EVH-344012-R54BEN	Copeland EVH VFD , 7.5 HP, 400 VAC, 3Ø, 12A, With DC link Choke & Add on EMI filter, Removeable LCD Display, IP54, BACnet/Modbus
(1) Variable Frequency Drive	EVH-344012-R54BDN	Copeland EVH VFD , 7.5 HP, 400 VAC, 3Ø, 12A, With DC link Choke (Standard EVH), Removeable LCD Display, IP54, BACnet/Modbus
(1) Variable Frequency Drive	EVM-344012-N20MFN	Copeland EVM VFD , HP, VAC, 3Ø, 12A, IP20, Modbus RTU Only
(1) Variable Frequency Drive	EVM-344012-N20MNN	Copeland EVM VFD , HP, VAC, 3Ø, 12A, IP20, Modbus RTU Only
(1) Variable Frequency Drive	EVM-344012-E20ENN	Copeland EVM VFD , 7.5 HP, 400 VAC, 3Ø, 12A, No EMI filter, No Choke (Standard EVM), Seven Segment Embedded Display, IP20, Ethernet/BACnet/Modbus

Electrical Components

Electrical Components

Nomenclature

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Miscellaneous

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Bill-of-Materials

ZP61KCE-TFD - 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	497-2649-00_046.pdf

160 - Common U.S. OEM Bill Of Materials

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	497-2650-00_032.pdf

230 - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Terminal Block
Mounting Assembly	Available

Sight Glass
Crankcase Heater
Schrader Valve
Tandem Ready
Module Voltage
Reference Drawing 497-2618-00_054.pdf

250 - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Terminal Block
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-2618-00_054.pdf

265 - Common U.S. OEM Bill Of Materials

Suction Connection	Rotalock
Suction Size	1 1/4"
Discharge Connection	Rotalock
Discharge Size	1"
Electrical Connection	Terminal Block
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	

Module Voltage

Reference Drawing	497-2619-00_022.pdf
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420 - Common U.S. OEM Bill Of Materials

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

Crankcase Heater

Schrader Valve

Tandem Ready	Yes
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Module Voltage

Reference Drawing	497-2852-00_027.pdf
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421 - Common U.S. OEM Bill Of Materials

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

Crankcase Heater

Schrader Valve

Tandem Ready	Yes
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Module Voltage

Reference Drawing	497-2852-00_027.pdf
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422 - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
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Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Terminal Block
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	Yes
Module Voltage	
Reference Drawing	497-2852-00_027.pdf

42A - Common U.S. OEM Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Terminal Block
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	Yes
Module Voltage	
Reference Drawing	497-2852-00_027.pdf

430 - 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	Yes
Module Voltage	
Reference Drawing	497-2852-00_027.pdf

450 - 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	Yes
Module Voltage	
Reference Drawing	497-2852-00_027.pdf

457 - Common U.S. OEM Bill Of Materials

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

Tandem Ready	Yes
Module Voltage	
Reference Drawing	497-2852-00_027.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	497-0636-00_011.pdf

492 - 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	497-0636-00_011.pdf

496 - 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	Yes
Module Voltage	
Reference Drawing	497-2858-00_014.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	497-0636-00_011.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	Molded Plug
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-3177-00_002.pdf

4U2 - 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	Available
Tandem Ready	
Module Voltage	
Reference Drawing	497-3529-00_001.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	497-2649-00_046.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	497-2649-00_046.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	497-2649-00_046.pdf

899 - 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	Yes
Module Voltage	
Reference Drawing	497-0636-00_011.pdf

950 - Common U.S. Service Bill Of Materials

Suction Connection	Stub
Suction Size	7/8"
Discharge Connection	Stub
Discharge Size	1/2"
Electrical Connection	Terminal Block
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-2618-00_054.pdf

953 - Common U.S. Service 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	497-2852-00_027.pdf

965 - Common U.S. Service Bill Of Materials

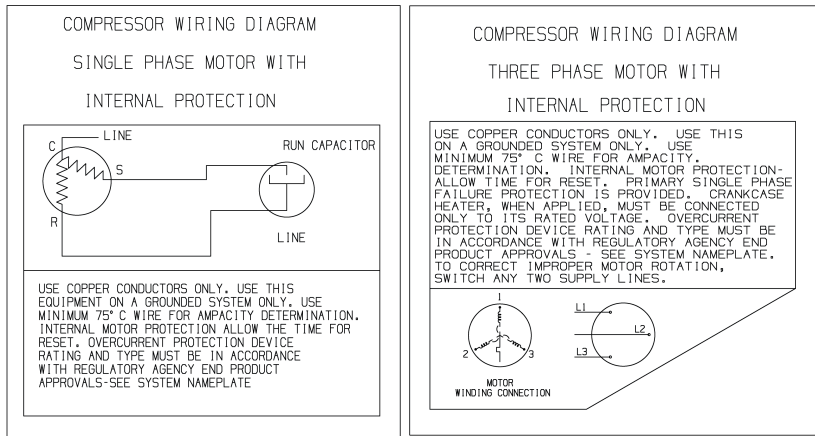
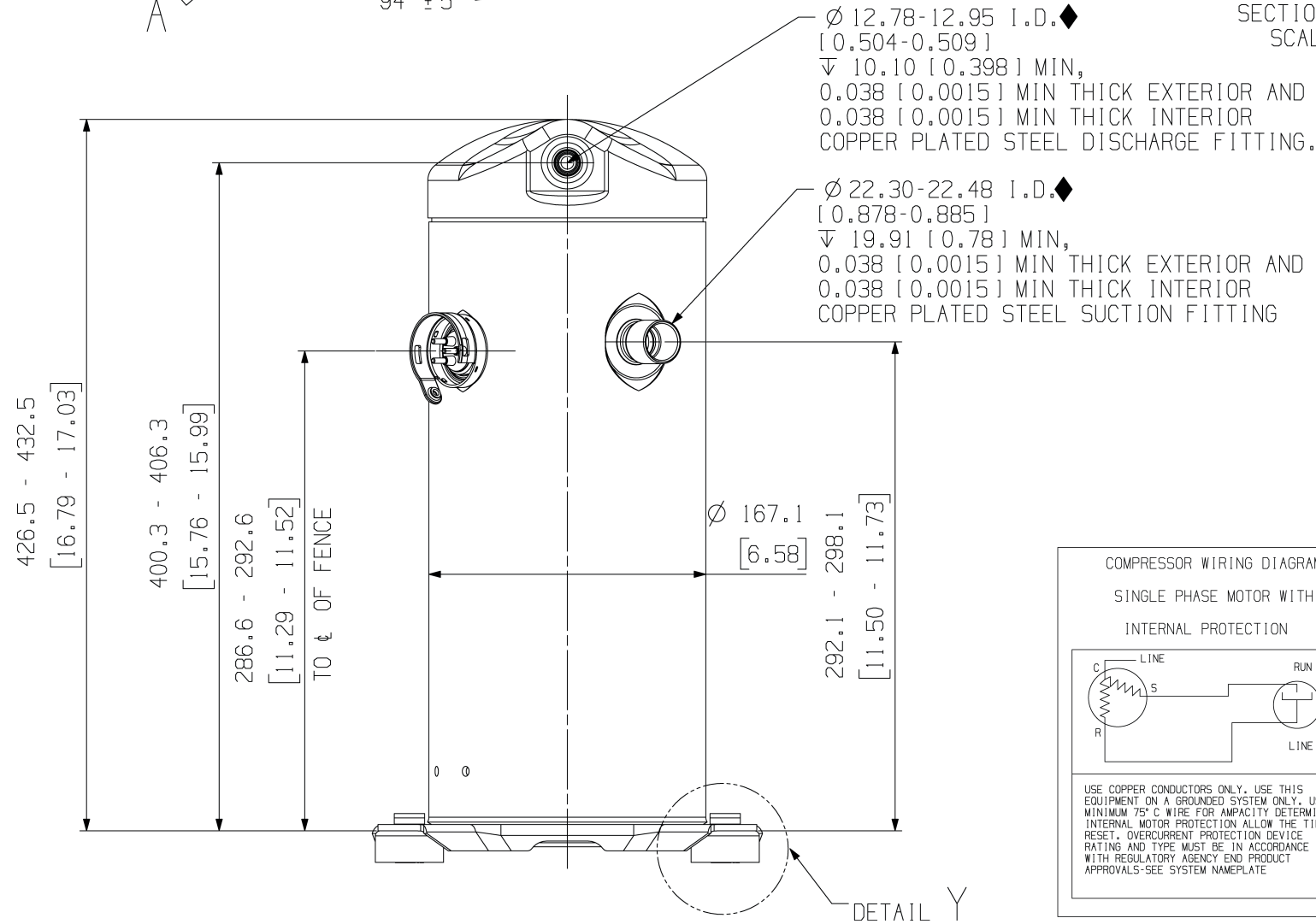
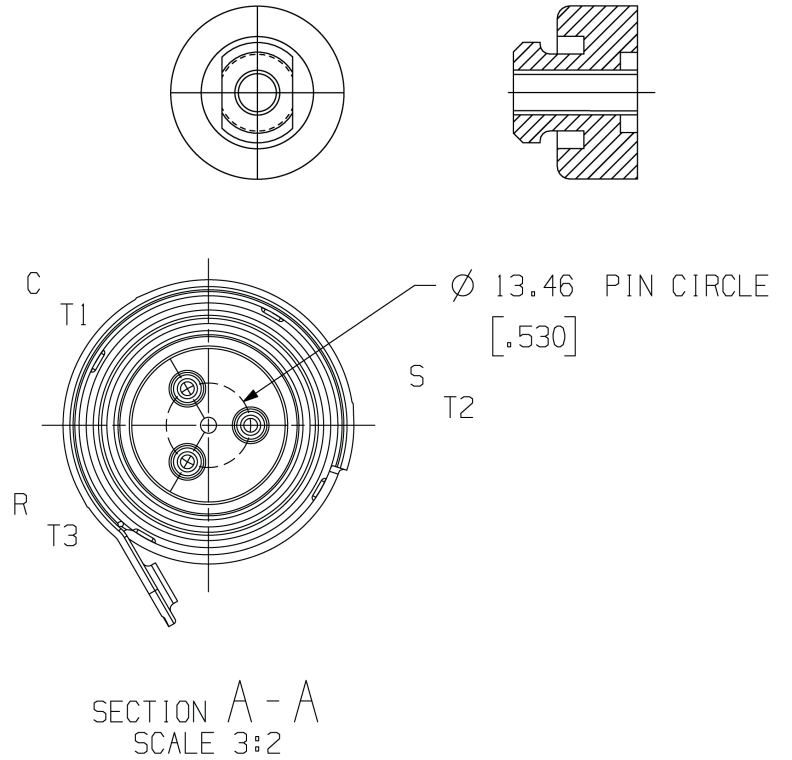
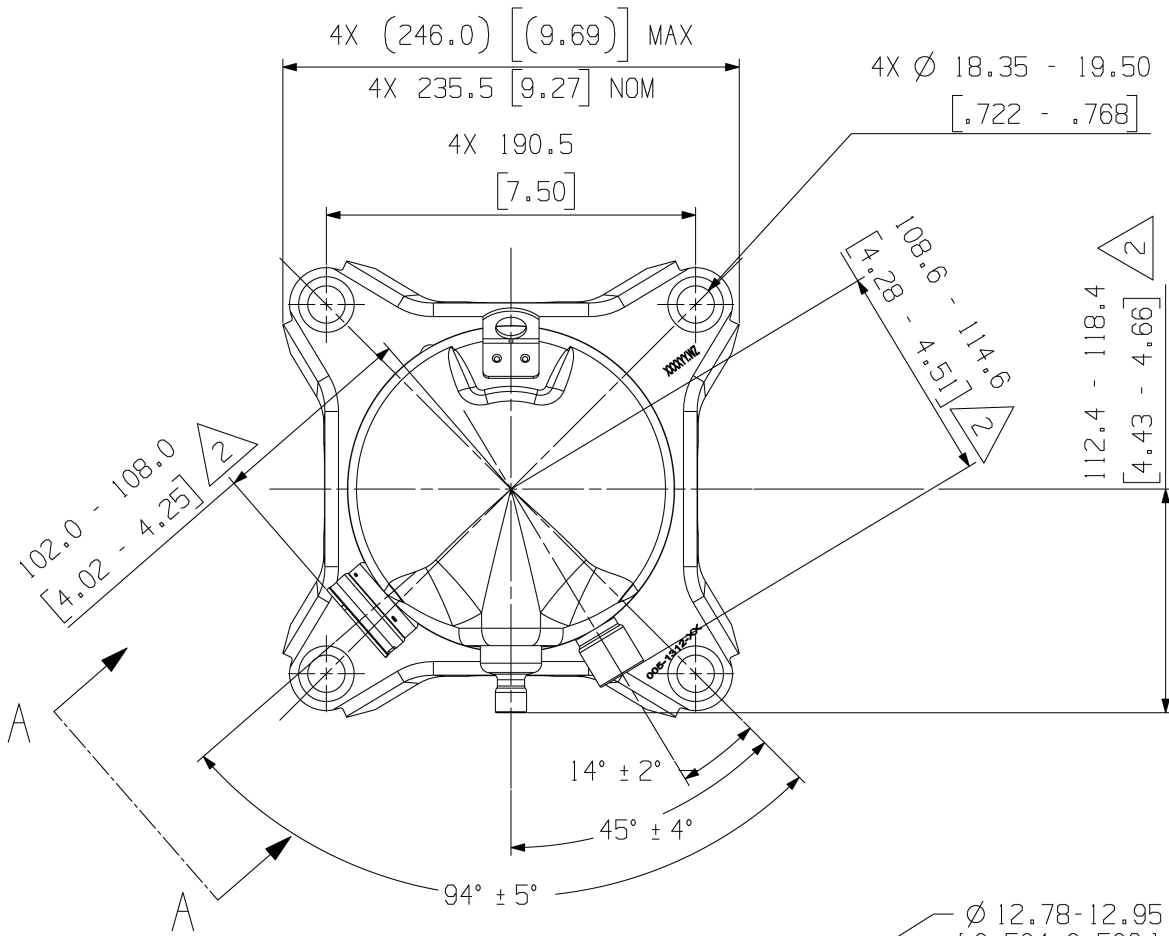
Suction Connection	Rotalock
Suction Size	1 1/4"
Discharge Connection	Rotalock
Discharge Size	1"
Electrical Connection	Terminal Block
Mounting Assembly	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-2619-00_022.pdf

MODEL NUMBER
YA54K1E -PFV/TF5/TFD/TFE/PFJ
YA57K1E -PFV/TF5/TFD/TFE
YA61K1E -PFV/TF5/TF7/TFD/TFE
YA34K2E -PFV
YA49K2E -PFV
YP54K1T -PFV/TF5/TFD/TFE
YP61K1T -PFV/TF5/TFE/TFD
ZP57K5E -PFV/TF5/TF7/TFD/TFE
ZP61K5E -PFV/TF5/TF7/TFD/TFE
ZP57LXE -PFV/TF5/TF7/TFD/TFE

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- NOTES:
- 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:

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



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			N/A		JM		497-1000-00 /		003	
			TITLE		DATE		SCALE		DATE FORMAT	
			REF DWG-WELD COMP ASSM		06-14-23		1:2		MM-DD-YY	
			DRAWING NUMBER				SHEET 1 OF 1		DWG	
			497-1000-00				4		SIZE	