

ZP39K5E-TFD

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

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)	39000	53000
Power (W):	3750	2450
Current (Amps):	5.2	3.8
EER(BTU/Wh):	10.4	21.7
Mass Flow (lbs/hr):	575	655
Sound Data @ 45 / 130		
Sound Power (dBA):	71 Avg	76 Max
Vibration mils(peak-peak):	2.0 Avg	3.0 Max
Record Date:	2017-03-01	
Mechanical		
Displacement (in^3/Rev):	2.25	
Displacement (ft^3/Hr):		
Overall Length (in):	9.70	
Overall Width (in):	9.70	
Overall Height (in):	16.50	
Mounting Length (in):	7.50	
Mounting Width (in):	7.50	

Mounting Height (in):	17.20
Suction Size (in),Type:	7 / 8 Stub
Discharge Size (in),Type:	1 / 2 Stub
Initial Oil Charge (oz):	42
Oil Recharge (oz):	36
Oil Type:	3MA
Net Weight (lbs):	67.0
Internal Free Volume (in^3):	209.5

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

Electrical	
LRA High* (Amps):	41
LRA Low*(Amps):	
LRA Half Winding (Amps):	
MCC (Amps):	9.5
Max Operating Current (Amps):	8.00
RLA, MCC/1.4(use for contactor selection)(Amps):	6.8
RLA, MCC/1.56(use for breaker & wire size selection)(Amps):	6.1
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
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	918-0041-00	1	HEATER-CRANKCASE	240V 40W WRAP AROUND
99	918-0041-01	1	HEATER-CRANKCASE	120V 40W WRAP AROUND
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	ROOTALOCK 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	ROOTALOCK TO SWEAT ADAPTER KIT DISCHARGE
99	998-0510-90	1	VLV KIT 7/8"SWT / 11/4-12UNC	SUCTION ROTALOCK
99	998-0510-98	1	VLV KIT 1/2"SWT/1-14UNC	DISCHARGE ROTALOCK

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)

Category	Part Number	Description
Motor Protection	543-0069-01	Comfort Alert (Two Stage Geothermal)
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

Nomenclature

ZP39K5E-TFD
Family Series Z: Scroll Application Range P: A/C - R-410A/B Capacity 39K: Capacity Multiplier-1000 Oil Type E: Polyol Ester Motor Type T: 3 Phase Motor Protection F: Internal Inherent Protection Voltage D: 60Hz (460-3) 50Hz (380/420-3)

Miscellaneous

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Alternate Application				
Refrigerant	Freq	Phase	Voltage	Application
HFC R-410A	50	3 Ø	380/420 V	R1 AC
Nomenclature				
ZP39K5E-TFD				

Bill-of-Materials

ZP39K5E-TFD - BILL OF MATERIALS

130 - 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	Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-2835-00 041.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	497-2841-00.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	
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-0665-00_017.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	497-0665-00_017.pdf
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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	497-0665-00_017.pdf
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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	Available
Tandem Ready	
Module Voltage	

Reference Drawing	497-1788-00_017.pdf
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4U8 - 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	Available
Tandem Ready	
Module Voltage	
Reference Drawing	497-1788-00_017.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	497-2835-00_041.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	497-2835-00_041.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	497-2835-00_041.pdf

898 - 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	497-0665-00_017.pdf
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899 - Common U.S. Service 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	Molded Plug
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Mounting Assembly	Available
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Sight Glass

Crankcase Heater

Schrader Valve

Tandem Ready	Yes
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Module Voltage

Reference Drawing	497-0665-00_017.pdf
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8U5 - Common U.S. Service 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	Molded Plug
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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	497-1788-00_017.pdf
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C98 - 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	
Mounting Assembly	Not Available
Sight Glass	
Crankcase Heater	
Schrader Valve	
Tandem Ready	
Module Voltage	
Reference Drawing	497-0665-00_017.pdf

MODEL NUMBER
ZP34/36/38/39/42/44/49/51/54K5E-PFV
ZP34/36/38/39/42/44/49/51/54K5E-TF5
ZP34/36/38/39/42/44/49/51/54K5E-TFD
ZP36/42/44/49/51/54K5E-PFJ
ZP34/36/38/39/42/44/49/51/54K5E-TFE
ZP34/39/42/44/49/51/54K5E-TF7
ZP36KHE-PFZ
ZP39KHE-PFZ
ZP44KSE-PFZ

MODEL NUMBER
ZP34LXE-TFD/TFE/TF5/TF7
ZP36LXE-PFJ
ZP39LXE-TFD/TF5/TFE/TF7
ZP42LXE-PFJ/TFD/TF5/TFE/TF7
ZP51LXE-PFJ/TFD/TF5/TFE/TF7

NOTES:

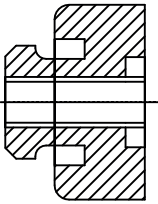
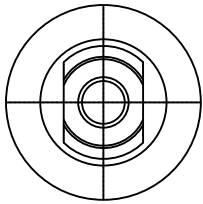
- 1

ALL TOLERANCES ± 1.50 [0.060] UNLESS OTHERWISE SPECIFIED.
- 2

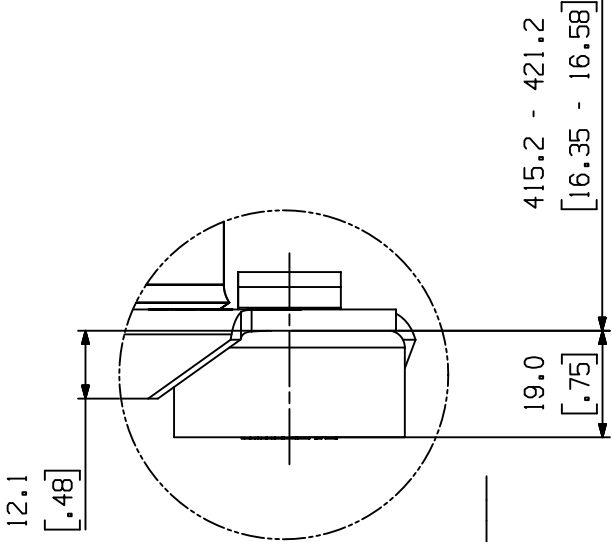
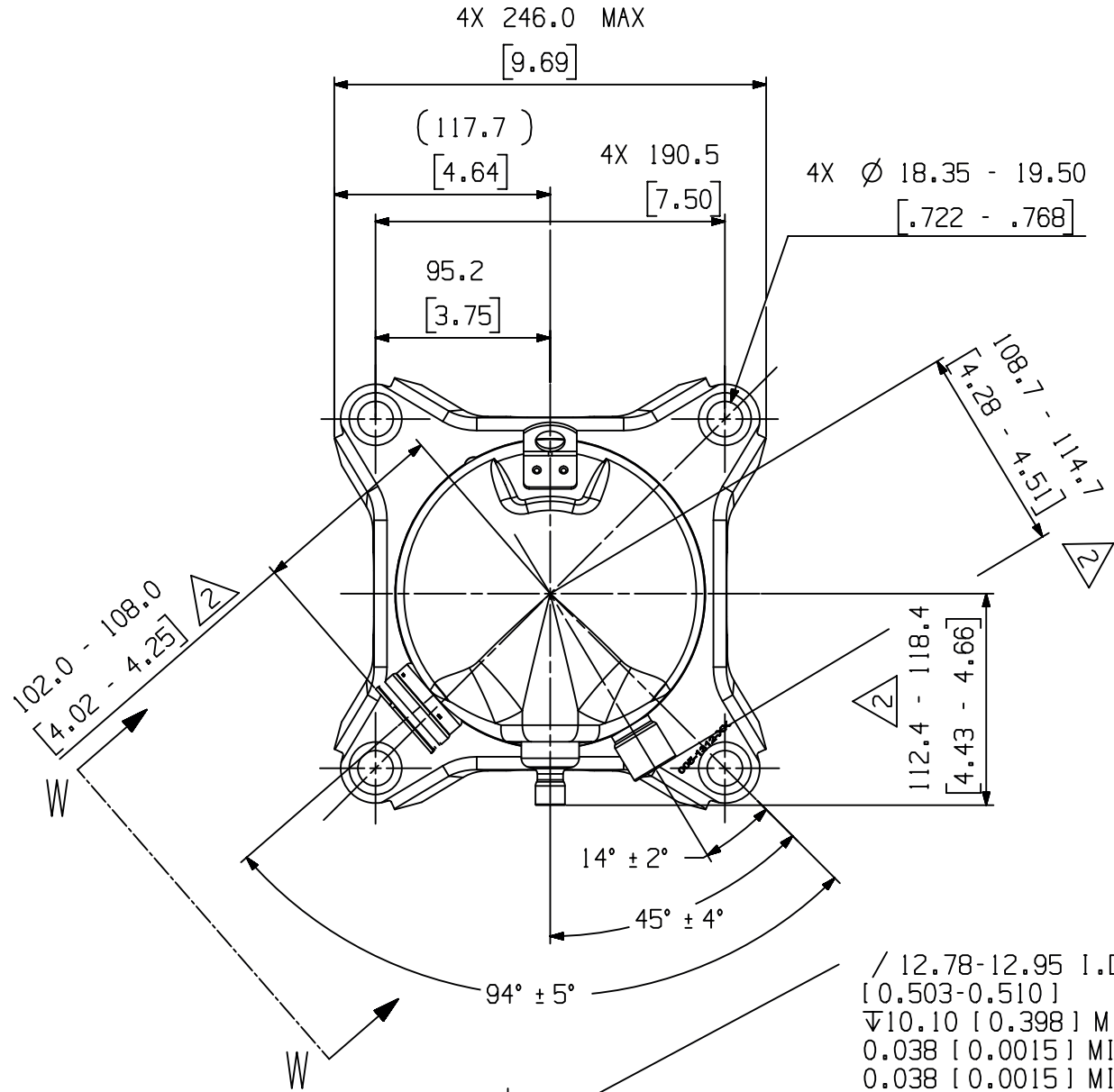
THE SUCTION TUBE, DISCHARGE TUBE, AND CIRCLE FENCE RADIAL DIMENSIONS ARE TO BE GAUGED FROM THE CENTER OF THE MOUNTING HOLE PATTERN.
- 3

TUBE ENDS MUST BE PLUGGED.
- 4

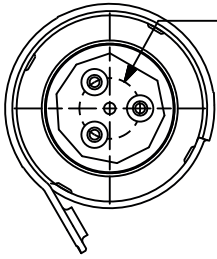
MOUNTING KIT:



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



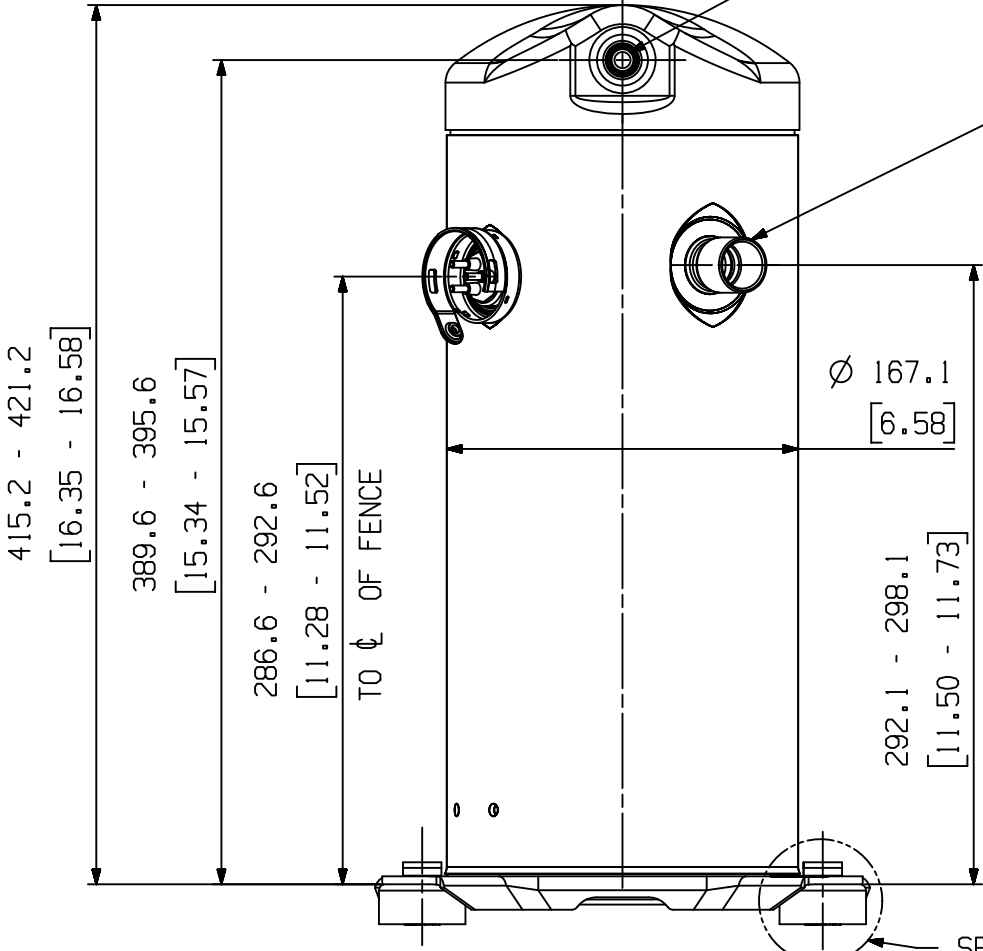
DETAIL Y
SCALE 3:2



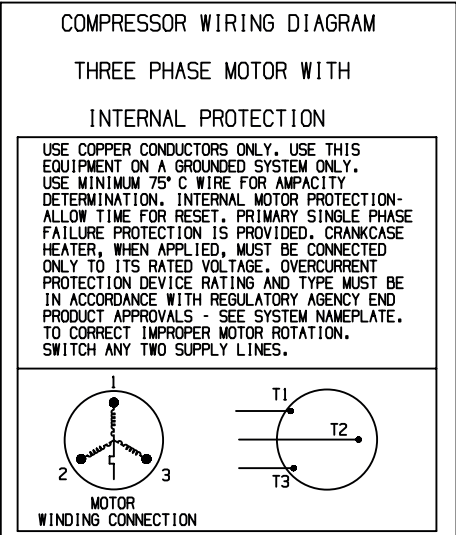
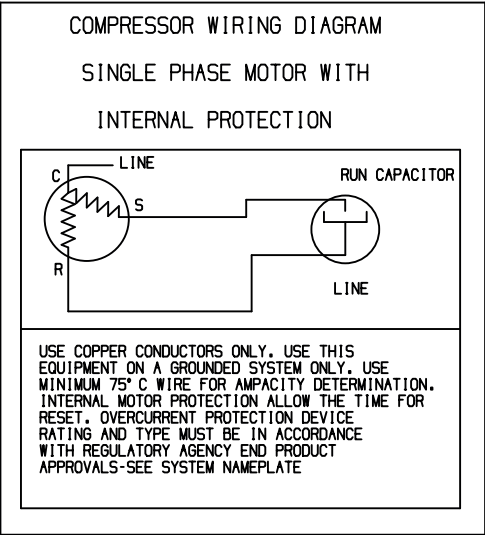
VIEW W - W
SCALE 1:1

12.78-12.95 I.D. [0.503-0.510]
10.10 [0.398] MIN,
0.038 [0.0015] MIN THICK EXTERIOR AND
0.038 [0.0015] MIN THICK INTERIOR
COPPER PLATED STEEL DISCHARGE FITTING.

22.30-22.48 I.D. [0.878-0.885]
19.9 [0.78] MIN,
0.038 [0.0015] MIN THICK EXTERIOR AND
0.038 [0.0015] MIN THICK INTERIOR
COPPER PLATED STEEL SUCTION FITTING



SEE DETAIL Y



INTERPRET PER ASME Y14.5M-1994 AND COPELAND DESIGN STANDARDS DS2002

DO NOT SCALE DRAWING

CRITICAL PRODUCT CHARACTERISTICS

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE MILLIMETER OR (INCH)

TOLERANCES:
1-PLACE ±
2-PLACE ±
ANGULAR ±

32-1103-065
ENG NOTICE NO.

0
REV.NO.

RELEASED
REVISIONS

05-10-04
DATE

LWM
BY

GD
CHKD

24
(63FR)

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MATERIAL SPECIFICATION
N/A

DRAWN BY
MAM

DATE
10-19-15

TITLE
REF DWG-WELD COMP ASSM

SUPERSEDES DWG NO / REV NO
497-2835-00 / 031

SCALE
1:2

DATE FORMAT:
MM-DD-YY

DRAWING NUMBER
497-2835-00

SHEET 1 OF 1
4
SIZ