

# PRODUCT INFORMATION PACKET



Model No: EM3731F  
Catalog No: EM3731F

PRO-E SERIES® Condenser Fan Motor, 3/4 HP, 1 Ph, 60 Hz, 208-230 V, 1075 RPM, 1 Speed, 48 Frame,  
ENCLOSED



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**Nameplate Specifications**

Output HP	<b>3/4 Hp</b>	Output KW	<b>0.56 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>208-230 V</b>
Current	<b>4.6-5.3 A</b>	Speed	<b>1075 rpm</b>
Service Factor	<b>1</b>	Phase	<b>1</b>
Duty	<b>Air Over</b>	Insulation Class	<b>F</b>
Frame	<b>48Y</b>	Enclosure	<b>Totally Enclosed</b>
Thermal Protection	<b>Automatic</b>	Ambient Temperature	<b>70 °C</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>N</b>	Number of Speeds	<b>1</b>

**Technical Specifications**

Electrical Type	<b>Permanent Split Capacitor</b>	Starting Method	<b>Across The Line</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Mounting	<b>Extended Studs</b>	Motor Orientation	<b>Any</b>
Drive End Bearing	<b>Ball</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Rolled Steel</b>	Shaft Type	<b>Flat</b>
Overall Length	<b>11.92 in</b>	Frame Length	<b>4.75 in</b>
Shaft Diameter	<b>0.500 in</b>	Shaft Extension	<b>6.0 in</b>
Connection Drawing	<b>614131-292</b>	Outline Drawing	<b>EM3731F-S01</b>

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GENERAL INFORMATION:

SHAFT RUNOUT: .001 [.03] T.I.R. PER INCH LENGTH OF EXTENSION

BEARINGS: BALL

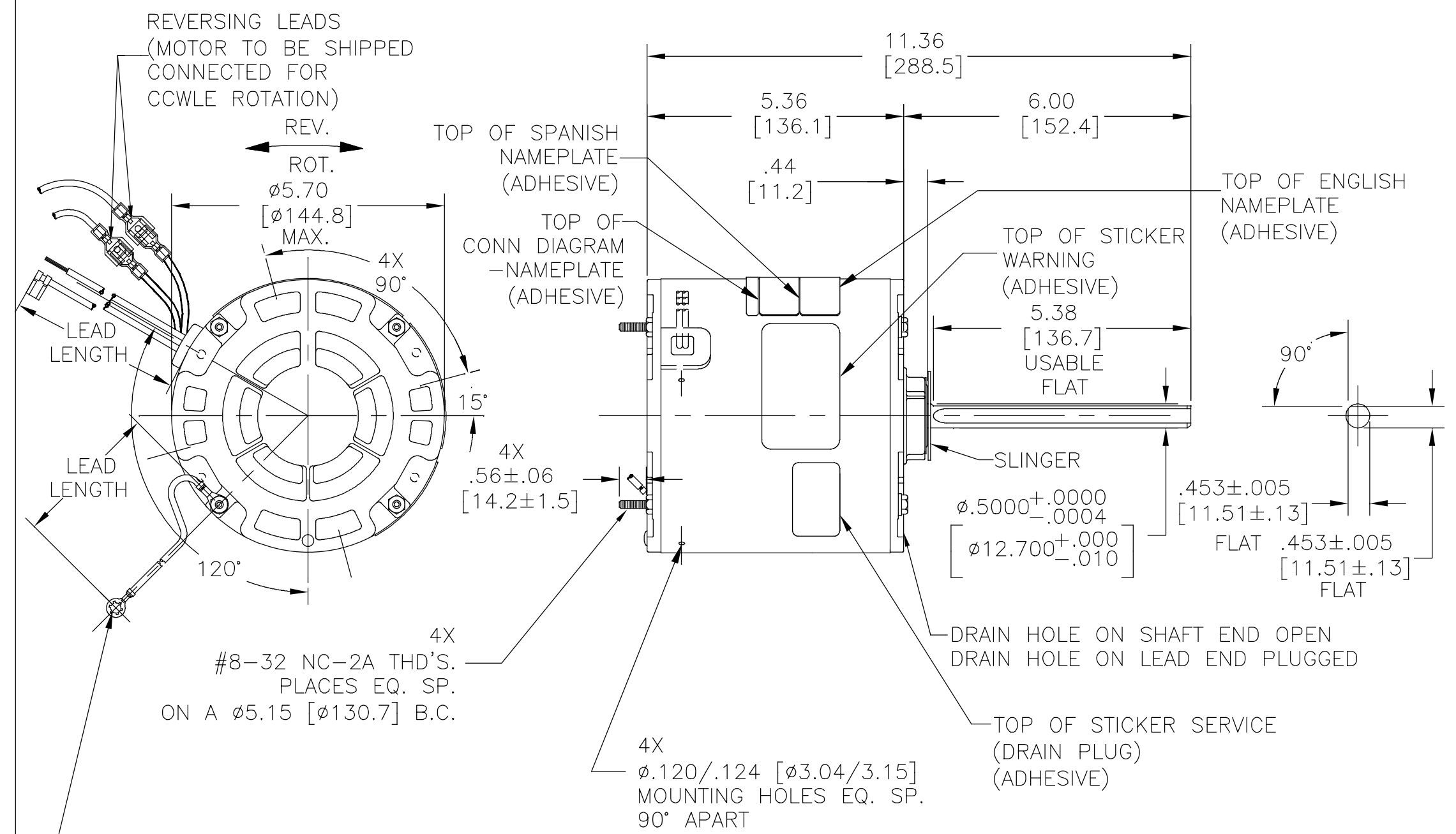
MOUNTING POSITION: ALL ANGLE

ELECTRICAL DATA:

OVERLOAD PROTECTOR: AUTOMATIC RESET (T.I. 7AM 036)

LEADS: NO. 18 GA., .03 [.8] THK.,XLP 125°C INSUL.

GROUND LEAD: NO. 18 GA., .03 [.8] THK. (GREEN) INSUL.



GROUND LEAD (TERMINAL AT MOTOR MUST NOT PROTRUDE BEYOND MOTOR O.D.)

- NOTES:
- 4X SCREWS 615982-001 & 4X HEX NUTS 7555A19H01 TO BE PUT IN A POLYBAG.
  - THE SYMBOL OF CTQ: ▲ (NO CTQ ON THIS DRAWING).
  - MEET THE REQUIREMENT OF RoHS & REACH, SEE EP000014\_5.1.

GREEN (GROUND)	12.0/13.0 [305/330]	#10 EYELET
PURPLE(REV)	4.0/6.0 [102/152]	.25[6.4] PER-INSUL. MALE TAB
PURPLE (REV)	4.0/6.0 [102/152]	.25[6.4] PER-INSUL. FEMALE SPADE
YELLOW (REV)	4.0/6.0 [102/152]	.25[6.4] PER-INSUL. MALE TAB
YELLOW (REV)	4.0/6.0 [102/152]	.25[6.4] PER-INSUL. FEMALE SPADE
BROWN/WHITE	35.0/37.0 [889/940]	.25 [6.4] FLAG
BROWN	35.0/37.0 [889/940]	.25 [6.4] FLAG
WHITE	35.0/37.0 [889/940]	.50 [12.7] SKIN
BLACK	35.0/37.0 [889/940]	.50 [12.7] SKIN
COLOR	LENGTH	TERMINAL OR STRIP LENGTH

REGAL-BELOIT CORPORATION (RBC) PROVIDES TECHNICAL ASSISTANCE TO OUR CUSTOMERS IN SEVERAL AREAS. SINCE RBC DOES NOT RECEIVE ALL DATA CONCERNING THE USE AND APPLICATION OF THE MOTOR, THE SUITABILITY OF THE MOTOR FOR THE APPLICATION MUST BE DETERMINED BY THE CUSTOMER.

DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.

MAIN FRAME - OLE	ENCLOSED
END FRAME - OLE	ENCLOSED
MAIN FRAME - LE	ENCLOSED
END FRAME - LE	ENCLOSED

CUSTOMER EconoMaster

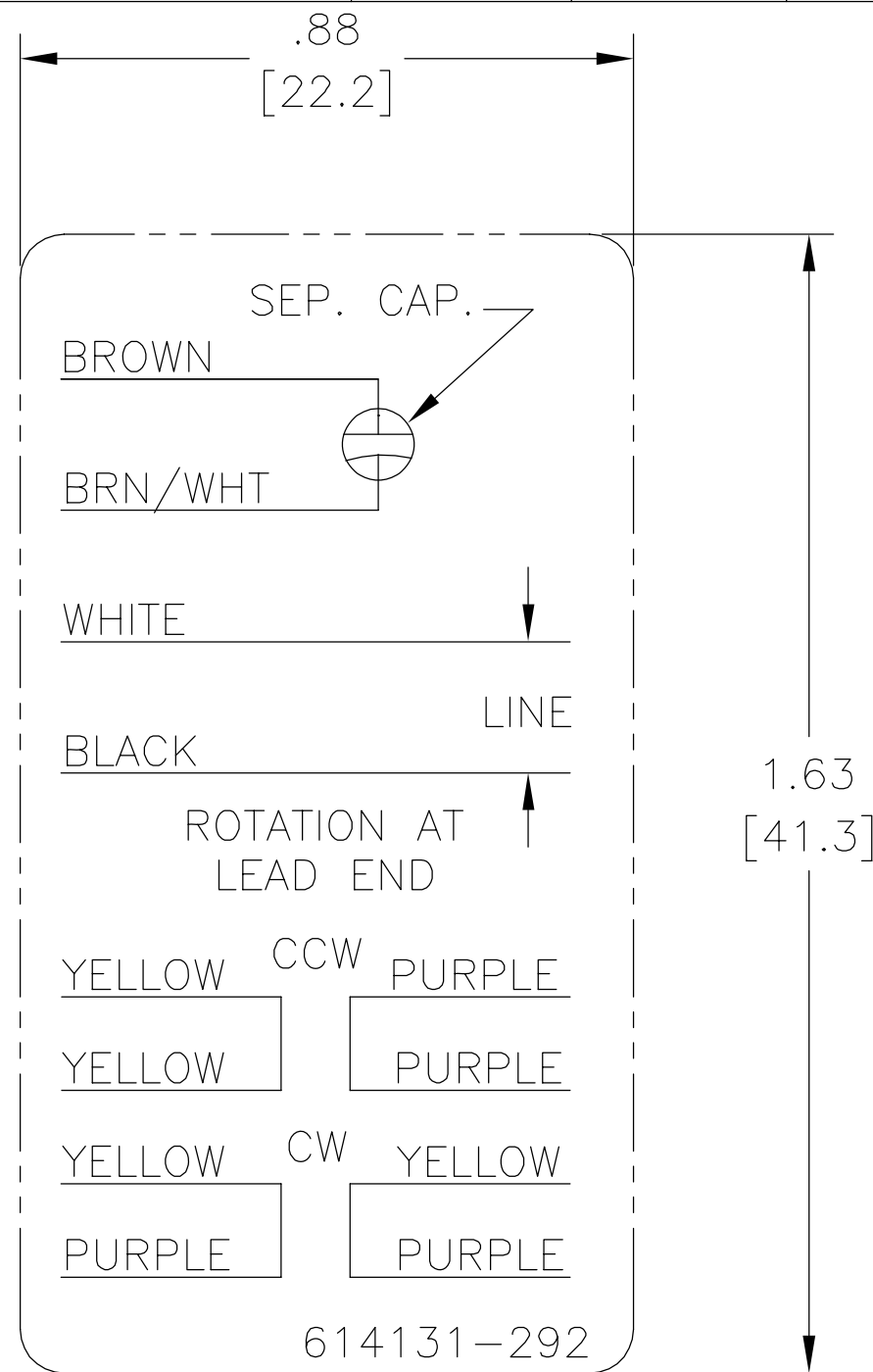
NAMEPLATE DATA:	EXTERNAL CONNECTION DIAGRAM
MODEL NO.: F48AF42A01 CUST. P/N: EM3731F HP: 3/4 ROT.: REVERSIBLE RPM: 1075 TYPE: UF FRAME: 48Y VOLTS: 208-230 PH: 1 AMPS: 4.6-5.3 HZ: 60 INS.: F AMB.: 70°C DUTY: AIR OVER CAP.: 10MFD/370V ENCL: ENCLOSED UL LOGO & FILE NO. CSA LOGO & FILE NO. THERMALLY PROTECTED TYPE T	<p>SEP. CAP. BROWN BRN/WHT WHITE BLACK LINE ROTATION AT LEAD END YELLOW CCW PURPLE YELLOW CW YELLOW PURPLE PURPLE</p> <p>614131-292</p>

PERFORMANCE CURVE NO.	TORQUE @1075 RPM (25°C)	APPROVED SAMPLE	UL COMPONENT FILE #	CCN #	CSA FILE #	CLASS #
C0001015	76.8 OZ. FT.	0603281A	E46412	PRGY2	LR43341	4211-01

DRAWING REVISION J	REVISION BY NANCY LIU	DATE 06-18-2020
ECO-0187955	APPROVED BY KEYUN.GONG	DATE 06-18-2020
ECO DESCRIPTION SEE ECO		
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DRAWN BY: CZ	Regal Beloit America, Inc.
DATE: 12-21-2012	
APPROVED BY: FJ	DESCRIPTION: MODEL-RFHP-48FR OUTLINE
DATE: 12-21-2012	MATERIAL: -
PROCESS/FINISH: -	SIZE DWG NO: C
THIRD ANGLE PROJECTION	SHEET 1

REV	ECO	REV BY	DATE	APPD	DATE
B	ECO-0022458	jrupert	09-19-2011	jrupert	09-19-2011



NOTES:

1. FOR USE WITH 614129 NAMEPLATE BLANK
2. — — — — — INDICATES DIMENSION LIMITS
3. DIE TO BE MADE FROM MASTER SUPPLIED BY A. O. SMITH CORPORATION
4. DIE MUST PRODUCE A LEGIBLE IMPRESSION.

GEOMETRIC CHARACTERISTICS & SYMBOLS

- ▭ FLATNESS
- STRAIGHTNESS
- ∠ ANGULARITY
- ⊥ PERPENDICULARITY (SQUARENESS)
- // PARALLELISM
- ROUNDNESS (CIRCULARITY)
- ⊘ CYLINDRICITY
- △ PROFILE OF ANY SURFACE
- ∩ PROFILE OF ANY LINE
- ↑ RUNOUT
- ⊕ TRUE POSITION
- ◎ CONCENTRICITY
- ≡ SYMMETRY

UNLESS OTHERWISE SPECIFIED  
DIM. TOLERANCES ARE AS FOLLOWS:

INCH	±.1	±.02	±.005	±.0005
mm	±0.5	±0.13	±0.013	

ANG. ±.50 DEG

REMOVE BURRS & BREAK SHARP EDGES:  
INCH .003-.015 mm 0.1-0.4

CORNER FILLETS TO:  
INCH .020 mm 0.5

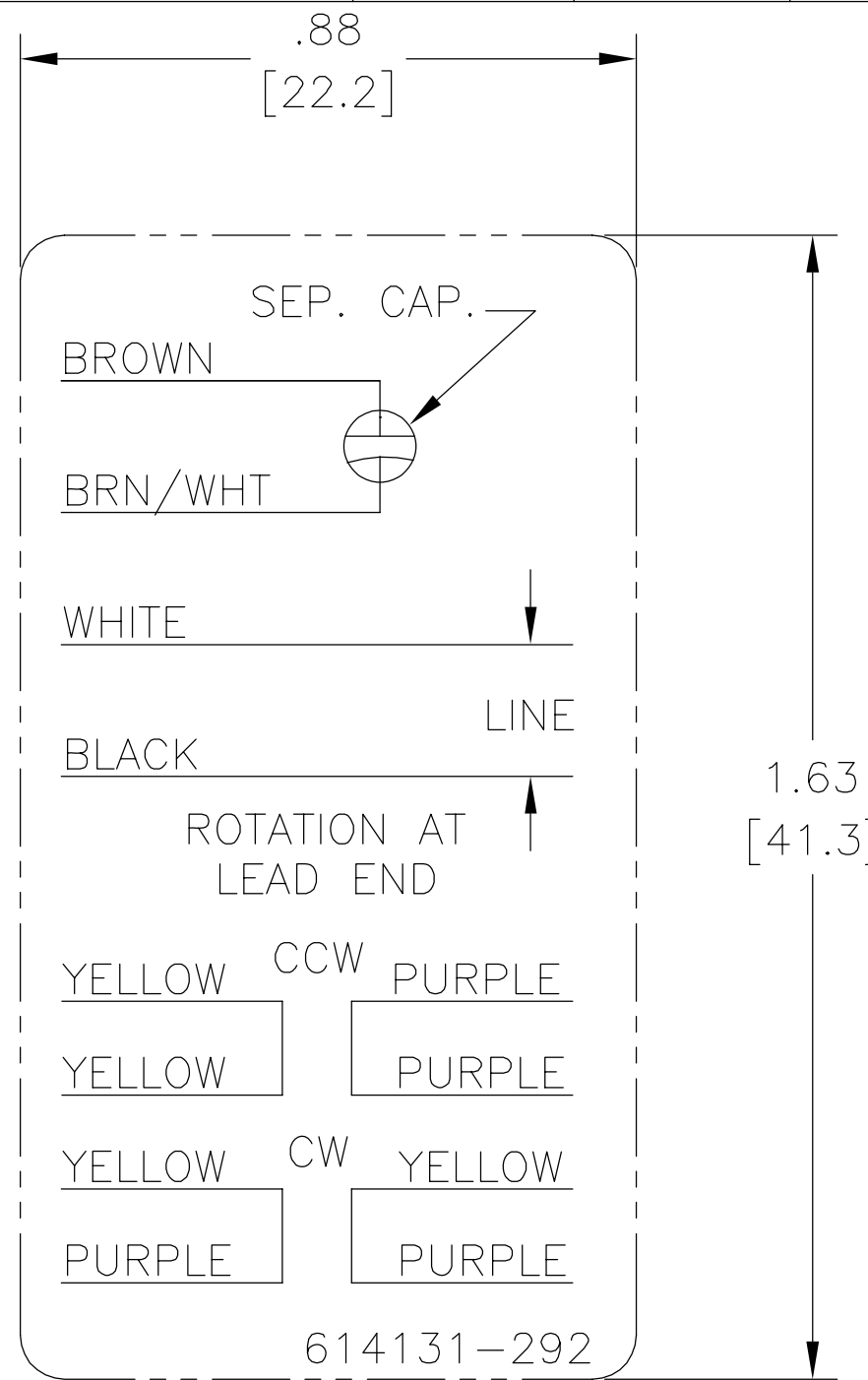
MACHINE SURFACES:  
INCH 125 mm 3.2

METRIC DIMS. SHOWN IN [BRACKETS]

DR BY:	jrupert	09-19-2011
APPD:	jrupert	09-19-2011
THIRD ANGLE PROJECTION		EDS DATE 02-22-2008 FORMAT REV F
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 <b>AC Smith</b> Innovation has a name.		<b>ELECTRICAL PRODUCTS COMPANY</b> A DIVISION OF A. O. SMITH CORPORATION	
DESCRIPTION CONN DIAGRAM NAMEPLATE			
SIZE A	DWG NO 614131-292		
SCALE NONE			SHEET 1

REVISION:	ECO	REVISADO POR:	FECHA:	APROBADO POR:	FECHA:
B	ECO-0022458	jrupert	09-19-2011	jrupert	09-19-2011



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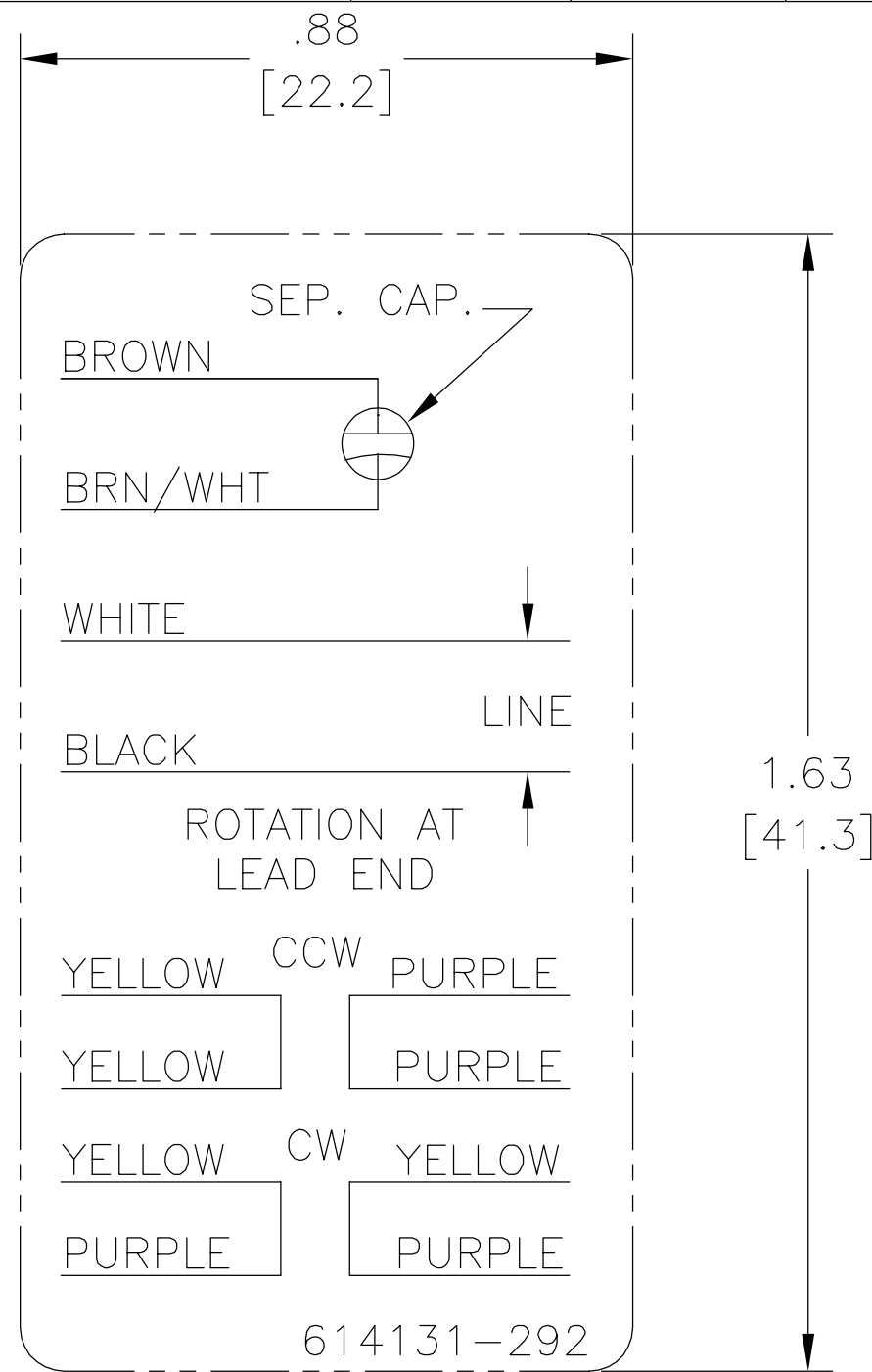
CARACTERISTICAS DE GEOMETRIA Y SIMBOLOS ▽ PLANICIDAD — RECTITUD < ANGULARIDAD ⊥ PERPENDICULARIDAD (A ESCUADRA) // PARALELISMO ○ REDONDEZ (CIRCULARIDAD) ∅ CILINDRICIDAD △ PERFIL DE CUALQUIER SUPERFICIE ∩ PERFIL DE CUALQUIER LINEA ↑ VARIACION ⊕ POSICION REAL ⊙ CONCENTRICIDAD = SIMETRIA
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A MENOS QUE SE ESPECIFIQUE DE OTRA MANERA, LAS TOLERANCIAS DE LAS DIMS; SON LAS SIGUIENTES: X XX XXX XXXX PULG ±.1 ±.02 ±.005 ±.0005 mm ±0.5 ±0.13 ±0.013 ANG. ±.50 GRADOS ELIMINAR REBABAS Y ORILLAS FILOSAS DEL BORDE. PULG .003-.015 mm 0.1-0.4 FILETEAR ESQUINA: PULG .020 mm 0.5 MAQUINAR SUPERFICIES PULG 125 mm 3.2 DIMS METRICAS MOSTRADAS [PARENTESIS]
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DIBUJADO POR:	jrupert	09-19-2011
APROBADO POR:	jrupert	09-19-2011
TERCER ANGULO DE PROYECCION		FECHA EDS: 02-22-2008 REV. FORMATO: F
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TAMAÑO:	A	NUMERO DE DIBUJO: 614131-292
ESCALA:	NONE	HOJA: 1

版本	ECO	编制	日期	批准	日期
B	ECO-0022458	jrupert	09-19-2011	jrupert	09-19-2011



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形位公差  
 □ 平面度  
 — 直线度  
 < 倾斜度  
 ⊥ 垂直度  
 // 平行度  
 ○ 圆度  
 ⊙ 圆柱度  
 △ 面轮廓度  
 ∩ 线轮廓度  
 ↑ 圆跳动  
 ⊕ 位置度  
 ◎ 同轴度  
 ≡ 对称度

除另有注明  
 尺寸公差如下:  
 英寸 X XX XXX XXXX  
 毫米 ±.1 ±.02 ±.005 ±.0005  
 角度 ±.50 度  
 清理毛刺和尖棱  
 英寸 .003-.015 毫米 0.1-0.4  
 内圆角  
 英寸 .020 毫米 0.5  
 表面粗糙度  
 英制 125 米制 3.2  
 米制尺寸显示在 [ ]

绘图:	jrupert	09-19-2011
批准:	jrupert	09-19-2011
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名称	CONN DIAGRAM NAMEPLATE
图幅	A
图号	614131-292
比例	NONE
页号	1