

# PRODUCT INFORMATION PACKET



Model No: EM3746F  
Catalog No: EM3746F  
1/2 HP Condenser Fan Motor, 825 RPM, 208-230 Volts, 48 Frame, TEAO  
Condenser Fans Motors



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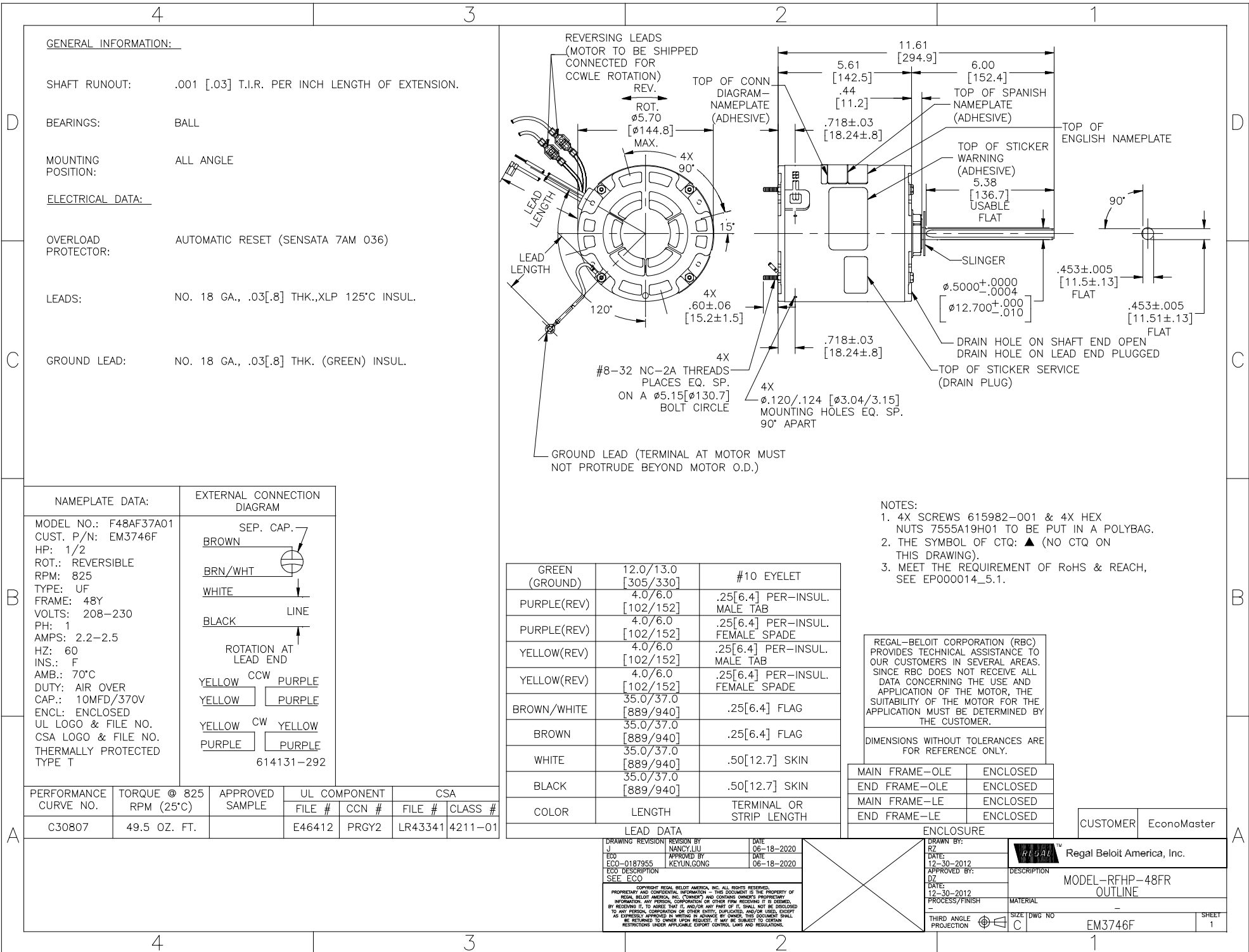
**Nameplate Specifications**

Output HP	1/2 Hp	Output KW	0.37 kW
Frequency	60 Hz	Voltage	208-230 V
Current	2.2-2.5 A	Speed	825 rpm
Service Factor	1	Phase	1
Duty	Air Over	Insulation Class	F
Frame	48Y	Enclosure	Totally Enclosed
Thermal Protection	Automatic	Ambient Temperature	70 °C
UL	Recognized	CSA	Y
CE	N		

**Technical Specifications**

Electrical Type	Permanent Split Capacitor	Starting Method	Across The Line
Poles	8	Rotation	Reversible
Mounting	Extended Studs	Motor Orientation	Any
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Rolled Steel	Shaft Type	Flat
Overall Length	12.21 in	Frame Length	5.12 in
Shaft Diameter	0.500 in	Shaft Extension	6.0 in
Connection Drawing	614131-292	Outline Drawing	EM3746F-S01

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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 (SENSATA 7AM 036)

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

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

NAMEPLATE DATA:	EXTERNAL CONNECTION DIAGRAM
MODEL NO.: F48AF37A01 CUST. P/N: EM3746F HP: 1/2 ROT.: REVERSIBLE RPM: 825 TYPE: UF FRAME: 48Y VOLTS: 208-230 PH: 1 AMPS: 2.2-2.5 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	

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

**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 EPO00014\_5.1.

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.

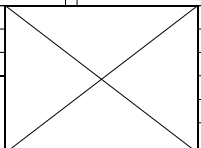
DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.

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

CUSTOMER	EconoMaster
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PERFORMANCE CURVE NO.	TORQUE @ 825 RPM (25°C)	APPROVED SAMPLE	UL COMPONENT FILE #	CCN #	CSA FILE #	CLASS #
C30807	49.5 OZ. FT.		E46412	PRGY2	LR43341	4211-01

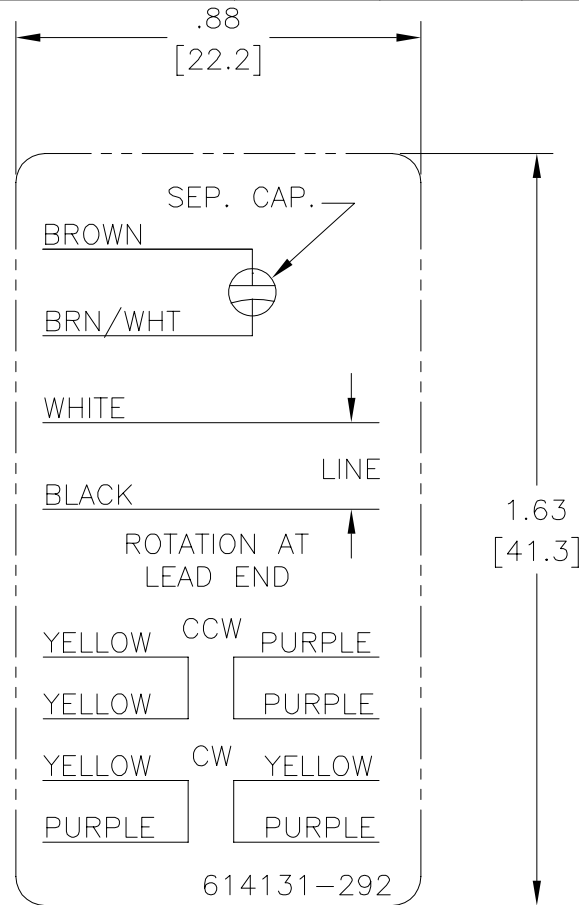
DRAWING REVISION	REVISION BY	DATE
J	NANCY LIU	06-18-2020
ECO	APPROVED BY KEYUN GONG	DATE 06-18-2020
ECO-0187955		
ECO DESCRIPTION	SEE ECO	



DRAWN BY: RZ	DATE: 12-30-2012	DESCRIPTION: MODEL-RFHP-48FR OUTLINE
APPROVED BY: DZ	DATE: 12-30-2012	MATERIAL: -
PROCESS/FINISH: -	THIRD ANGLE PROJECTION	SIZE DWG NO: C EM3746F
		SHEET 1

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



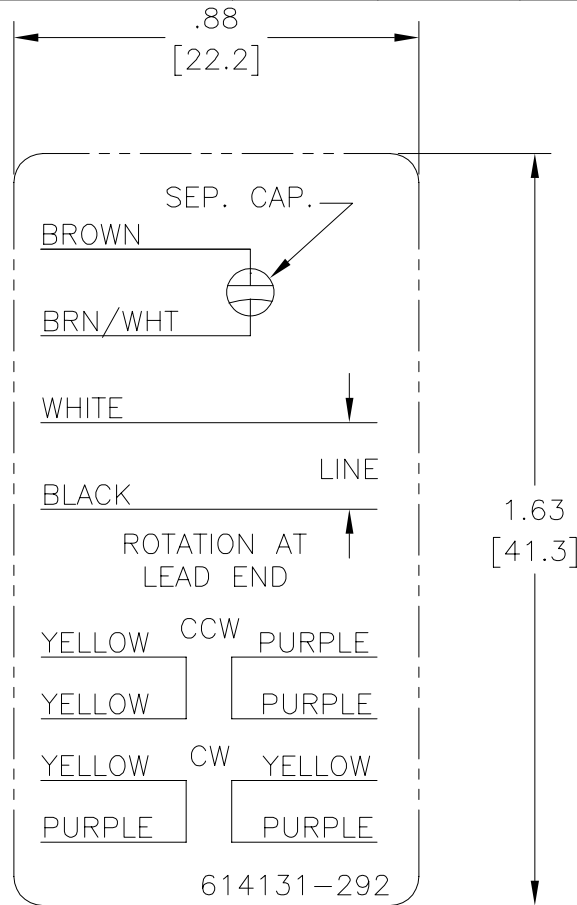
**NOTES:**

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.

<b>GEOMETRIC CHARACTERISTICS &amp; SYMBOLS</b> ▽ 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 X XX XXX XXXX ±.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 APPD: jrupert DATE: 09-19-2011 EDS DATE 02-22-2008 FORMAT REV F THIRD ANGLE PROJECTION	DR BY: jrupert APPD: jrupert DATE: 09-19-2011 EDS DATE 02-22-2008 FORMAT REV F THIRD ANGLE PROJECTION	<b>ACSmith</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	SHEET 1
				SCALE NONE	SHEET 1
				CONFIDENTIAL: THIS DRAWING AND ITS INFORMATION ARE THE EXCLUSIVE AND CONFIDENTIAL PROPERTY OF A.O. SMITH CORP. AND ARE NOT TO BE DISCLOSED, DUPLICATED, DISTRIBUTED OR OTHERWISE USED WITHOUT THE WRITTEN CONSENT OF A.O. SMITH CORP. -ALL RIGHTS RESERVED. ASME Y14.5M 1994	SHEET 1

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B	ECO-0022458								



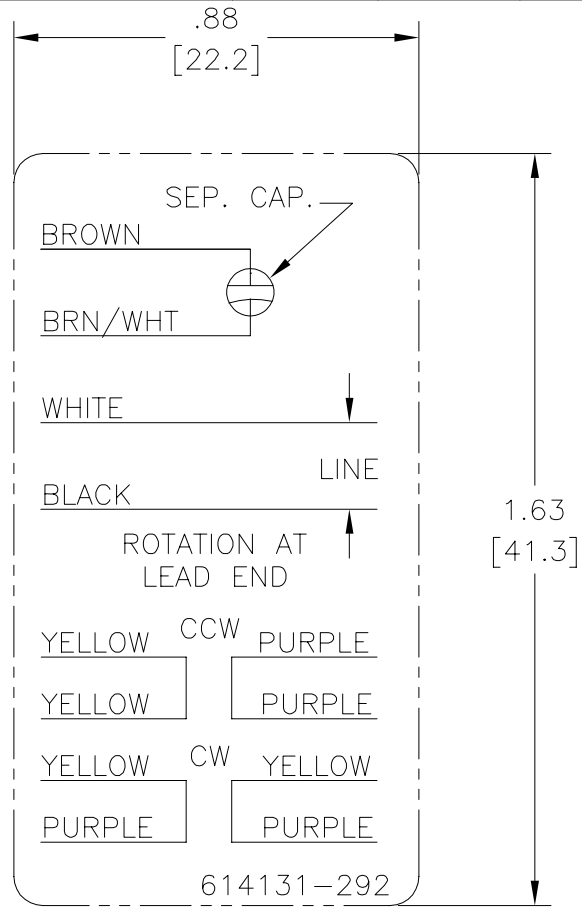
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<b>CARACTERISTICAS DE GEOMETRIA Y SIMBOLOS</b> Z PLANICIDAD — RECTITUD < ANGULARIDAD ⊥ PERPENDICULARIDAD (A ESCUADRA) // PARALELISMO O REDONDEZ (CIRCULARIDAD) R CILINDRICIDAD △ PERFIL DE CUALQUIER SUPERFICIE ▽ PERFIL DE CUALQUIER LINEA / VARIACION ⊕ POSICION REAL ⊙ CONCENTRICIDAD = SIMETRIA	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]	DIBUJADO POR: jrupert APROBADO POR: jrupert TERCER ANGULO DE PROYECCION:                  CONFIDENCIAL: ESTE DIBUJO Y SU INFORMACION SON PROPIEDAD DE USO EXCLUSIVO Y CONFIDENCIAL DE A.O.SMITH CORP. Y NO DEBERAN SER REVELADOS, DUPLICADOS, DISTRIBUIDOS O USARSE DE OTRA MANERA SIN EL CONSENTIMIENTO ESCRITO DE A.O. SMITH CORP. -TODOS LOS DERECHOS RESERVADOS.ASME Y14.5M 1994	09-19-2011 09-19-2011 FECHA EDS: 02-22-2008 REV. FORMATO: F	<b>ELECTRICAL PRODUCTS COMPANY</b> <small>A DIVISION OF A. O. SMITH CORPORATION</small>	DESCRIPCION: CONN DIAGRAM NAMEPLATE TAMAÑO: A NUMERO DE DIBUJO: 614131-292 ESCALA: NONE HOJA: 1
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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 毫米 ±0.5 ±0.13 ±0.013 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 批准: jrupert 第三角投影	09-19-2011 09-19-2011 图纸格式发布日期 02-22-2008 图纸格式版本 F	<p><b>ELECTRICAL PRODUCTS COMPANY</b> A DIVISION OF A. O. SMITH CORPORATION</p>
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	图幅: A		图号: 614131-292	
	比例: NONE		页号: 1	

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