

PRODUCT INFORMATION PACKET



Model No: 647A

Catalog No: 647A

Pedestal Fan Motor, 1/3 HP, 1 Ph, 60 Hz, 115 V, 1100 RPM, 2 Speed, 48 Frame, TEAO



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Nameplate Specifications

Output HP	1/3 Hp	Output KW	0.25 kW
Frequency	60 Hz	Voltage	115 V
Current	4.7 A	Speed	1100 rpm
Service Factor	1	Phase	1
Duty	Air Over	Insulation Class	B
Frame	48Y	Enclosure	Totally Enclosed Air Over
Thermal Protection	Automatic	Ambient Temperature	40 °C
UL	Recognized	CSA	Y
CE	N	Number of Speeds	2

Technical Specifications

Electrical Type	Permanent Split Capacitor	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Mounting	Yoke	Motor Orientation	Any
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Rolled Steel	Shaft Type	Flat
Overall Length	10.35 in	Frame Length	6.00 in
Shaft Diameter	0.500 in	Shaft Extension	3.05 in
Outline Drawing	F48Z33A01-S01	Connection Drawing	D0000313-013

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4

3

2

1

GENERAL INFORMATION:

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

BEARINGS: 203 BALL BEARING

MOUNTING POSITION: ALL ANGLE

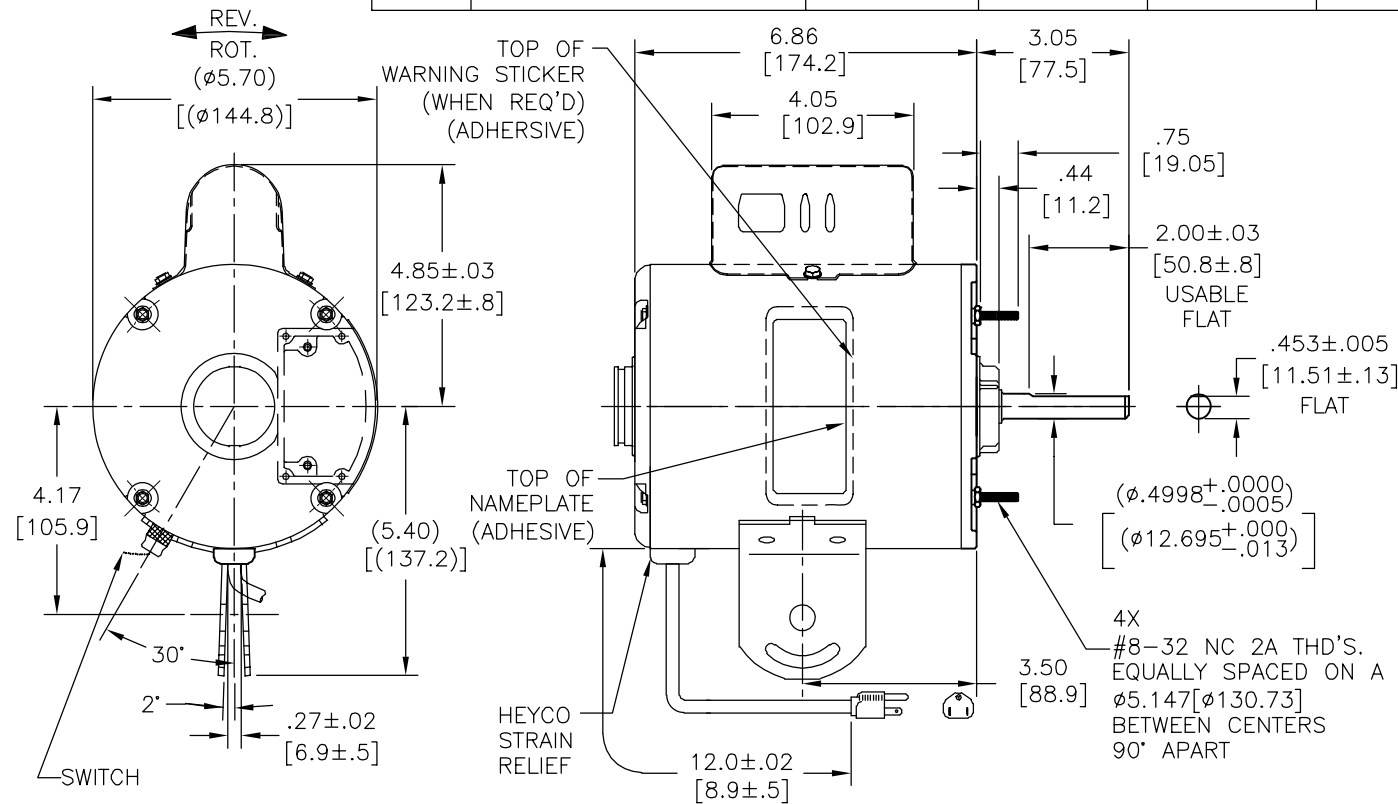
ELECTRICAL DATA:

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

LEADS: NO. 18 GA., .06 [1.5] THK. PVC 105°C AISLAM.

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

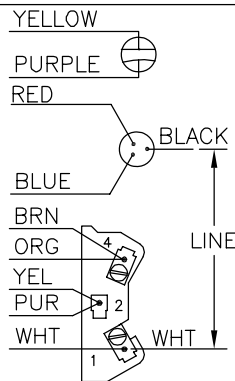
REV	ECO	REV BY	DATE	APPD	DATE
C	0009810	JLG	10-21-09	JR	10-21-09



NAMEPLATE DATA:

EXTERNAL CONNECTION DIAGRAM

MODEL NO.: F48Z33A01
 CUST. P/N: 647A
 HP: 1/3
 ROT.: REV.
 RPM: 1100/2SPD
 TYPE: UF
 FRAME: 48Y
 VOLTS: 115
 PH: 1
 AMPS: 4.7
 HZ: 60
 INS.: B
 AMB.: 40° C
 DUTY: AIR OVER
 CAP.: 7.5MFD/370V
 ENCL: ENCLOSED
 UL LOGO
 CSA LOGO
 THERMALLY PROTECTED



614131-348

3 COND. CABLE	GREEN (GRD)	11.0/13.0 [279/330]	MOLDED PLASTIC PLUG
	BLACK	11.0/13.0 [279/330]	
	WHITE	11.0/13.0 [279/330]	
EXT. INTO TERMINAL BOX	YELLOW	10.0/12.0 [254/305]	.25[6.4] FLAG (BOTH ENDS)
	WHITE	5.0/6.0 [127/152]	.25[6.4] FLAG
	BROWN	5.0/6.0 [127/152]	.25[6.4] FLAG
	ORANGE	5.0/6.0 [127/152]	.25[6.4] FLAG
	PURPLE	5.0/6.0 [127/152]	.25[6.4] FLAG
	BLUE	5.0/6.0 [127/152]	.31[7.9] SKIN (TIN DIPPED)
	RED	5.0/6.0 [127/152]	.31[7.9] SKIN (TIN DIPPED)
COLOR	LENGTH	TERMINAL OR STRIP LENGTH	

NOTES:

- SHIP SEPARATE(1) 72TI76A-26 BAG ASSEMBLY.
- MOTOR TO BE SHIPPED CONNECTED FOR CCWLE ROTATION.

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

CUSTOMER	DISTRIBUTION SERVICE
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PERFORMANCE CURVE NO.	TORQUE @ RPM (25°C)	APPROVED SAMPLE	UL COMPONENT FILE #	CCN #	CSA FILE #	CLASS #
C32706	30.2 OZ. FT.	0604209C	E46412	PRGY2	LR43341	4211-01

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

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DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.

DR BY: MEIYU.HE 06-06-2007
 APPD: -
 THIRD ANGLE PROJECTION
 EDS DATE 02-22-2008
 FORMAT REV F
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DESCRIPTION: **OUTLINE**

SIZE: C DWG NO: F48Z33A01

SCALE: NONE SHEET: 1

4

3

2

1

4

3

2

1

REVISION:	ECO	REVISADO POR:	FECHA:	APROBADO POR:	FECHA:
C	0009810	JLG	10-21-09	JR	10-21-09

INFORMACION GENERAL:

OSCILACION DE FLECHA: .001 [.03] L.T.I POR PULG. DE LONG. DE EXTENSION.

BALEROS: 203 BALEROS DE BOLA

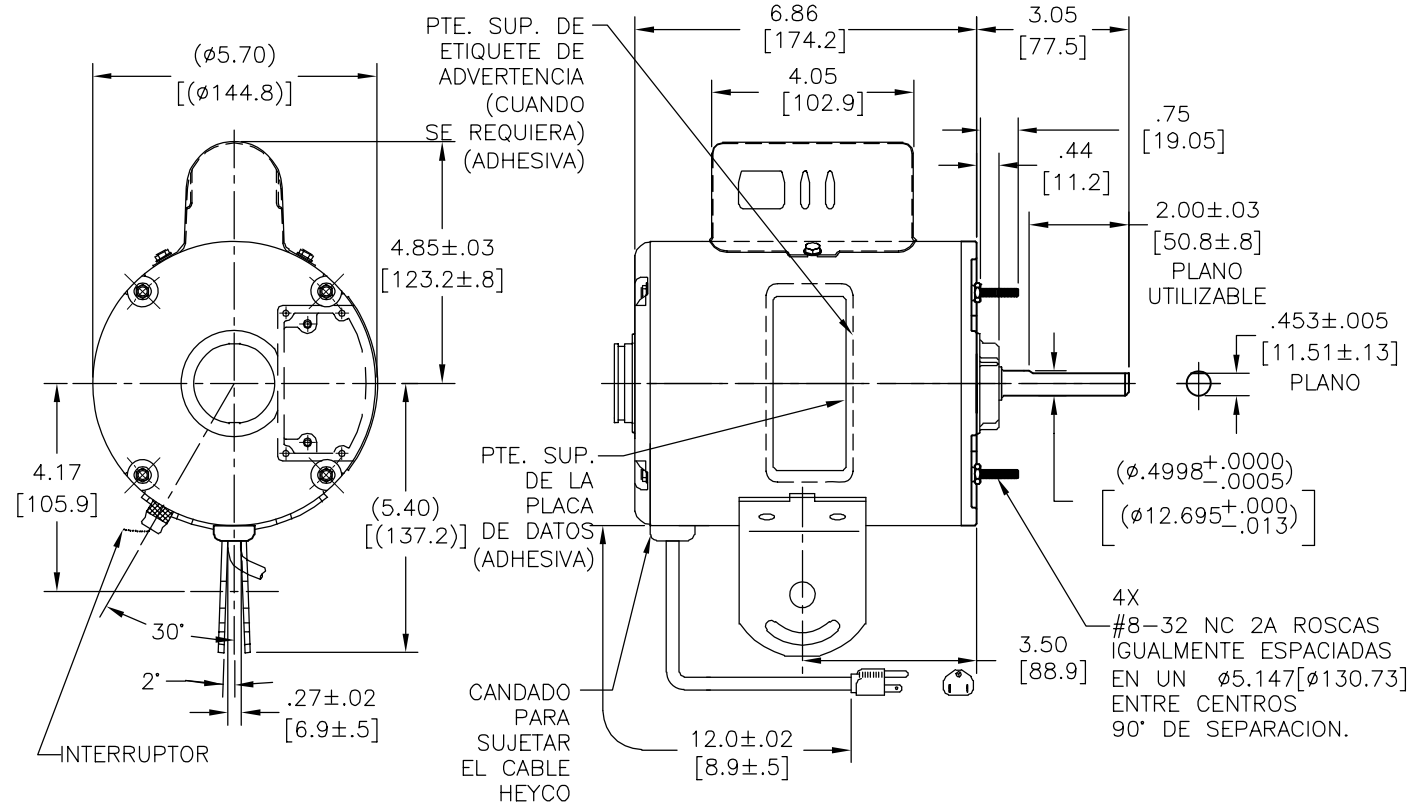
POSICION DEL MONTAJE: TODOS LOS ANGULOS

INFORMACION ELECTRICA:

PROTECTOR DE SOBRECARGA: REINICIO AUTOMATIC (T.I. 7AM 036)

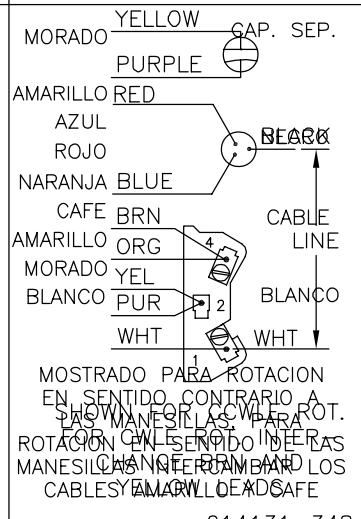
CABLES: NO. 18 GA., .06 [1.5] ESPESOR. PVC 105°C AISLAN.

CABLE DE TIERRA: NO. 18 GA., .03 [.8] ESPESOR. (VERDE) AISLANTE.



INFORMACION DE ETIQUETA: DIAGRAMA DE CONEXION EXTRNA

MODEL NO.: F48Z33A01
 CUST. P/N: 647A
 HP: 1/3
 ROT.: REV.
 RPM: 1100/2SPD
 TYPE: UF
 FRAME: 48Y
 VOLTS: 115
 PH: 1
 AMPS: 4.7
 HZ: 60
 INS.: B
 AMB.: 40° C
 DUTY: AIR OVER
 CAP.: 7.5MFD/370V
 ENCL: ENCLOSED
 UL LOGO
 CSA LOGO
 THERMALLY PROTECTED



614131-348

CURVAS DE FUNCIONAMIENTO	TORSION @ RPM (25°C)	MUESTRA APROBADA	COMPONENTE UL		CSA	
			#ARCHIVO	CCN #	#ARCHIVO	CLASE #
C32706	30.2 OZ. FT.	0604209C	E46412	PRGY2	LR43341	4211-01

3 CABLES COND.	VERDE (TIERRA)	11.0/13.0 [279/330]	CONECTOR DE PLASTICO MOLDEADO
	NEGRO	11.0/13.0 [279/330]	
BLANCO	11.0/13.0 [279/330]		
EXT. HACIA TABLILLA DE TERMINALES	AMARILLO	10.0/12.0 [254/305]	.25[6.4] TERM. BANDERA (AMBOS EXTREMOS)
	BLANCO	5.0/6.0 [127/152]	.25[6.4] TERMINAL BANDERA
	CAFE	5.0/6.0 [127/152]	.25[6.4] TERMINAL BANDERA
	ANARANJADO	5.0/6.0 [127/152]	.25[6.4] TERMINAL BANDERA
	MORADO	5.0/6.0 [127/152]	.25[6.4] TERMINAL BANDERA
	AZUL	5.0/6.0 [127/152]	.31[7.9] DESFORRE (SUMERGIDO EN ESTAÑO)
	ROJO	5.0/6.0 [127/152]	.31[7.9] DESFORRE (SUMERGIDO EN ESTAÑO)
COLOR	LONGITUD	TERMINAL O LONGITUD DE DESFORRE	

NOTAS:

1. EMPACAR SEPARADO(1) ENSAMBLE DE BOLSA 72TI76A-26.
2. EL MOTOR DEBE SER EMPACADO CONECTADO PARA LA ROTACION EN CONTRA DEL SENTIDO DE LAS MANESILLAS DEL RELOJ.

CARCASA - LOC	INCLUIDO
TAPA - LOC	INCLUIDO
CARCASA - LC	INCLUIDO
TAPA - LC	INCLUIDO
TIPO DE MOTOR	

CLIENTE	DISTRIBUTION SERVICE
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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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DIMENSIONES SIN TOLERANCIA SON DE REFERENCIA SOLAMENTE

DIBUJADO POR: MEIYU HE
 APROBADO POR: SMITH
 INFORMACION DE CABLES: TERMINAL O LONGITUD DE DESFORRE
 TERCER ANGULO DE PROYECCION
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DESCRIPCION: **OUTLINE**

TAMAÑO: C NUMERO DE DIBUJO: F48Z33A01

ESCALA: NONE HOJA: 1

4

3

2

1

4

3

2

1

总技术要求:

轴跳动要求:

轴跳动: 0.03/25.4mm (外伸轴).

安装位置: 球轴承.

安装位置: 垂直 - 轴向下

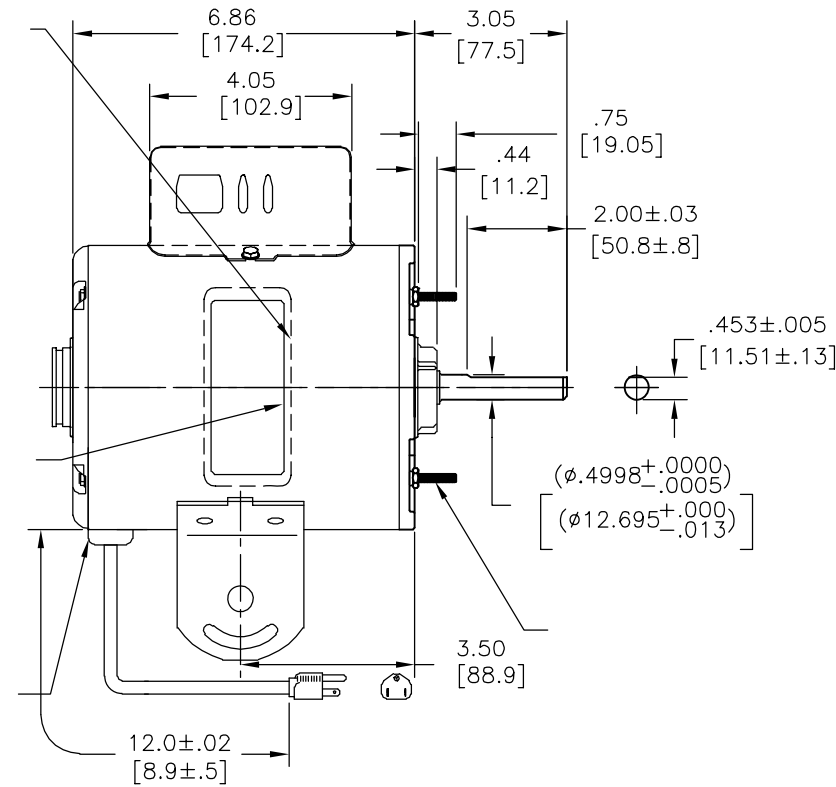
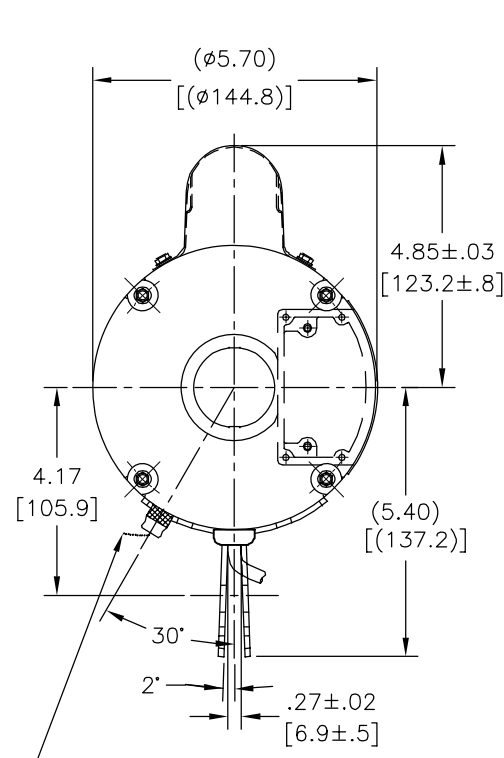
电气数据:

过载保护: 自动复位 (T. I. 7AM 036)

引线: 18GA, 厚.06[1.5] PVC 105°C 绝缘

接地线: 18GA, 厚.03[0.8] 绿色绝缘

版本	ECO	编制	日期	批准	日期
C	0009810	JLG	10-21-09	JR	10-21-09



		11.0/13.0	
		[279/330]	
		11.0/13.0	
		[279/330]	
		11.0/13.0	
		[279/330]	
		10.0/12.0	
		[254/305]	
		5.0/6.0	
		[127/152]	
		5.0/6.0	
		[127/152]	
		5.0/6.0	
		[127/152]	
		5.0/6.0	
		[127/152]	
		5.0/6.0	
		[127/152]	

颜色	长度	端子或剥线长度

无引线端机壳	
无引线端盖	
有引线端机壳	
有引线端盖	

用户	DISTRIBUTION SERVICE
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铭牌数据	外部数据
MODEL NO.: F48Z33A01 CUST. P/N: 647A HP: 1/3 ROT.: REV. RPM: 1100/2SPD TYPE: UF FRAME: 48Y VOLTS: 115 PH: 1 AMPS: 4.7 HZ: 60 INS.: B AMB.: 40° C DUTY: AIR OVER CAP.: 7.5MFD/370V ENCL: ENCLOSED UL LOGO CSA LOGO THERMALLY PROTECTED	YELLOW RED BLACK BLUE BRN ORG YEL PUR WHT WHT LINE SHOWN FOR CCWLE ROT. FOR CWLE ROT. INTER- CHANGE BRN AND YELLOW LEADS 614131-348

性能曲线编号	转矩在 @ RPM (25° C)	批准样品	UL部件		CSA	
C32706	30.2 OZ. FT	0604209C	文件号	指南	文件号	指南
			E46412	PRGY2	LR43341	4211-01

性能曲线编号	转矩在 @ RPM (25° C)	批准样品	形位公差	文件号	指南	文件号	指南
			□ 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				

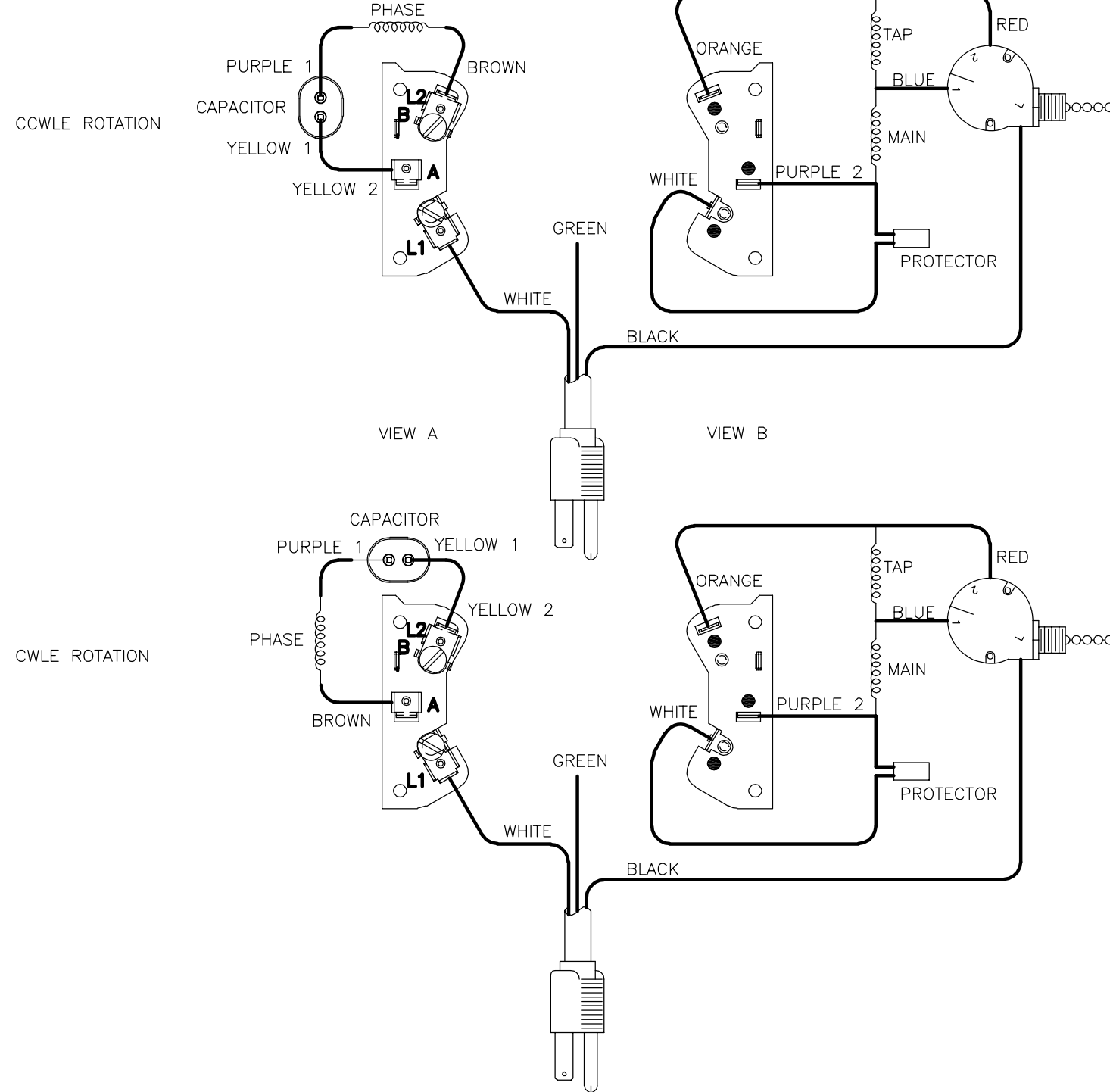
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提供技术支持。鉴于A. O. SMITH
未收到任何涉及电机使用和
应用环境的数据，电机的适用性
由客户自己决定。

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批准: 引线数据		
第三角投影		
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ASME Y14.5M 1994		

名称	OUTLINE
图幅	C
图号	F48Z33A01
比例	NONE
页号	1

REV	ECO	REV BY	DATE	APPD	DATE
A	ECO-0024611	jrupert	03-29-2012	jrupert	03-29-2012



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

ASME Y14.5M 1994

UNLESS OTHERWISE SPECIFIED
DIM. TOLERANCES ARE AS FOLLOWS:

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

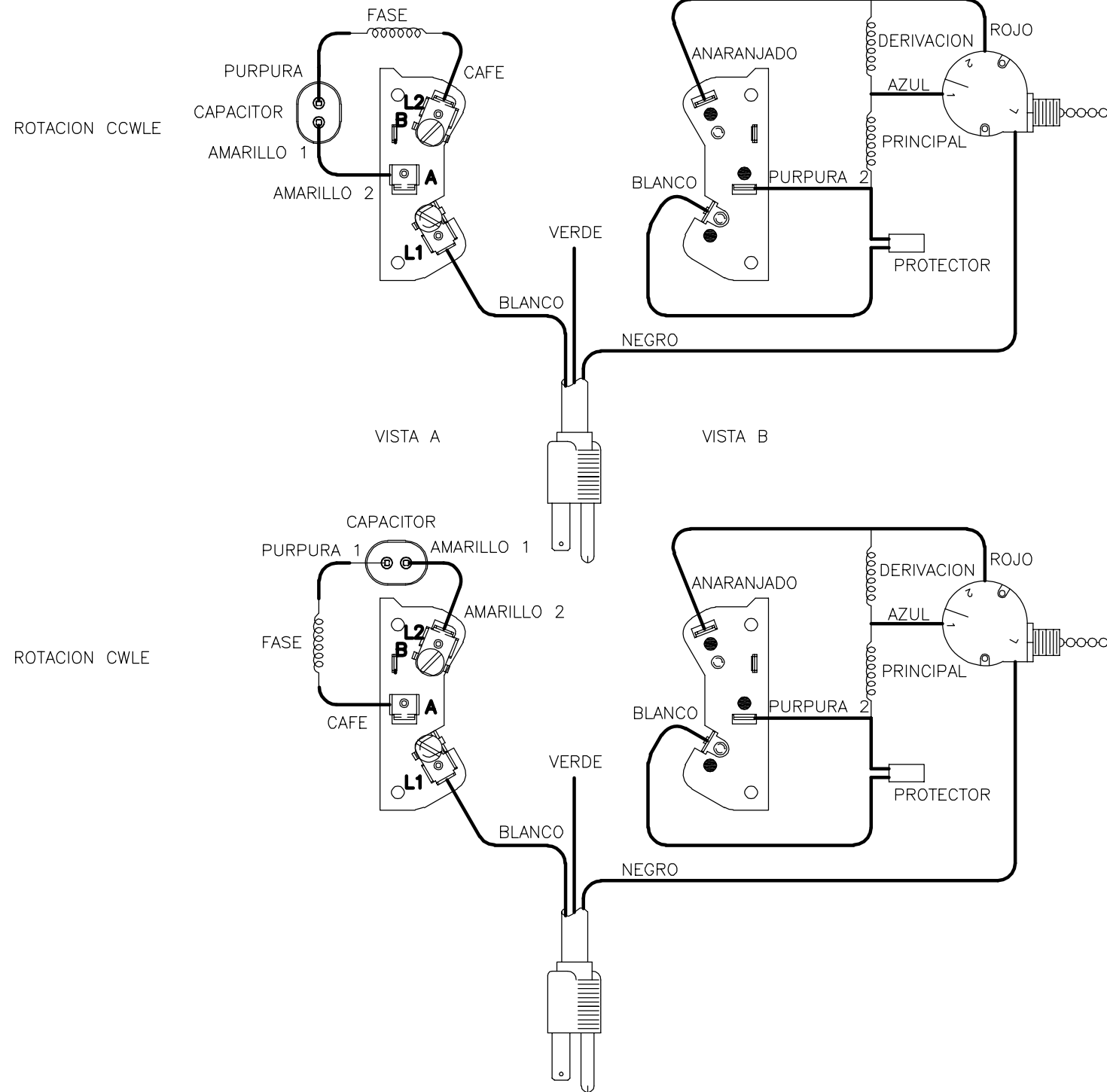
ANG. ±.50 DEG
REMOVE BURRS & BREAK SHARP EDGES:
INCH .003-.015 mm 0.1-0.4
CORNER FILLETS TO:
INCH .020 mm 0.5
MACHINE SURFACES:
INCH 125 mm 3.2

METRIC DIMS. SHOWN IN [BRACKETS]

DR BY:	jrupert	03-29-2012
APPD:	jrupert	03-29-2012
THIRD ANGLE PROJECTION		EDS DATE 11-11-2011 FORMAT REV G
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DESCRIPTION CONN DIAGRAM-EXTERNAL	
SIZE C	DWG NO D0000313-013
SCALE NONE	SHEET 1

REVISION:	ECO	REVISADO POR:	FECHA:	APROBADO POR:	FECHA:
A	ECO-0024611	jrupert	03-29-2012	jrupert	03-29-2012



CARACTERISTICAS DE GEOMETRIA Y SIMBOLOS

- ▧ PLANICIDAD
- RECTITUD
- ∠ ANGULARIDAD
- ⊥ PERPENDICULARIDAD (A ESQUADRA)
- // PARALELISMO
- REDONDEZ (CIRCULARIDAD)
- ⊘ CILINDRICIDAD
- △ PERFIL DE CUALQUIER SUPERFICIE
- ▽ PERFIL DE CUALQUIER LINEA
- ↗ VARIACION
- ⊕ POSICION REAL
- ⊙ CONCENTRICIDAD
- = SIMETRIA

ASME Y14.5M 1994

A MENOS QUE SE ESPECIFIQUE DE OTRA MANERA, LAS TOLERANCIAS DE LAS DIMS; SON LAS SIGUIENTES:

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 .32

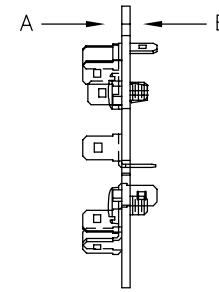
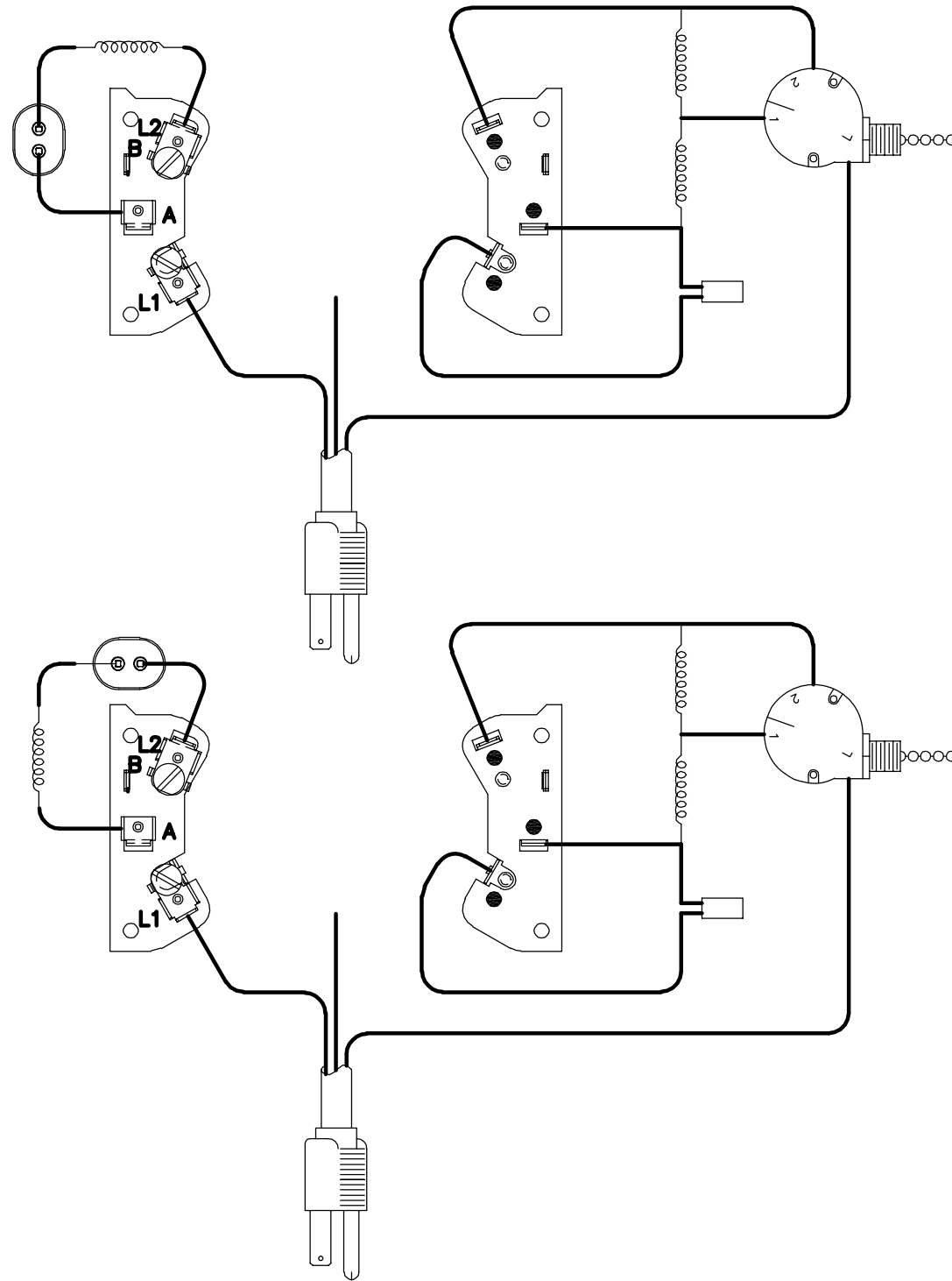
DIMS METRICAS MOSTRADAS [PARENTESIS]

DIBUJADO POR:	jrupert	03-29-2012
APROBADO POR:	jrupert	03-29-2012
TERCER ANGULO DE PROYECCION	⊕	FECHA EDS: 11-11-2011 REV. FORMATO: G

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DESCRIPCION: CONN DIAGRAM-EXTERNAL	
TAMAÑO: C	NUMERO DE DIBUJO: D0000313-013
ESCALA: NONE	HOJA: 1

版本	ECO	编制	日期	批准	日期
A	ECO-0024611	jrupert	03-29-2012	jrupert	03-29-2012



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	03-29-2012
批准:	jrupert	03-29-2012
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名称 CONN DIAGRAM-EXTERNAL	
图幅 C	图号 D0000313-013
比例 NONE	页号 1