

# PRODUCT INFORMATION PACKET



Model No: 149A  
Catalog No: 149A  
Fan and Blower Motor, 1/2,1/3,1/4 HP, 1 Ph, 60 Hz, 208-230 V, 1075 RPM, 3 Speed, 48 Frame,  
SEMI ENCLOSED



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**Nameplate Specifications**

Output HP	1/2,1/3,1/4 Hp	Output KW	0.37 kW
Frequency	60 Hz	Voltage	208-230 V
Current	3.0,2.0,1.5 A	Speed	1075 rpm
Service Factor	1	Phase	1
Duty	Air Over	Insulation Class	B
Frame	48Y	Enclosure	Semi Enclosed
Thermal Protection	Automatic	Ambient Temperature	60 °C
UL	Recognized	CSA	Y
CE	N	Number of Speeds	3

**Technical Specifications**

Electrical Type	Permanent Split Capacitor	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Mounting	Resilient Rings	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Rolled Steel	Shaft Type	Flat
Overall Length	10.47 in	Frame Length	4.38 in
Shaft Diameter	0.500 in	Shaft Extension	4.98 in
Outline Drawing	F48Z03A01	Connection Drawing	614131-351

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REV	ECO	REV BY	DATE	APPD	DATE
C	0025525	E.SINECIO	04-23-2012	R.RASCON	04-23-2012

GENERAL INFORMATION:

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

BEARINGS: 203 BALL

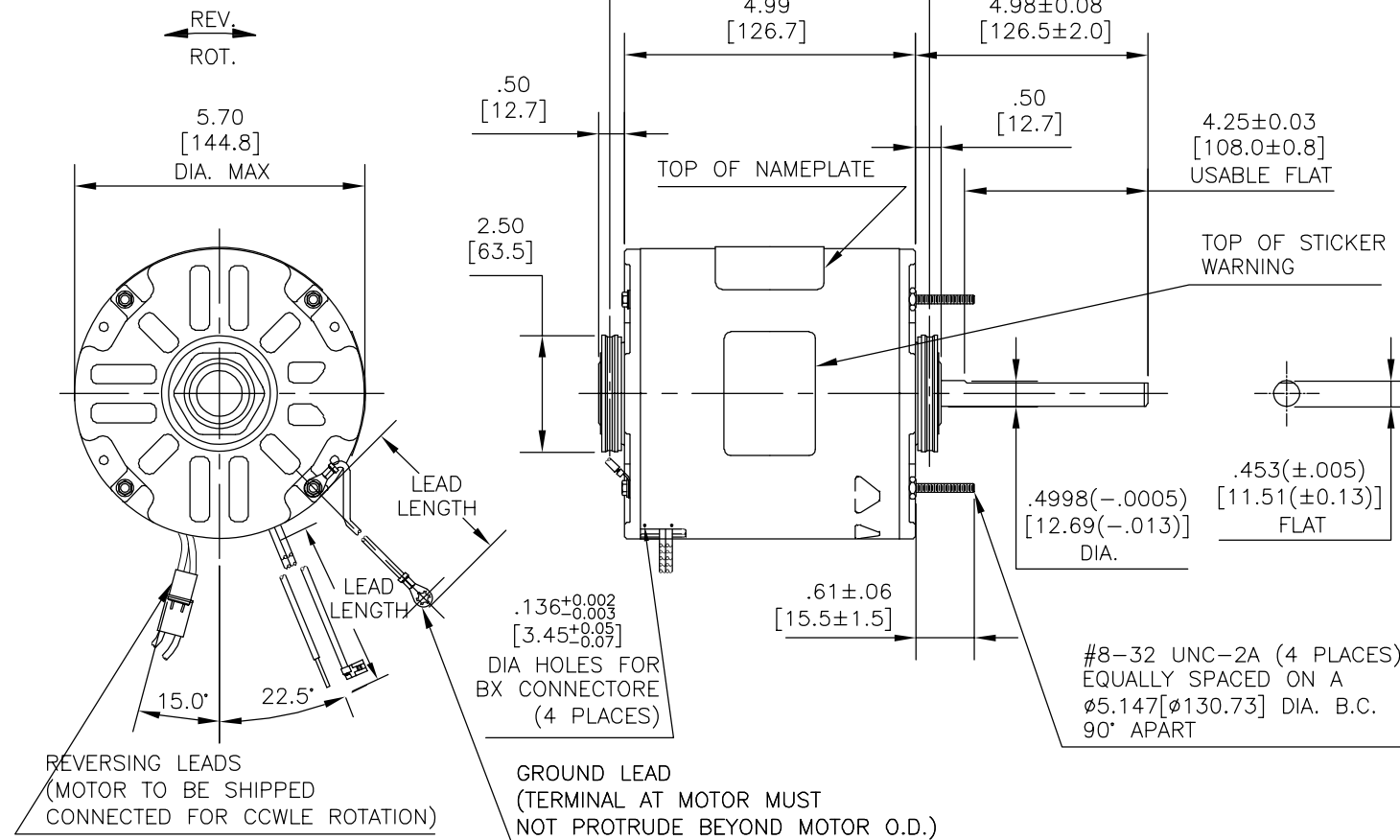
MOUNTING POSITION: HORIZONTAL

ELECTRICAL DATA:

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

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

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



NAMEPLATE DATA:	EXTERNAL CONNECTION DIAGRAM
MODEL NO.: F48Z03A01 CUST. P/N: 149A HP: 1/2, 1/3, 1/4 ROT.: REVERSIBLE RPM: 1075 TYPE: UF FRAME: 48Y VOLTS: 208-230 PH: 1 AMPS: 3.0/2.0/1.5 HZ: 60 INS.: B AMB.: 60°C DUTY: AIR OVER CAP.: 7.5MFD/370V ENCL: SEMI-ENCL. UL LOGO CSA LOGO THERMALLY PROTECTED	

GRN/YEL (GRD)	11/13 [279/330]	#10 EYELET
BLACK/WHITE	3/5 [76/127]	REVERSING PLUG (MALE)
BLACK/WHITE	3/5 [76/127]	REVERSING PLUG (FEMALE)
BROWN	24/22 [610/559]	.25 [6.35] FLAG
BROWN/WHITE	24/22 [610/559]	.25 [6.35] FLAG
WHITE	24/22 [610/559]	.50 [12.7] SKIN
BLACK	24/22 [610/559]	.50 [12.7] SKIN
BLUE	24/22 [610/559]	.50 [12.7] SKIN
RED	24/22 [610/559]	.50 [12.7] SKIN
COLOR	LENGTH	TERMINAL OR STRIP LENGTH

MAIN FRAME - OLE	SEMI-ENCLOSED
END FRAME - OLE	OPEN
MAIN FRAME - LE	ENCLOSED
END FRAME - LE	OPEN

CUSTOMER	DISTRIBUTION
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PERFORMANCE CURVE NO.	TORQUE @ 1075 RPM (25°C)	APPROVED SAMPLE	UL COMPONENT FILE #	CCN #	CSA FILE #	CLASS #
C32662	43.48 OZ. FT.	0603111B	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  
 ASME Y14.5M 1994

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 DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.

DR BY: AMY 03-16-2007  
 APPD:  
 THIRD ANGLE PROJECTION  
 EDS DATE 02-22-2008  
 FORMAT REV G  
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REGAL-BELOIT CORPORATION  
 DESCRIPTION: MODEL-RFHP-48FR OUTLINE  
 SIZE: C DWG NO: F48Z03A01  
 SCALE: NONE SHEET: 1

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REVISION:	ECO	REVISADO POR:	FECHA:	APROBADO POR:	FECHA:
C	0025525	E.SINECIO	04-23-2012	R.RASCON	04-23-2012

**INFORMACION GENERAL:**

OSCILACION DE FLECHA: .001 [.03] T.I.R. PER INCH LENGTH OF EXTENSION

JUEGO AXIAL: .010 A .063 [.25 A 1.60]

BALEROS: MANGA

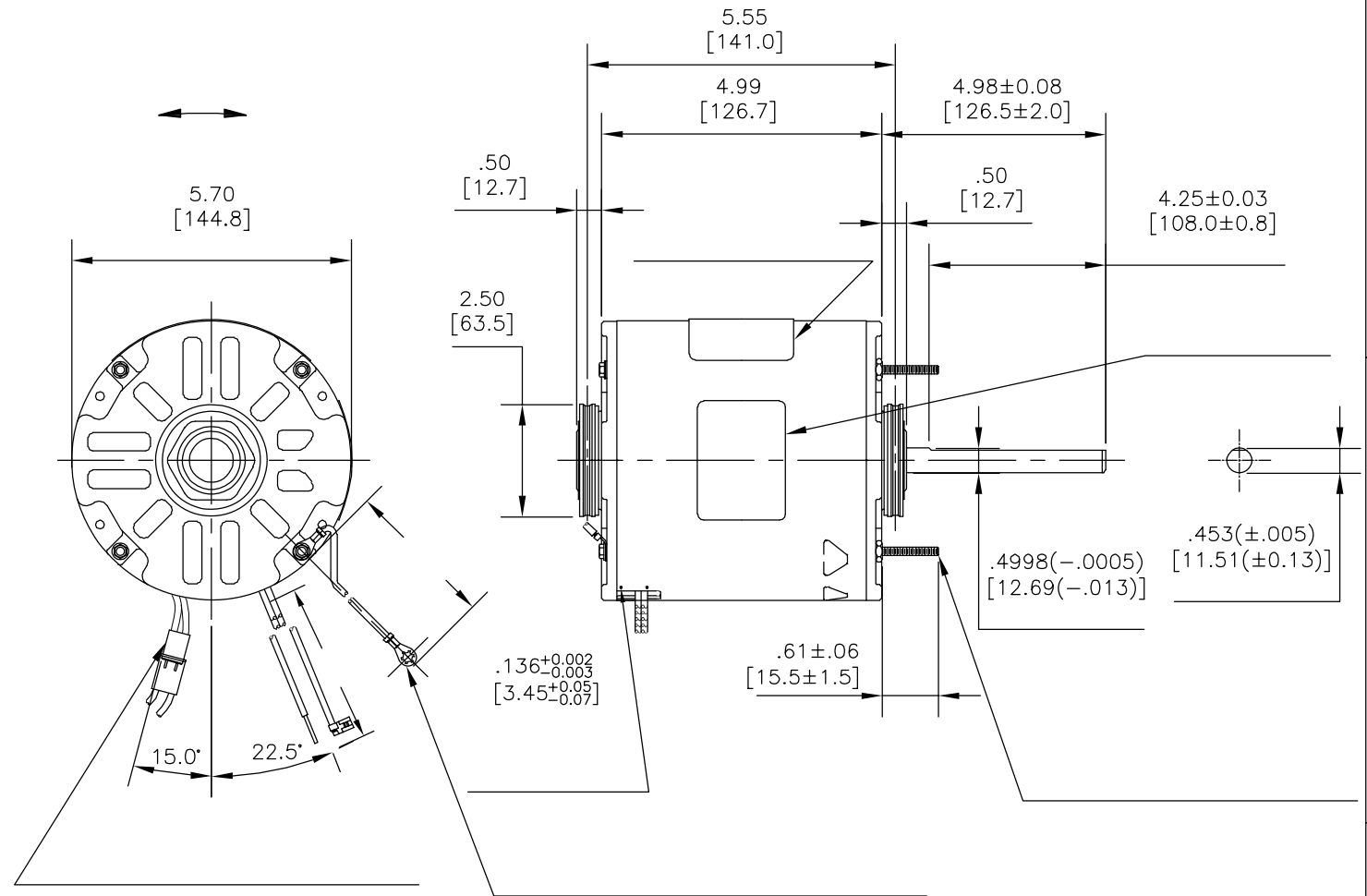
POSICION DEL MONTAJE: HORIZONTAL

**INFORMACION ELECTRICA:**

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

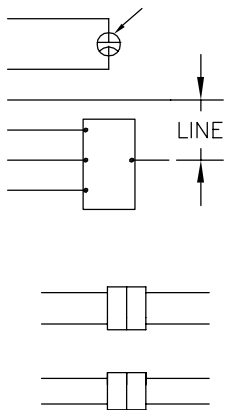
CABLES: NO. 18 GA., .06 [1.5] THK. PVC 105°C AISLAM.

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



INFORMACION DE ETIQUETA:	DIAGRAMA DE CONEXION EXTRNA
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MODEL NO.: F48Z03A01  
 CUST. P/N: 149A  
 HP: 1/2,1/3,1/4  
 ROT.: REVERSIBLE  
 RPM: 1075  
 TYPE: UF  
 FRAME: 48Y  
 VOLTS: 208-230  
 PH: 1  
 AMPS: 3.0/2.0/1.5  
 HZ: 60  
 INS.: B  
 AMB.: 60°C  
 DUTY: AIR OVER  
 CAP.: 7.5MFD/370V  
 ENCL: SEMI-ENCL.  
 UL LOGO  
 CSA LOGO  
 THERMALLY PROTECTED



614131-351

CURVAS DE FUNCIONAMIENTO	TORSION @--- RPM (25°C)	MUESTRA APROBADA	COMPONENTE UL		CSA	
			#ARCHIVO	CCN #	#ARCHIVO	CLASE #
C32662	43.48 OZ. FT.	0603111B	E46412	PRGY2	LR43341	4211-01

	11/13	
	[279/330]	
	3/5	
	[76/127]	
	3/5	
	[76/127]	
	24/22	
	[610/559]	
	24/22	
	[610/559]	
	24/22	
	[610/559]	
	24/22	
	[610/559]	
	24/22	
	[610/559]	
	24/22	
	[610/559]	
	24/22	
	[610/559]	
	LONGITUD	TERMINAL O LONGITUD DE DESFORRE

DE CARCASA - OLE	
DE TAPA - OLE	
DE CARCASA - LE	
DE TAPA - LE	
TIPO DE MOTOR	

CLIENTE

**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  
 ASME Y14.5M 1994

REGAL-BELOIT CORPORATION (RBC) PROVEE ASISTENCIA TECNICA A NUESTROS CLIENTES EN VARIAS AREAS, DESDE QUE RBC NO RECIBE TODOS LOS DATOS EN RELACION AL USO Y A LA APLICACION DEL MOTOR, LA APLICACION ADECUADA DEL MOTOR DEBE SER DETERMINADA POR EL CLIENTE.  
 DIMENSIONES SIN TOLERANCIA SON DE REFERENCIA SOLAMENTE

DIBUJADO POR: AMY 03-16-2007  
 APROBADO POR:  
 TERCER ANGULO DE PROYECCION  
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**REGAL BELLOIT** REGAL-BELOIT CORPORATION  
 DESCRIPCION: MODEL-RFHP-48FR OUTLINE  
 TAMAÑO: C NUMERO DE DIBUJO: F48Z03A01  
 ESCALA: NONE HOJA: 1

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版本	ECO	编制	日期	批准	日期
C	0025525	E.SINECIO	04-23-2012	R.RASCON	04-23-2012

**总要求:**

轴跳动: .001/1 [.03/25.4] (外伸轴)

端部窜动量: .010 - .063 [.25 - 1.60]

轴承: 含油轴承

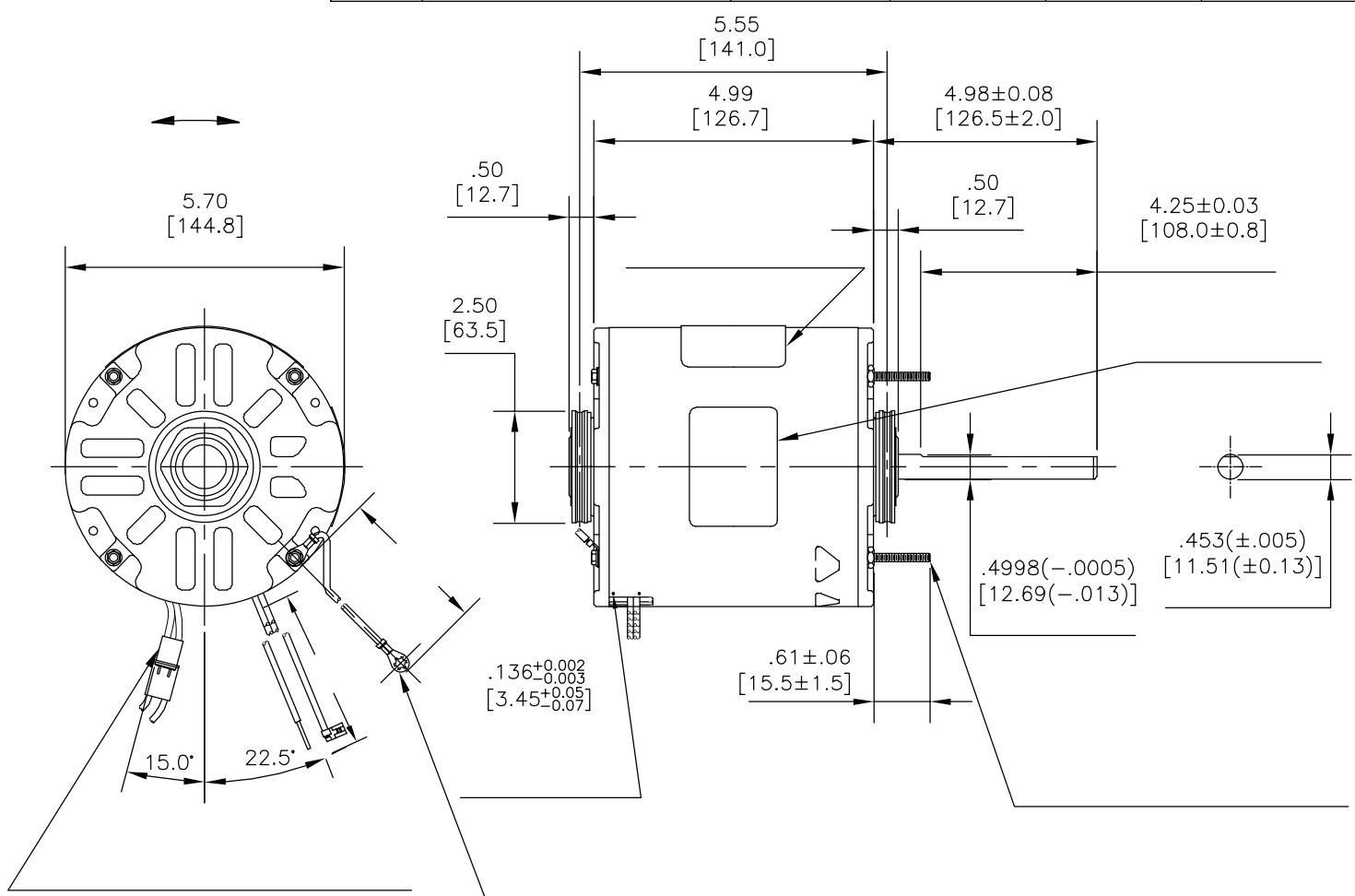
安装位置: 水平

**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



铭牌数据	外部连接详图
MODEL NO.: F48Z03A01 CUST. P/N: 149A HP: 1/2, 1/3, 1/4 ROT.: REVERSIBLE RPM: 1075 TYPE: UF FRAME: 48Y VOLTS: 208-230 PH: 1 AMPS: 3.0/2.0/1.5 HZ: 60 INS.: B AMB.: 60°C DUTY: AIR OVER CAP.: 7.5MFD/370V ENCL: SEMI-ENCL. UL LOGO CSA LOGO THERMALLY PROTECTED	

性能曲线编号	转矩在---RPM (25° C)	批准样品	UL部件	CSA
C32662	43.48 OZ. FT.	0603111B	文件号 指南	文件号 指南
			E46412 PRGY2	LR43341 4211-01

	11/13 [279/330]	
	3/5 [76/127]	
	3/5 [76/127]	
	24/22 [610/559]	
	24/22 [610/559]	
	24/22 [610/559]	
	24/22 [610/559]	
	24/22 [610/559]	
	24/22 [610/559]	
	24/22 [610/559]	
颜色	长度	端子或剥线长度

非引线端机壳	
非引线端端盖	
引线端机壳	
引线端端盖	

用户	
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形位公差	ASME Y14.5M 1994
□ 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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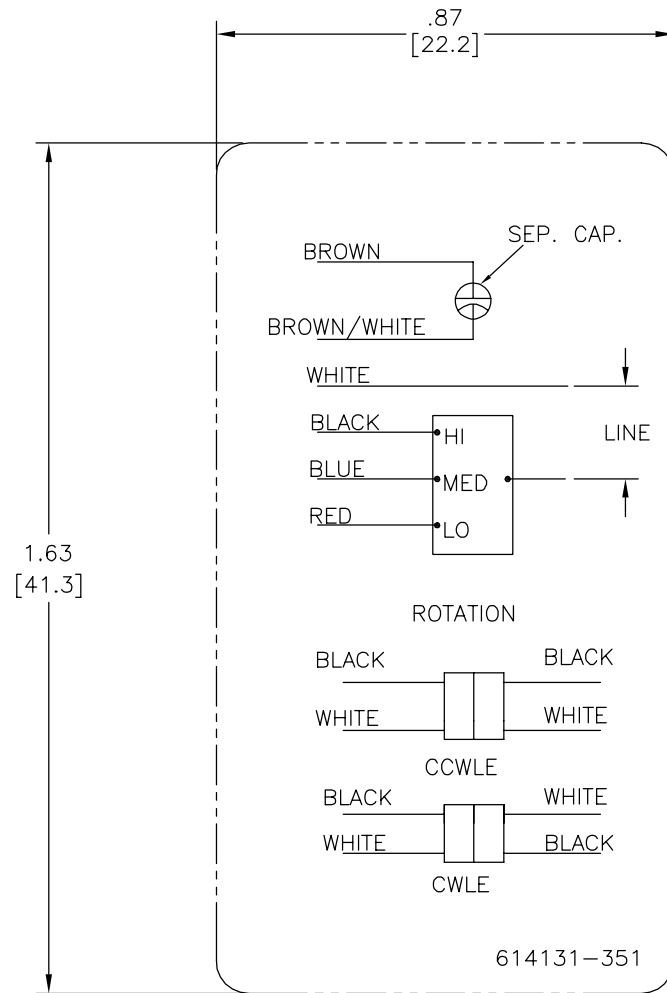
未注公差尺寸仅供参考。

绘图: AMY	03-16-2007
批准:	
第三角投影	图纸格式发布日期 02-22-2008 图纸格式版本 G
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名称	
MODEL-RFHP-48FR OUTLINE	
图幅 C	图号 F48Z03A01
比例 NONE	页号 1

4 3 2 1

REV	ECO	REV BY	DATE	APPD	DATE
C	0027023	N.HONG	06-24-2012	B.SHEN	06-24-2012



NOTES:

1. FOR USE WITH 614129 OR 2513020-001 NAMEPLATE BLANKS;
2. ——— INDICATES DIMENSION LIMITS

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	X ±.1 XX ±.02 XXX ±.005 XXXX ±.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:	YL	04-08-2011
APPD:	CZ	04-08-2011
THIRD ANGLE PROJECTION	⊕	EDS DATE 11-11-2011 FORMAT REV H
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<b>REGAL</b> REGAL-BELOIT CORPORATION	
DESCRIPTION CONN DIAGRAM-NAMEPLATE	
SIZE C	DWG NO 614131-351
SCALE NONE	SHEET 1

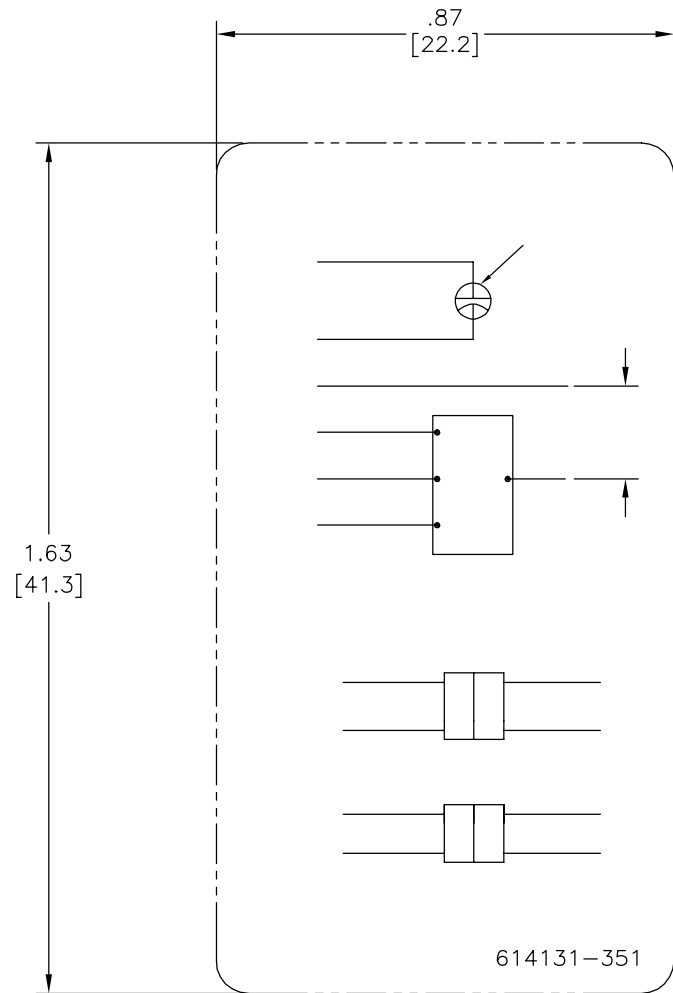
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REVISION:	ECO	REVISADO POR:	FECHA:	APROBADO POR:	FECHA:
C	0027023	N.HONG	06-24-2012	B.SHEN	06-24-2012



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

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 3.2

DIMS METRICAS MOSTRADAS [PARENTESIS]

DIBUJADO POR:	YL	04-08-2011
APROBADO POR:	CZ	04-08-2011
TERCER ANGULO DE PROYECCION	⊕	FECHA EDS: 11-11-2011 REV. FORMATO: H
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<b>REGAL REGAL-BELOIT CORPORATION</b>	
DESCRIPCION: CONN DIAGRAM-NAMEPLATE	
TAMAÑO: C	NUMERO DE DIBUJO: 614131-351
ESCALA: NONE	HOJA: 1

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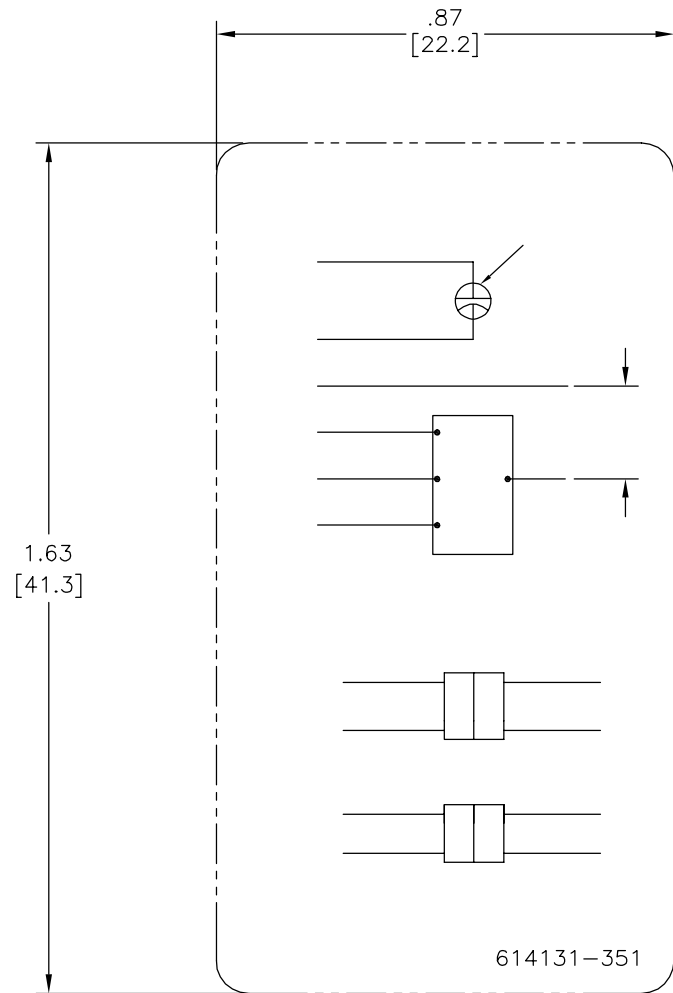
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版本	ECO	编制	日期	批准	日期
C	0027023	N.HONG	06-24-2012	B.SHEN	06-24-2012



形位公差	除另有注明
□ 平面度	尺寸公差如下:
— 直线度	英寸 X XX XXX XXXX
∠ 倾斜度	毫米 ±.1 ±.02 ±.005 ±.0005
⊥ 垂直度	毫米 ±0.5 ±0.13 ±0.013
// 平行度	角度 ±.50 度
○ 圆度	清理毛刺和尖棱
⊘ 圆柱度	英寸 .003-.015 毫米 0.1-0.4
△ 面轮廓度	内圆角
∩ 线轮廓度	英寸 .020 毫米 0.5
↗ 圆跳动	表面粗糙度
⊕ 位置度	英制 125 米制 3.2
⊙ 同轴度	米制尺寸显示在 [ ]
≡ 对称度	

ASME Y14.5M 1994

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:	YL	04-08-2011
批准:	CZ	04-08-2011
第三角投影		图纸格式发布日期 11-11-2011 图纸格式版本 H
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<b>REGAL-BELOIT CORPORATION</b>	
名称	CONN DIAGRAM-NAMEPLATE
图幅	C
图号	614131-351
比例	NONE
页号	1

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