

PRODUCT INFORMATION PACKET



Model No: 159A
Catalog No: 159A

Condenser Fan Motor, 1 HP, 1 Ph, 60 Hz, 230/460 V, 1075 RPM, 1 Speed, 48 Frame, SEMI ENCLOSED



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Nameplate Specifications

Output HP	1 Hp	Output KW	0.75 kW
Frequency	60 Hz	Voltage	230/460 V
Current	4.7/2.4 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	1

Technical Specifications

Electrical Type	Permanent Split Capacitor	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Mounting	Resilient Ring/Extended Studs	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Rolled Steel	Shaft Type	Flat
Overall Length	12.23 in	Frame Length	5.13 in
Shaft Diameter	0.500 in	Shaft Extension	6.0 in
Connection Drawing	614131-343	Outline Drawing	159A

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GENERAL INFORMATION:

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

BEARINGS: BALL

MOUNTING POSITION: HORIZONTAL

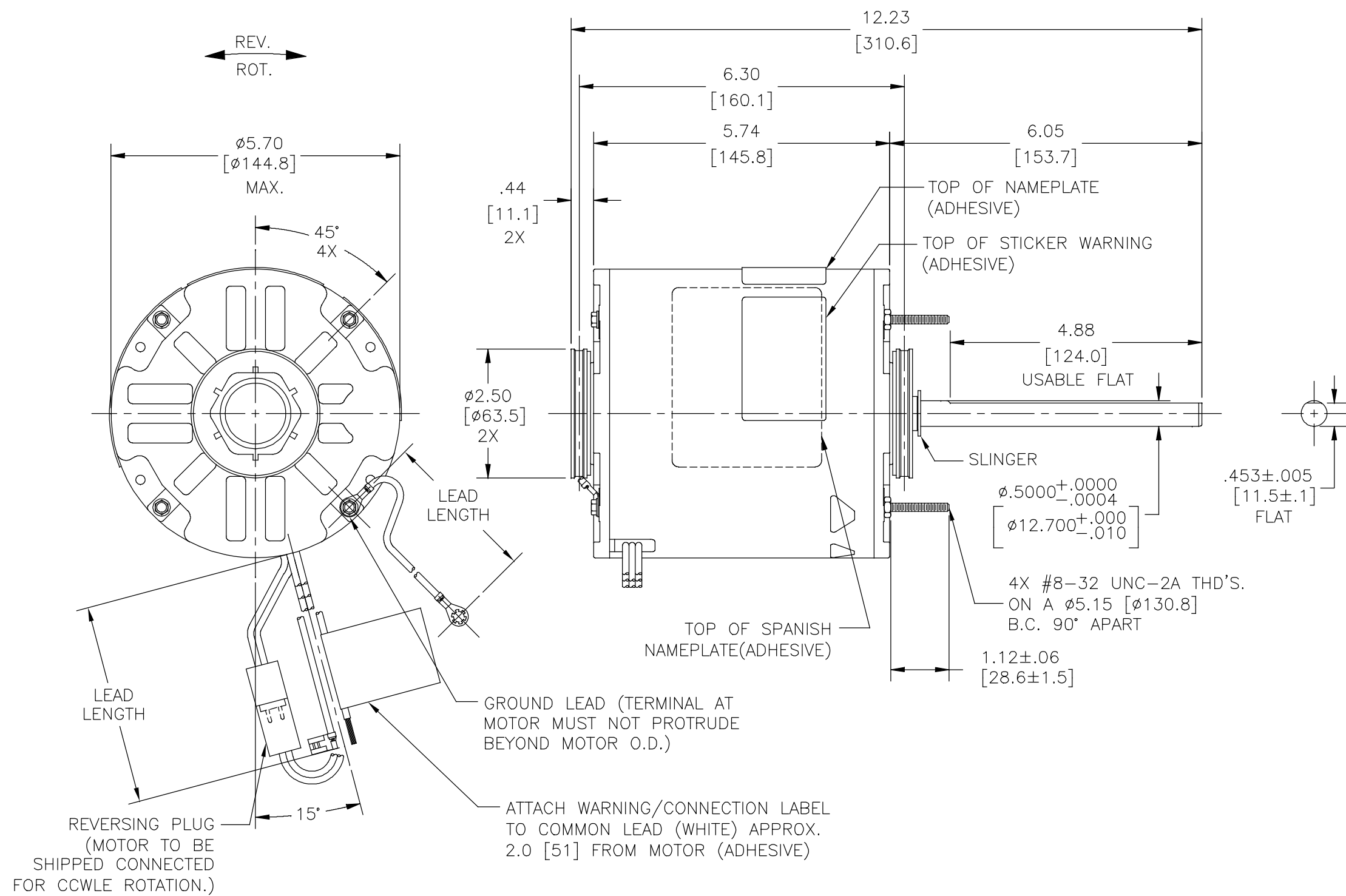
ELECTRICAL DATA:

OVERLOAD PROTECTOR: AUTOMATIC RESET (T.I. 7AM 034)

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

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

GROUND LEAD: NO. 16 GA., .03 [.8] THK. (GREEN/YELLOW) INSUL.



- NOTES:
 1. THE SYMBOL OF CTQ: ▲ (NO CTQ ON THIS DRAWING)
 2. MEET THE REQUIREMENT OF ROHS AND REACH: SEE EP000014_5.1

COLOR	LENGTH	TERMINAL OR STRIP LENGTH
GREEN/YELLOW (GROUND)	110.0/13.0 [279/330]	#10 EYELET
BLACK/WHITE	3.0/5.0 [76/127]	REVERSING PLUG
BROWN	22.0/24.0 [559/610]	.25 [6.4] FLAG
BROWN/WHITE	22.0/24.0 [559/610]	.25 [6.4] FLAG
ORANGE	22.0/24.0 [559/610]	.50 [12.7] SKIN
BLACK	22.0/24.0 [559/610]	.50 [12.7] SKIN
RED	22.0/24.0 [559/610]	.50 [12.7] SKIN
BLUE	22.0/24.0 [559/610]	.50 [12.7] SKIN
WHITE	22.0/24.0 [559/610]	.50 [12.7] SKIN

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

CUSTOMER	DISTRIBUTION SERVICE
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NAMEPLATE DATA:	EXTERNAL CONNECTION DIAGRAM
MODEL NO.: F48Y37A01 CUST. P/N: 159A HP: 1 ROT.: REVERSIBLE RPM: 1075 TYPE: UF FRAME: 48Y VOLTS: 230/460 PH: 1 AMPS: 4.7/2.4 HZ: 60 INS.: B AMB.: 60° C DUTY: AIR OVER CAP.: 15 MFD/370 V ENCL: SEMI-ENCL. UL LOGO CSA LOGO THERMALLY PROTECTED	

PERFORMANCE CURVE NO.	TORQUE @ 1075 RPM (25°C)	APPROVED SAMPLE	UL COMPONENT		CSA	
			FILE #	CCN #	FILE #	CLASS #
C32616	77.4 OZ. FT.	0600703A	E46412	PRGY2	LR43341	4211-01

DRAWING REVISION	REVISION BY	DATE
D	CADDIE.ZHOU	03-03-2020
E	KEYUN.GONG	03-03-2020

ECO-0182191
 ADD SPANISH NAMEPLATE AND NOTES

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ENCLOSURE
THIRD ANGLE PROJECTION

REGAL™ Regal Beloit America, Inc.

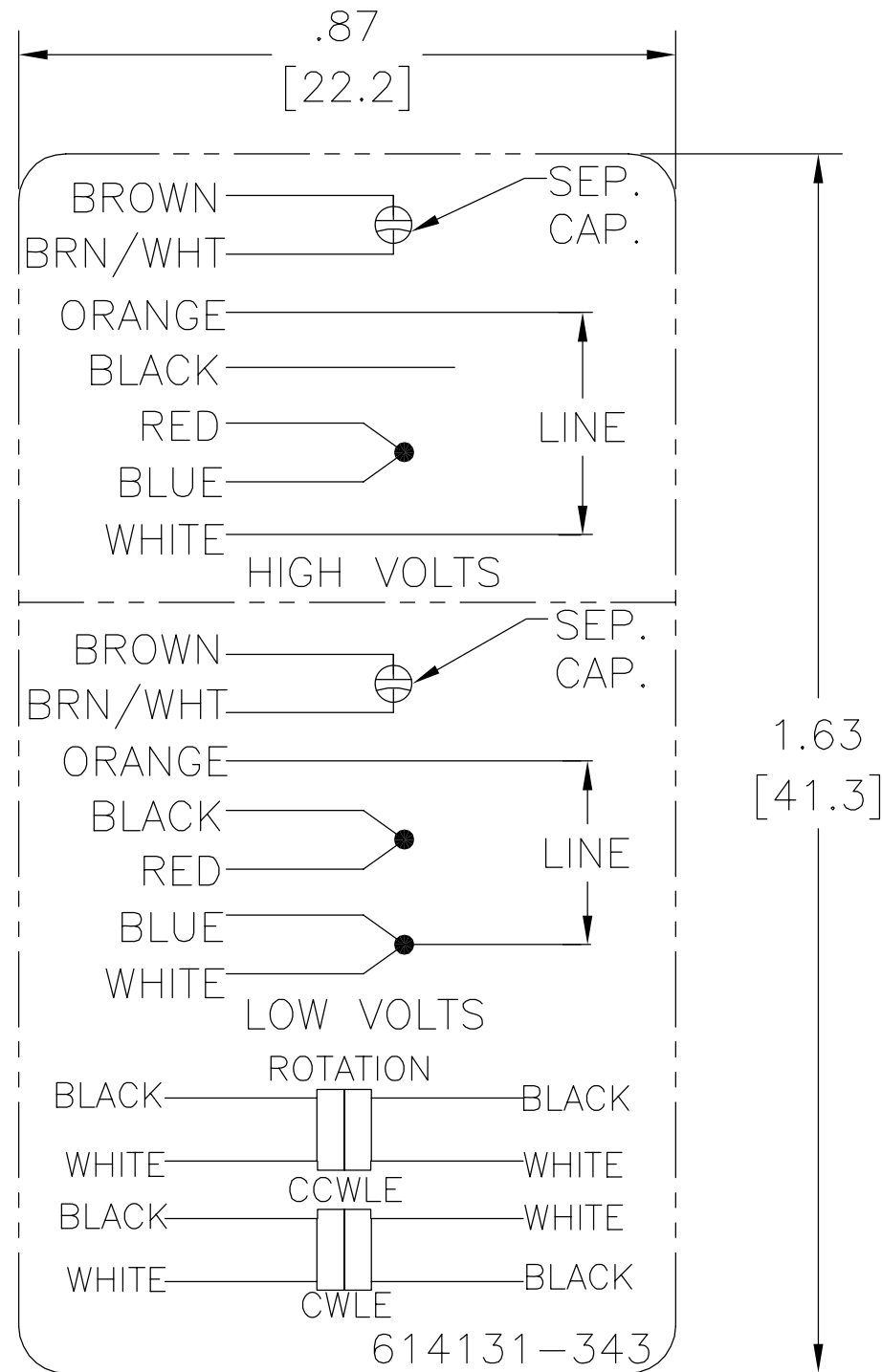
DESCRIPTION: MODEL-RFHP-48FR OUTLINE

MATERIAL: PROCESS/FINISH

SIZE DWG NO: 159A

SHEET: 1

REV	ECO	REV BY	DATE	APPD	DATE
B	0004268	Lara Grado	02-05-2009	C. Contreras	02-05-2009



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.

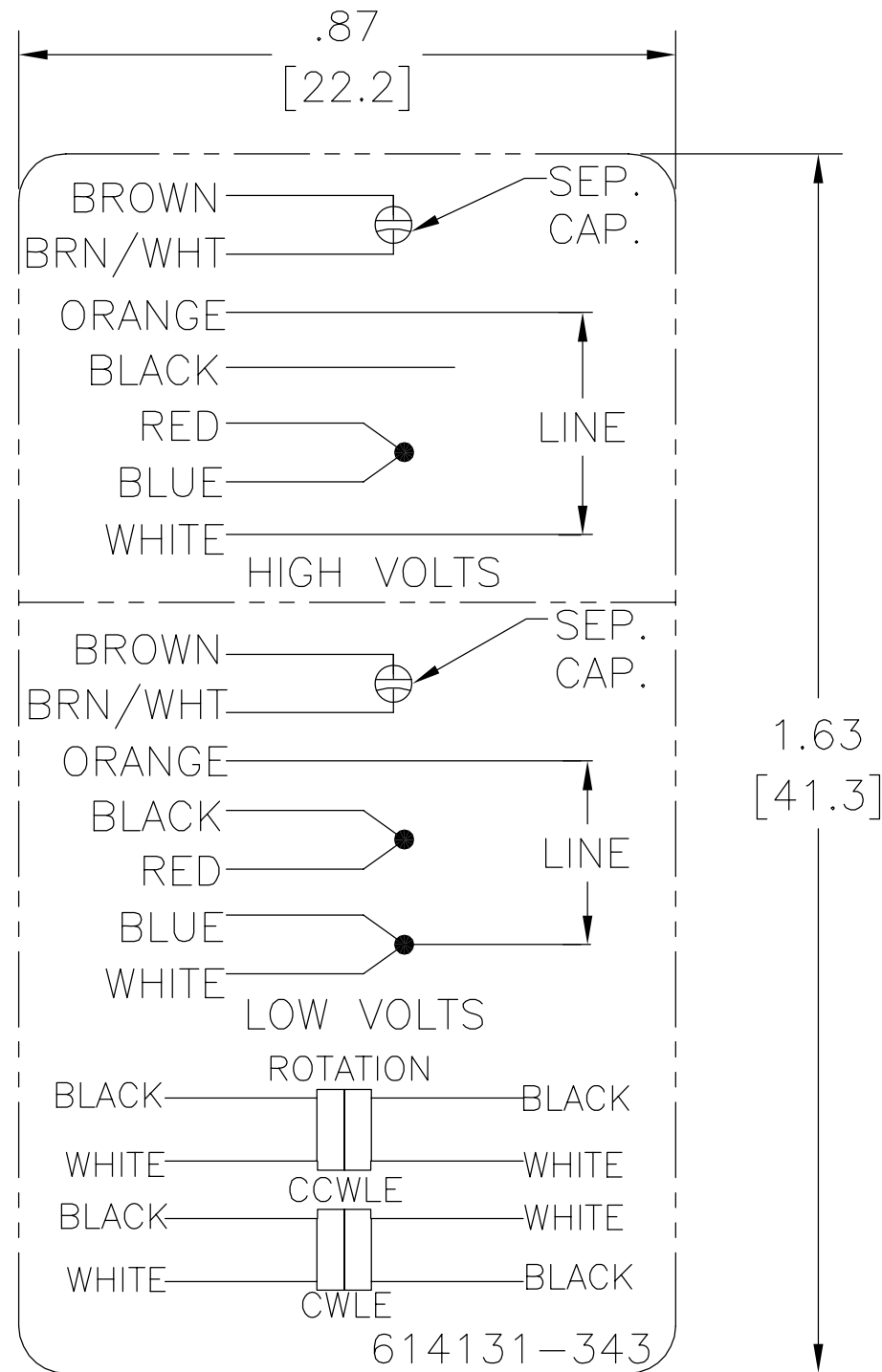
GEOMETRIC CHARACTERISTICS & SYMBOLS
 ▭ FLATNESS
 — STRAIGHTNESS
 < ANGLARITY
 ⊥ PERPENDICULARITY (SQUARENESS)
 // PARALLELISM
 ○ ROUNDNESS (CIRCULARITY)
 ∅ CYLINDRICITY
 △ PROFILE OF ANY SURFACE
 ∩ PROFILE OF ANY LINE
 ↑ RUNOUT
 ⊕ TRUE POSITION
 ⊙ CONCENTRICITY
 = SYMMETRY

UNLESS OTHERWISE SPECIFIED
 DIM. TOLERANCES ARE AS FOLLOWS:
 INCH X XX XXX XXXX
 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: L. Grado 02-05-2009
 APPD: C. Contreras 02-05-2009
 THIRD ANGLE PROJECTION
 EDS DATE 01-21-2007
 FORMAT REV F
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		ELECTRICAL PRODUCTS COMPANY <small>A DIVISION OF A. O. SMITH CORPORATION</small>	
DESCRIPTION CONN DIAGRAM-EXTERNAL			
SIZE A	DWG NO 614131-343		SHEET 1
SCALE NONE			

REVISION:	ECO	REVISADO POR:	FECHA:	APROBADO POR:	FECHA:
B	0004268	Lara Grado	02-05-2009	C. Contreras	02-05-2009



NOTAS:

1. PARA USAR CON 614129 PLACA DE DATOS EN BLANCO.
2. ——— ——— INDICA LIMITES DE DIMENSION
3. EL MOLDE DEBE ESTAR HECHO DESDE EL PROVEEDOR PRINCIPAL POR A. O. SMITH CORPORATION
4. EL MOLDE DEBE PRODUCIR UNA IMPRESION LEGIBLE.

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

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
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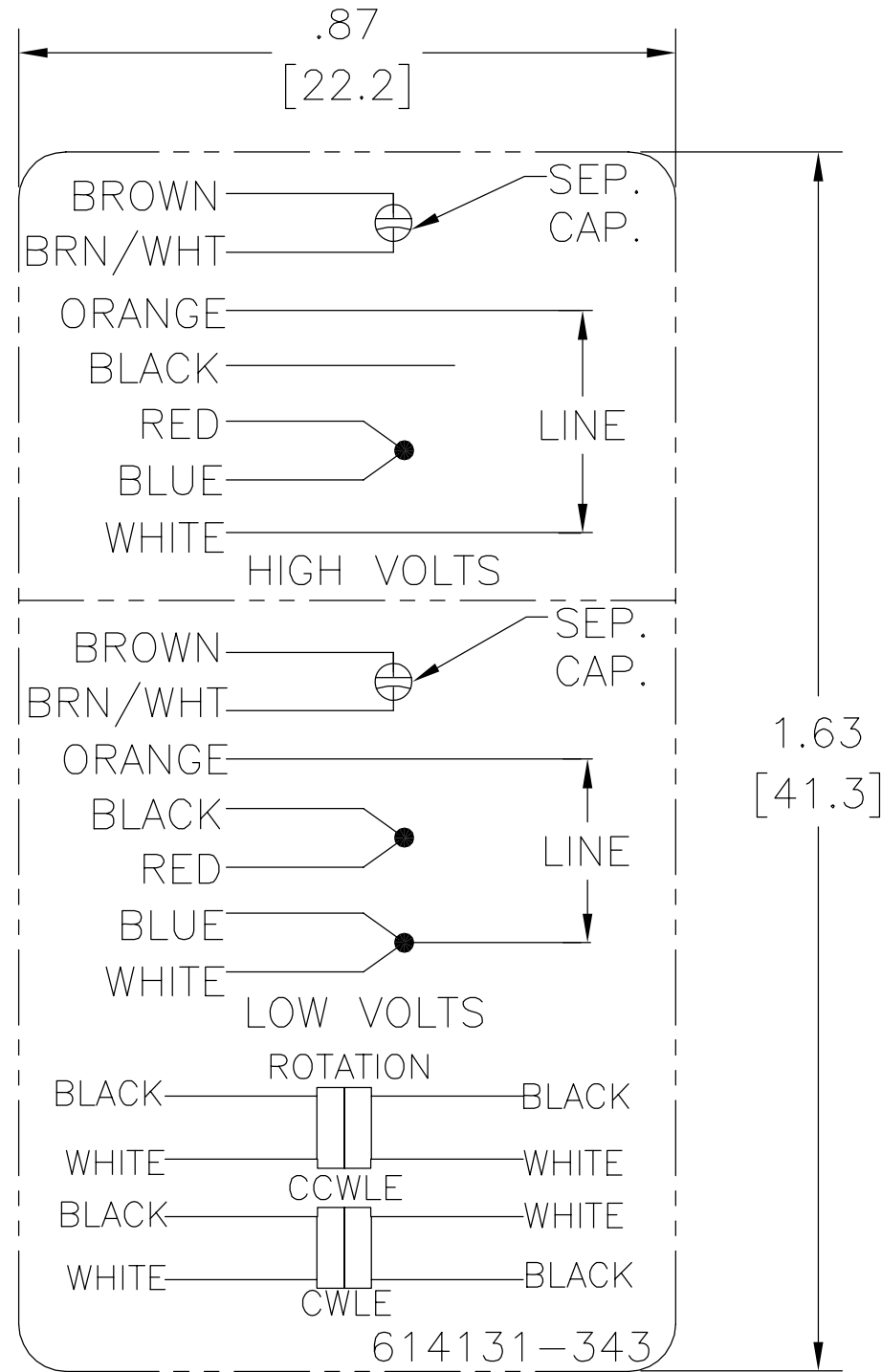
FILETEAR ESQUINA: PULG .020 mm 0.5
MAQUINAR SUPERFICIES
PULG 125 mm 3.2

DIMS METRICAS MOSTRADAS [PARENTESIS]

DIBUJADO POR:	L. Grado	02-05-2009
APROBADO POR:	C. Contreras	02-05-2009
TERCER ANGULO DE PROYECCION		FECHA EDS: 01-21-2007 REV. FORMATO: F
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		ELECTRICAL PRODUCTS COMPANY <small>A DIVISION OF A. O. SMITH CORPORATION</small>	
DESCRIPCION: CONN DIAGRAM-EXTERNAL			
TAMAÑO: A	NUMERO DE DIBUJO: 614131-343		
ESCALA:NONE			HOJA: 1

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B	0004268	Lara Grado	02-05-2009	C. Contreras 02-05-2009



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	ASME Y14.5M 1994	

		ELECTRICAL PRODUCTS COMPANY <small>A DIVISION OF A. O. SMITH CORPORATION</small>	
CONN DIAGRAM-EXTERNAL			
??	A	??	614131-343
??	NONE	??	1



Specification & Rating Report

Item Number: **159A**

Specification Number: **1**

Model Number: **F48Y37A01**

Carton Label Model
Number:

Customer Model
Number:

Agency Type:

CE: **N**

CSA: **Y**

UL: **Y**

UL Explosion Proof Rating:

Sample Number:

Customer Specification
Number:

Catalog Number: **159A**

CE Number:

CSA Number: **NO**

UL Number: **NO**

Cubic Feet Per Minute:

F2 Assembly:

UPC Model Number:

UPC Catalog Number: **786674009951**

Nameplate Drive
Bearing Type:

Nameplate Opposite
Drive Bearing Type:

Capacitor:

Capacitor Rating MFD: **15**

Control Code:

DC Design Number:

Form Factor:

Connection Diagram:

Lubrication Label
Diagram:

Outline Diagram: **159A**

Label Drive Bearing **BALL**
Type:

Label Opposite Drive **BALL**
Bearing Type:

Capacitor Included: **N**

Capacitor Rating VAC: **370**

Design Status:

Features:

Installation Diagram:

Warning Label
Diagram:

Outline Graphic: **83A**

Ambient Temperature: **60**

Insulation Class: **B**



Specification & Rating Report

Protector: AUTOMATIC	Thermal Protection:
Nameplate Overload:	Label Overload:
IP Code:	
Nameplate Enclosure: SEMI ENCL	Label Enclosure: SEMI ENCL
Frame Length: 5.125	Frame Length UOM:
Frame Diameter:	Frame Diameter UOM:
Frame Size: 48Y	
Frame Material: ROLLED STEEL	End Frame Material:
Operator Instruction Manual:	
Nameplate Mounting:	Label Mounting: STUD/RESILIENT RING
Base Height:	Base Height UOM:
Ring Diameter:	RingDiameterUOM:
Nameplate:	Carton Label:
Nameplate Location L Format:	
Brake:	Tachometer:
Layer Quantity:	Pallet Quantity:
Phase: 1	CurrentType:
DC Pole:	
Poles: 6	
Speeds: 1	
Duty: AIR OVER	
Shaft Diameter: .5	Shaft Diameter UOM: INCH
Shaft Extension: 6.0	Shaft Extension UOM: IN
Shaft Material:	Rotation: REV
Shaft Type: FLAT	
Motor Type: UF	
Motor Use:	
Nameplate 1:	
Nameplate 2:	
Nameplate Text 1:	



Specification & Rating Report

Nameplate Text 2:

Nameplate Text 3:

Nameplate Text 4:

Label Text 1: **PERMANENT**

SPLIT

CAPACITOR

Label Text 2:

Label Text 3: **CONDENSER**

FAN MOTOR

Label Text 4:

Brand Line:

Vendor Line:

Motor Weight:

Motor Weight UOM:

Shipping Weight:

Shipping Weight UOM:

Armature Field
Winding:

Core Length:

Core Length UOM:

Winding Code:

Winding Specification:

Nameplate Only
Instructions:

Nameplate & Label
Instructions:

Label Only
Instructions:



Specification & Rating Report

Rating Number: 1

Horsepower: 1

Volts: **230/460**

Hertz: **60**

Field Current:

Revolutions Per **1075**
Minute:

Service Factor: **1.0**

Service Factor Amps:

NEMA Code:

NEMA Design:

Customer Nameplate Number:

Kilowatts:

Amps: **4.7/2.4**

Maximum Amps:

Armature Current:

Power Factor:

Service Factor Volts:

NEMA Nominal Efficiency: **67.4**

NEMA Guaranteed Efficiency: