

# ABB BALDOR RELIANCE III

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## Customer information packet

ECP849156T-4

150HP, 1190RPM, 3PH, 60HZ, 447T, A44120M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

<b>Enclosure</b>	TEFC
<b>Frame</b>	447T
<b>Frame Material</b>	Iron
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	CLI GP A,B,C,D
<b>Haz Area Division</b>	Division II
<b>Motor Letter Type</b>	Three Phase
<b>Output @ Frequency</b>	150.000 HP @ 60 HZ
<b>Phase</b>	3
<b>Synchronous Speed @ Frequency</b>	1200 RPM @ 60 HZ
<b>Voltage @ Frequency</b>	460.0 V @ 60 HZ
<b>Agency Approvals</b>	CCSA US CSA EEV UR
<b>Ambient Temperature</b>	40 °C
<b>Auxiliary Box</b>	NO AUXILLARY BOX
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Current @ Voltage</b>	170.000 A @ 460.0 V
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	95.8 %
<b>Feedback Device</b>	NO FEEDBACK
<b>Haz Area Temp Code</b>	T2A
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	170.0 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	F
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Motor Lead Quantity/Wire Size</b>	3 @ 1/0 AWG

**Part Detail**

<b>Revision</b>	V
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	A44WG1496
<b>Layout</b>	617423-019
<b>Eff. date</b>	04-08-2021
<b>CD Diagram</b>	416820-036
<b>Poles</b>	06
<b>Leads</b>	3#1/0
<b>Proprietary</b>	False
<b>Created date</b>	10-19-2010

<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	A44120M
<b>Mounting Arrangement</b>	F1
<b>No Load Current</b>	38.6 a
<b>Number of Poles</b>	6
<b>Overall Length</b>	48.24 IN
<b>Power Factor</b>	86
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	3.375 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Phase Seq-Std Rot (CCWODE)
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1190 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None

**Nameplate**

**000613007ET**

<b>CAT NO</b>	ECP849156T-4	<b>SPEC NO.</b>	P44G3752			
<b>HP</b>	150	<b>AMPS</b>	170	<b>VOLTS</b> 460	<b>DESIGN</b> B	
<b>FRAME SIZE</b>	447T	<b>RPM</b>	1190	<b>HZ</b> 60	<b>AMB</b> 40	<b>SF</b> 1.15
<b>D.E. BRG.</b>	90BC03J30X	<b>PH</b>	3	<b>DUTY</b> CONT	<b>INSUL.CLASS</b>	F
<b>O.D.E. BRG.</b>	90BC03J30X	<b>TYPE</b>	P	<b>ENCL</b> TEFC	<b>CODE</b>	F
<b>D.E.BRG.DATA</b>	6318	<b>POWER FACTOR</b>	85.5		<b>NEMA-NOM-EFFICIENCY</b>	95.8
<b>O.D.E.BRG.DATA</b>	6318	<b>MAX CORR KVAR</b>	25.0		<b>GUARANTEED EFFICIENCY</b>	95.0
<b>3/4 LOAD EFF.</b>	95.8	<b>NEMA NOM/CSA QUOTED EFF</b>				
<b>SER.NO.</b>		<b>MOTOR WEIGHT</b>	2598			

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**000613007EX**

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<b>CAT NO</b>	ECP849156T-4	<b>SPEC NO.</b>	P44G3752	
<b>NO. ROTOR BARS</b>	71	<b>GREASE TYPE</b>	POLYREX EM	
<b>NO. SLOTS</b>	90	<b>NL AMPS AT RATED VOLTAGE</b>		38.6
<b>5 YEAR WARRANTY</b>		<b>WINDING RES @25 C</b>	.03239	<b>OHMS</b>
<b>MFG. DATE</b>		<b>SER.NO</b>		

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**000692000UJ**

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<b>TCODE</b>	<b>T2A</b>	<b>TEMP</b>	<b>280</b>	<b>CL I DIV 2 GR</b>	<b>ABCD</b>
<b>CL.1,ZONE 2,GR</b>	IIAIIIBIC	<b>CL II DIV 2 GR</b>		<b>X X X</b>	
<b>MOTOR I.D. NO.</b>					

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REL. S.O.	FRAME	HP	TYPE	PHASE/HERTZ	RPM	VOLTS
	447T	150	P	3/60	1190	460

AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
170	CONT	40/F	1.15	B	F	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)
833241	418143080ME	---	---	.0324

**PERFORMANCE**

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	42.5	1200	3.70	0
1/4	37.6	65.5	1197	56.6	94.9
2/4	75.1	94.9	1194	76.9	96.3
3/4	112	130	1191	83.9	96.2
4/4	150	170	1188	86.3	95.8
5/4	188	213	1184	86.8	95.1

**SPEED TORQUE**

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	121	799	1025
PULL UP	180	97.2	644	1002
BREAKDOWN	1150	236	1563	592
FULL LOAD	1188	100	663	170

AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS: TYPICAL DATA  
NEMA NOMINAL EFFICIENCY = 95.4 PCT.



DR. BY W. L. SMITH  
CK. BY J. J. HARRISON  
APP. BY W. L. SMITH  
DATE 04/27/10

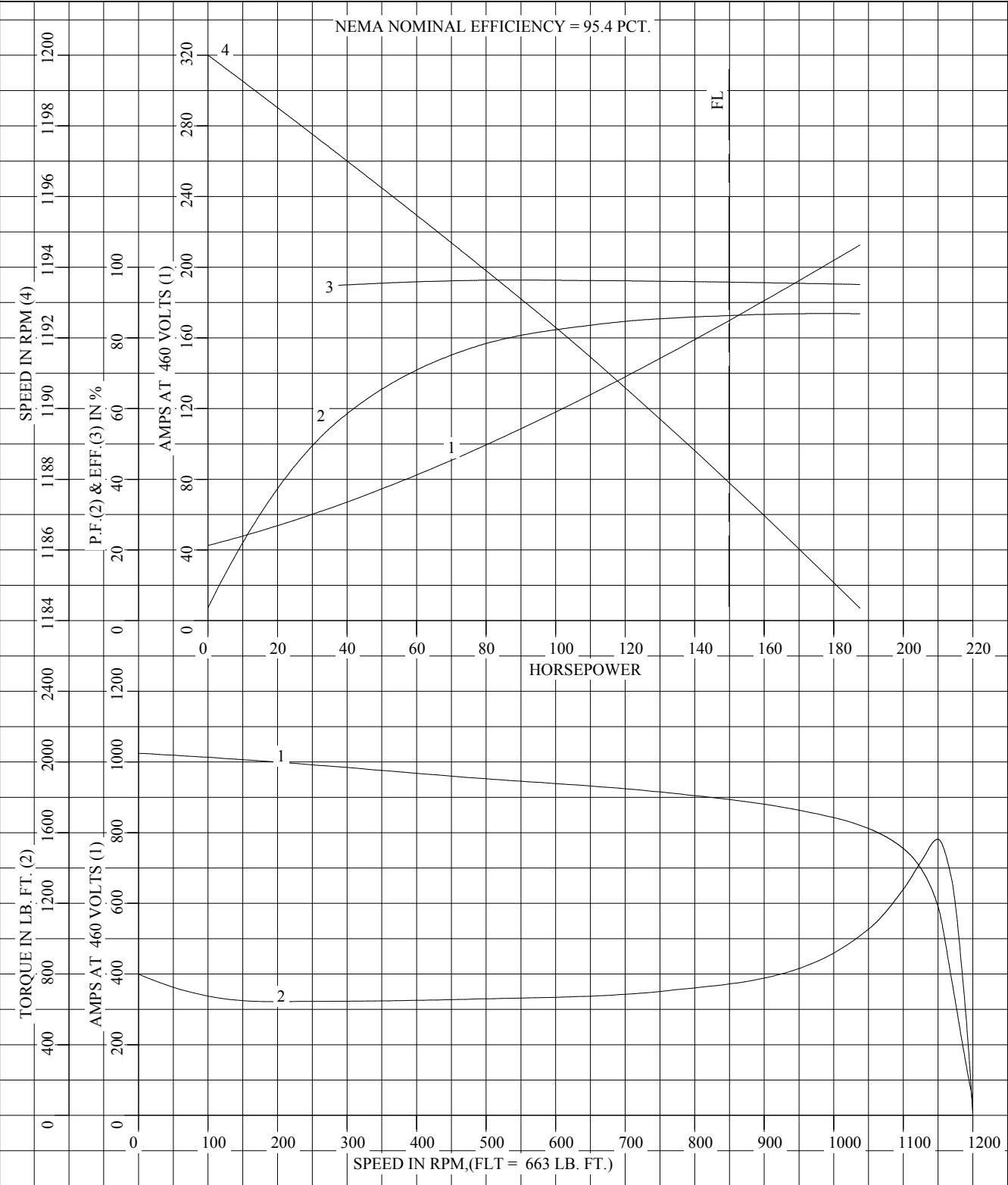
**A-C MOTOR  
PERFORMANCE A44WG1496-R001  
DATA** ISSUE DATE 12/18/10

FRAME 447T  
HP 150  
TYPE P  
PHASE/HERTZ 3/60

RPM 1190  
VOLTS 460  
AMPS 170  
DUTY CONT  
AMB °C/INSUL 40/F

NEMA DESIGN B  
CODE LETTER F  
ENCLOSURE TEFC  
E/S 833241

TEST S.O. TYPICAL DATA  
TEST DATE ---  
STATOR RES. @ 25 °C .0324  
OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY W. L. SMITH  
CK. BY J.J.HARRISON  
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DATE 04/27/10

**A-C MOTOR  
PERFORMANCE CURVES** A44WG1496-R001  
ISSUE DATE 12/18/10

REL. S.O.

RPM 1190

S.F. 1.15

ROTOR 418143080ME

FRAME 447T

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 150

AMPS 170

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

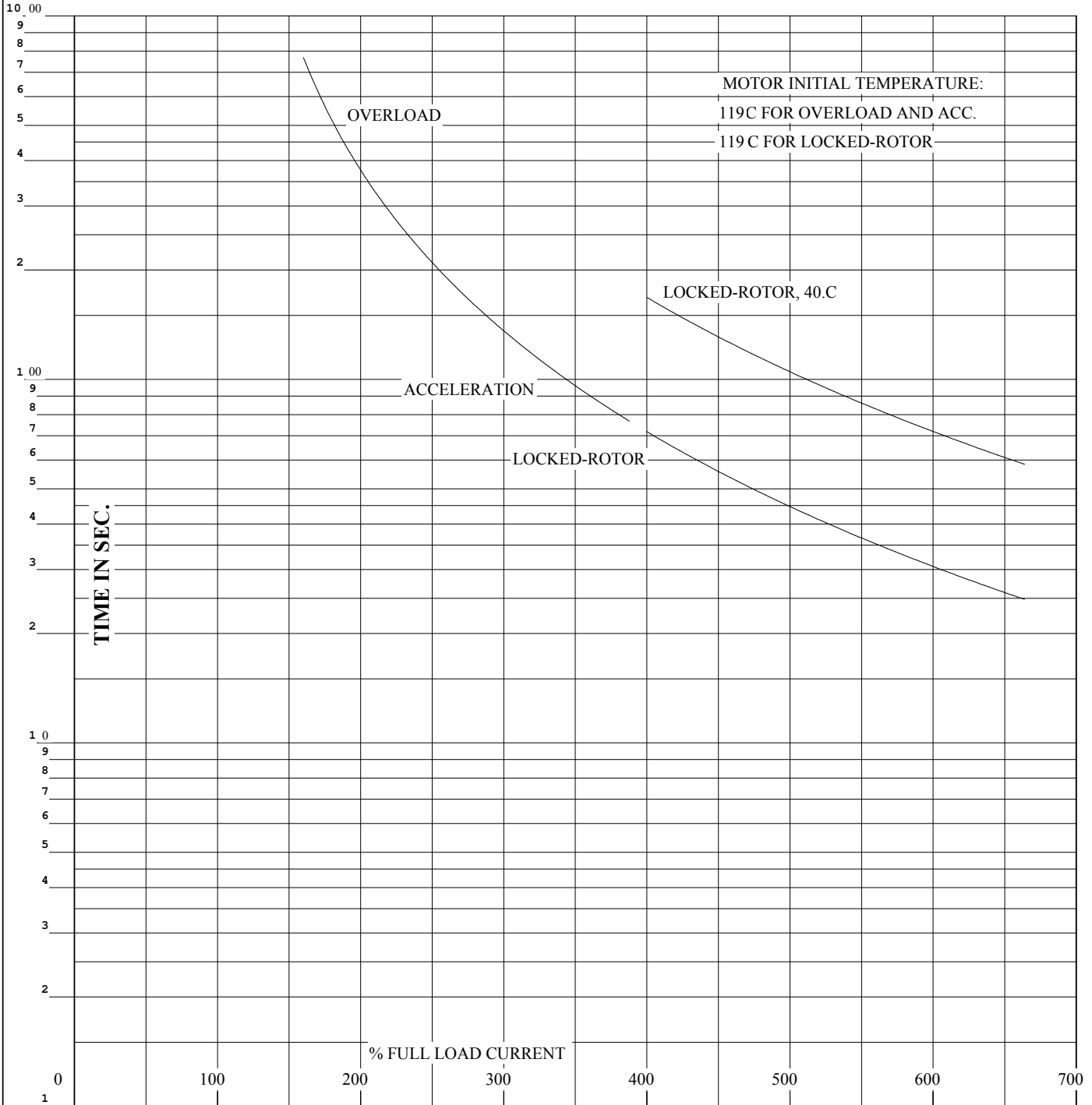
STATOR RES. @ 25 °C .0324

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 833241

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: NEMA NOMINAL EFFICIENCY = 95.4 PCT.

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 DATE 04/27/10

**A-C MOTOR  
 PERFORMANCE A44WG1496-R001  
 CURVES** ISSUE DATE 12/18/10

# DUTY MASTER ALTERNATING CURRENT MOTORS

## SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

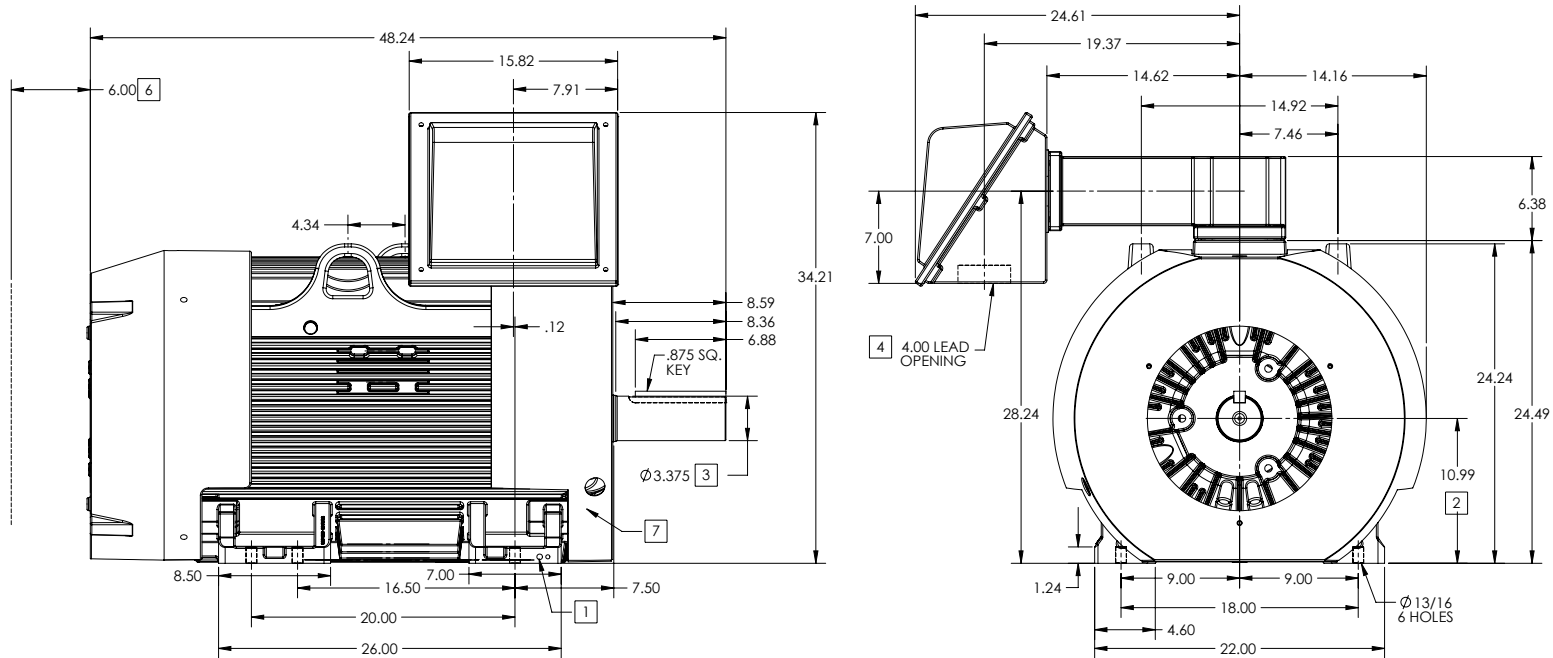
FRAME G447T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445T FRAME MOUNTING HOLES

841-XL



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.00,-.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET.
7. AIR DEFLECTOR INSTALLED WHEN REQUIRED.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.  
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .0015" T.I.R. FOR BALL BEARING MOTORS AND .002" T.I.R. FOR ROLLER BEARING MOTORS TO 5 INCH DIA.

WEIGHT (LBS): 2545

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. A	VERSION: 01	REVISED: 01-09-13 08/19/2010	TDR: 00000554409
MODEL NO. 617423-019		REF:	
BY: RAGTBM		Material:	

**BALDOR**

DIM SHEET G445/447T TEFC HORIZ FT MTG 841-XL

617423-019

# DUTY MASTER ALTERNATING CURRENT MOTORS

## SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

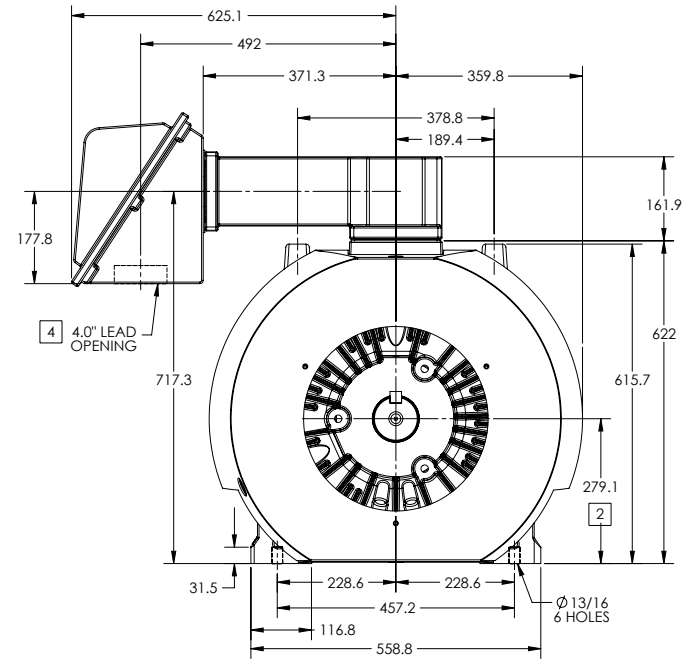
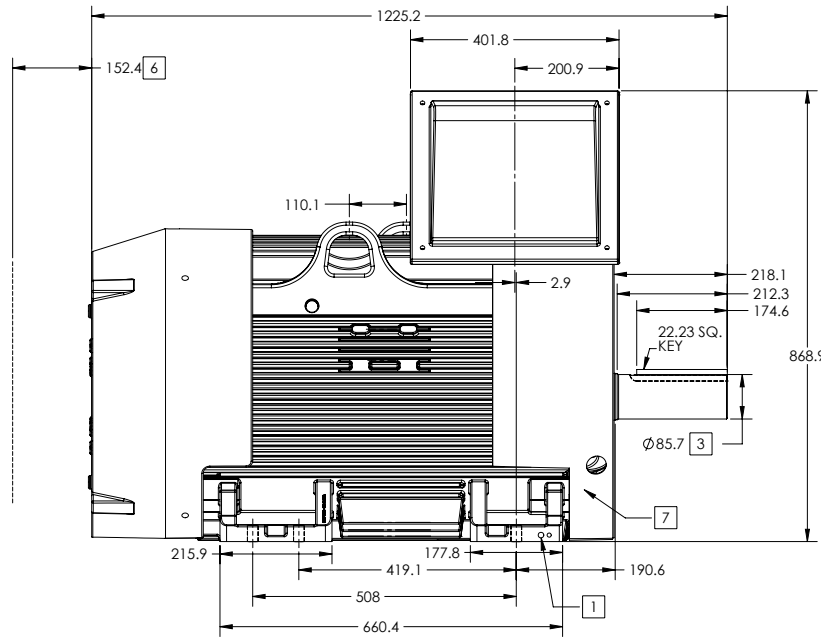
FRAME G447T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445T FRAME MOUNTING HOLES

841-XL



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MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .04 MM T.I.R. FOR BALL BEARING MOTORS AND .05MM T.I.R. FOR ROLLER BEARING MOTORS TO 127 MM DIA.

WEIGHT (KGS): 1155

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. A	VERSION: 01	REVISED: 01-09-13 08/19/2010	TDR: 00000554409
MODEL NO. 617423-019		REF:	
BY: RAGTBM		Material:	

**BALDOR**

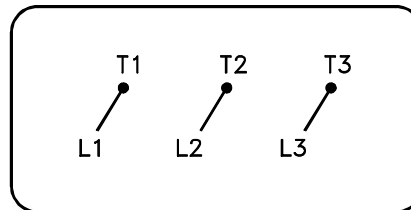
DIM SHEET G445/447T TEFC HORIZ FT MTG 841-XL

610-E2719

617423-019

416820-036

**A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 3 LEAD CONNECTED**



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682	REVISED: 11: 54: 06 04/30/2010	
MTL: -	BY: RAGRA	

**BALDOR**

CONN DIAG - STANDARD 3 LEAD  
SH 1 of 1