

ABB BALDOR RELIANCE III

Customer information packet

ECP849156T-4

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

Class - CLI GP A,B,C,D

Division - Division II

Specifications

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

Part Detail

Revision	W
Type	AC
Mech. spec.	
Base	
Status	NLA/A
Elec. spec.	A44WG1496
Layout	617423-019
Eff. date	09-29-2026
CD Diagram	416820-036
Poles	06
Leads	3#1/0
Proprietary	False
Created date	10-19-2010

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

Nameplate

000613007ET											
CAT NO	ECP849156T-4			SPEC NO.		P44G3752					
HP	150	AMPS	170		VOLTS		460		DESIGN	B	
FRAME SIZE	447T	RPM	1190		HZ	60	AMB	40	SF	1.15	
D.E. BRG.	90BC03J30X		PH	3	DUTY	CONT		INSUL.CLASS		F	
O.D.E. BRG.	90BC03J30X		TYPE	P	ENCL	TEFC	CODE	F			
D.E.BRG.DATA	6318		POWER FACTOR			85.5		NEMA-NOM-EFFICIENCY			95.8
O.D.E.BRG.DATA	6318		MAX CORR KVAR			25.0		GUARANTEED EFFICIENCY			95.0
3/4 LOAD EFF.	95.8		NEMA NOM/CSA QUOTED EFF								
SER.NO.				MOTOR WEIGHT			2598				

000613007EX				
CAT NO	ECP849156T-4	SPEC NO.	P44G3752	
NO. ROTOR BARS	71	GREASE TYPE	POLYREX EM	
NO. SLOTS	90	NL AMPS AT RATED VOLTAGE		38.6
5 YEAR WARRANTY		WINDING RES @25 C	.03239	OHMS
MFG. DATE		SER.NO		

000692000UJ					
TCODE	T2A	TEMP	280	CL I DIV 2 GR	ABCD
CL.1,ZONE 2,GR	IIAIIIBIIC	CL II DIV 2 GR		X X X	
MOTOR I.D. NO.					

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		A-C MOTOR PERFORMANCE A44WG1496-R001 DATA ISSUE DATE 12/18/10					
		CK. BY J. J. HARRISON							
		APP. BY W. L. SMITH							
		DATE 04/27/10							

FRAME 447T

RPM 1190

VOLTS 460

NEMA DESIGN B

HP 150

AMPS 170

CODE LETTER F

TEST S.O. TYPICAL DATA

TYPE P

DUTY CONT

ENCLOSURE TEFC

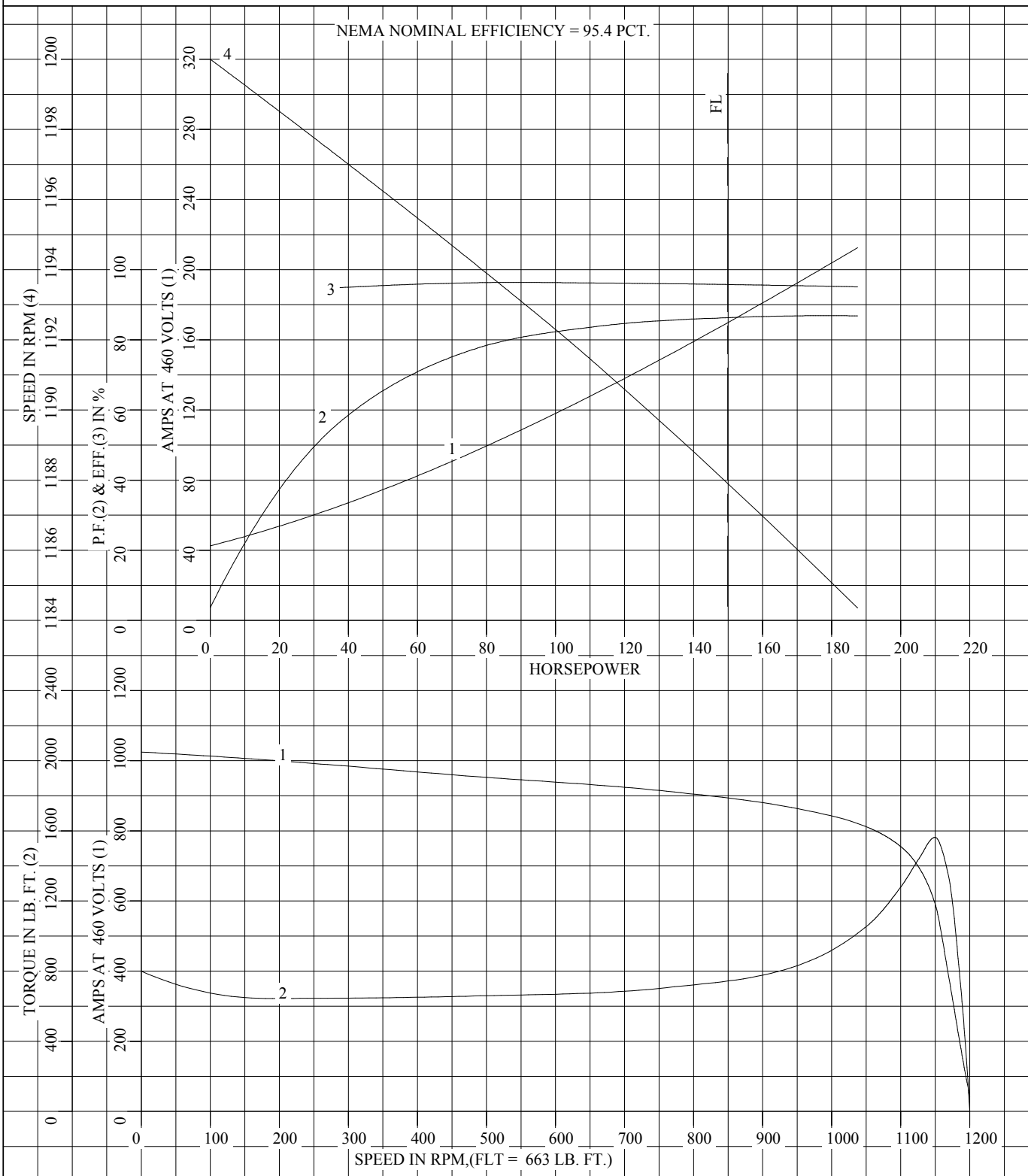
TEST DATE ---

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 833241

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.

BALDOR

DR. BY W. L. SMITH
CK. BY J.J. HARRISON
APP. BY W. L. SMITH
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

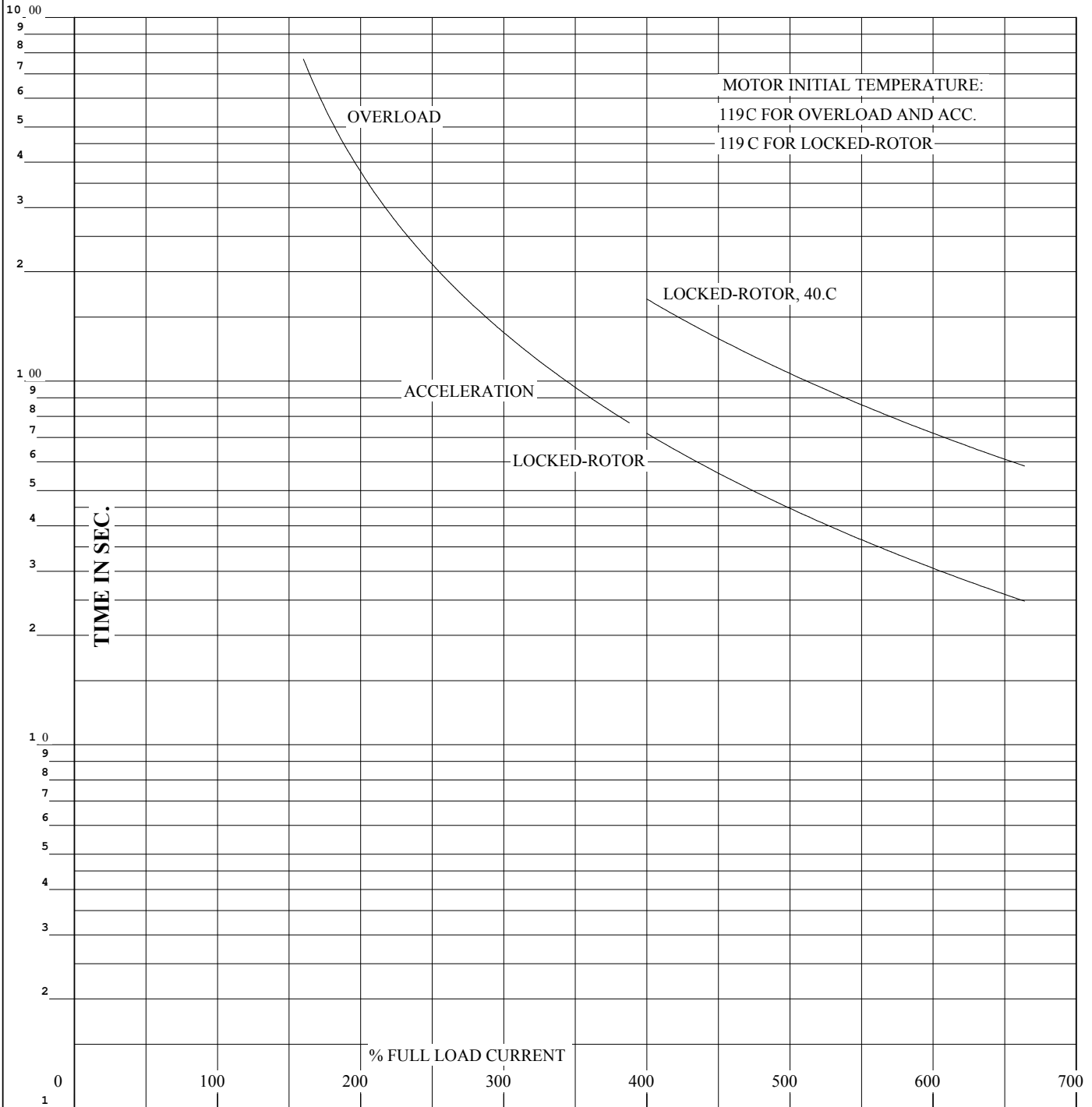
STATOR RES. @ 25 °C .0324

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.

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

BALDOR

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
CURVES** ISSUE DATE 12/18/10

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

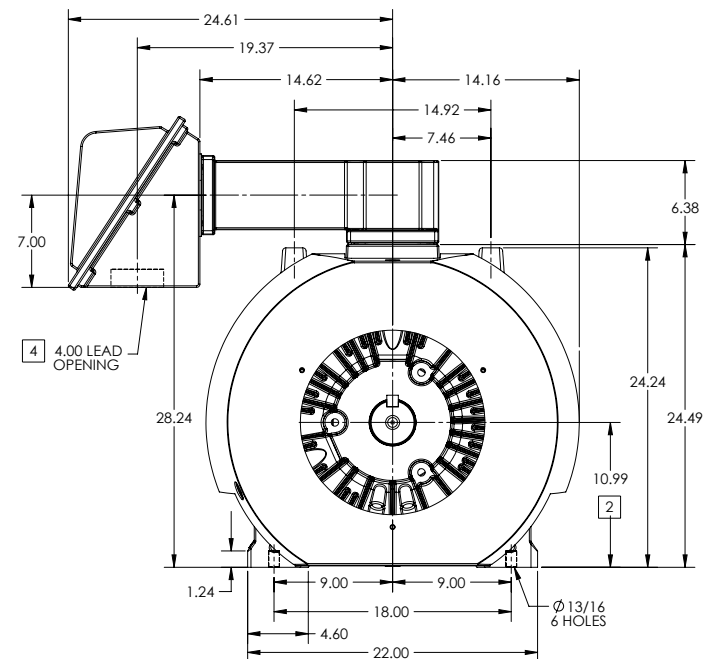
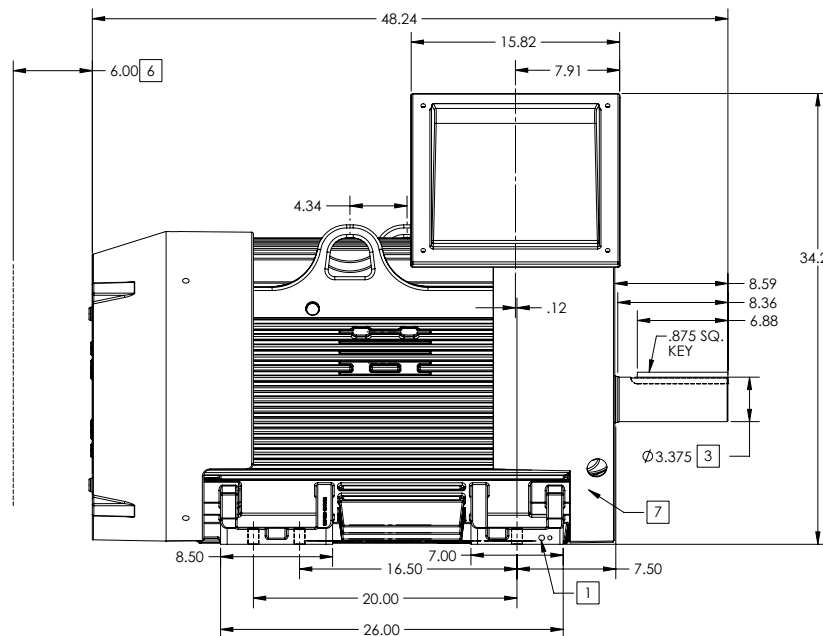
FRAME G447T ABOVE NEMA RATINGS

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 NOT ENCR OACH 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.

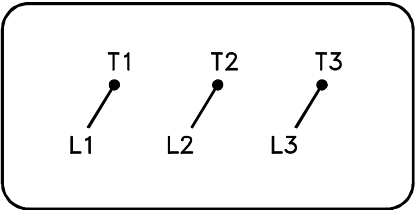
REV. DESC: ADDED NOTE #7 TO DRAWING	
REV: A	VERSION: 01
MODEL NO. 617423-019	REVISED: 01-09-13 08/19/2010
BY: RAGTBM	TDR: 000006554409
Material:	REF:

BALDOR

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

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