

ABB BALDOR RELIANCE III

Customer information packet

ECP4408TR-4

250HP, 1785RPM, 3PH, 60HZ, 449T, A44140M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	449T
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	250.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Mobil SHC 220 (Athens Only)
Constant Torque Speed Range	30-60
Current @ Voltage	276.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	276.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 1/0 AWG
Motor Standards	Other

Part Detail

Revision	R
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG5150
Layout	617427-003
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	04
Leads	3#1/0 (02 per group)
Proprietary	False
Created date	08-15-2012

Motor Type	A44144M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	53.24 IN
Power Factor	88
Pulley End Bearing Type	Roller
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	3.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

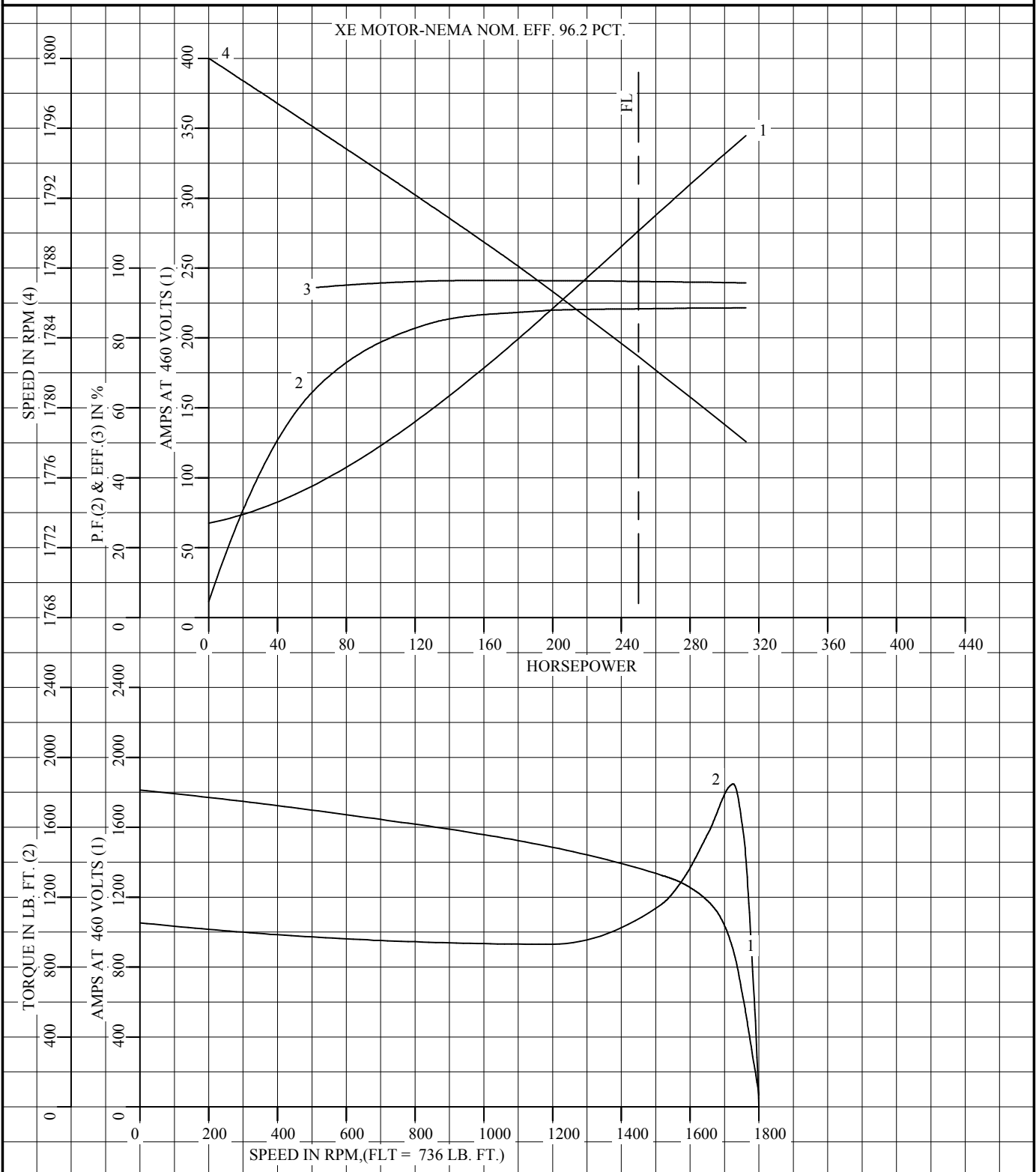
Nameplate

NP3238															
CAT NO	ECP4408TR-4				SPEC NO.	P44G3937									
HP	250	AMPS	276			VOLTS	460			DESIGN	B				
FRAME	449T	RPM	1785	HZ	60	AMB	40	SF	1.15						
D.E. BRG.DATA	NU222		O.D.E. BRG.DATA			6318		PH	3	DUTY	CONT	INSUL.CLASS	F		
D.E. BRG.	110RU02M30X			TYPE	P	ENCL	TEFC	CODE	G						
O.D.E. BRG.	90BC03J30X			POWER FACTOR			88	NEMA NOM EFFICIENCY			96.2				
3/4 LOAD EFF.	96.5	MAX CORR KVAR			39	GUARANTEED EFFICIENCY			95.4						
TEMP CODE	T3	TEMP =	200												
CHP HZ	60-90	CT HZ	30-60		VT HZ	0-60									
INVERTER-TEMP-CODE	T3														
SER.NO.					MOTOR WEIGHT			2995							

NP2496L	
MOBIL SHC -220 GREASE	

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	449T	250	P	3/60	1785	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
276	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
833428	418143052LE	---	---	.0128		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	67.9	1800	4.53	0	
1/4	62.6	94.4	1796	65.7	94.4	
2/4	125	145	1792	83.6	96.2	
3/4	187	208	1788	87.6	96.4	
4/4	250	276	1783	88.3	96.2	
5/4	313	345	1778	88.6	95.7	
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	143	1053	1813		
PULL UP	1200	126	931	1486		
BREAKDOWN	1726	251	1847	893		
FULL LOAD	1783	100	736	276		
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE						
REMARKS: TYPICAL DATA XE MOTOR-NEMA NOM. EFF. 96.2 PCT.						
		DR. BY J. P. TSAO		A-C MOTOR PERFORMANCE DATA A44WG5150-R001 ISSUE DATE 04/23/21		
		CK. BY C. E. JAMISON				
		APP. BY W. L. SMITH				
		DATE 11/20/14				

REL S.O.	RPM 1785	S.F. 1.15	ROTOR 418143052LE
FRAME 449T	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 250	AMPS 276	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0128
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 833428	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
A MEMBER OF THE ABB GROUP

DR. BY J. P. TSAO
CK. BY C. E. JAMISON
APP. BY W. L. SMITH
DATE 11/20/14

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG5150-R001

ISSUE DATE 04/23/21 Page 7 of 11

REL. S.O.

RPM **1785**

S.F. **1.15**

ROTOR **418143052LE**

FRAME **449T**

VOLTS **460**

NEMA DESIGN **B**

TEST S.O. **TYPICAL DATA**

HP **250**

AMPS **276**

CODE LETTER **G**

TEST DATE **---**

TYPE **P**

DUTY **CONT**

ENCLOSURE **TEFC**

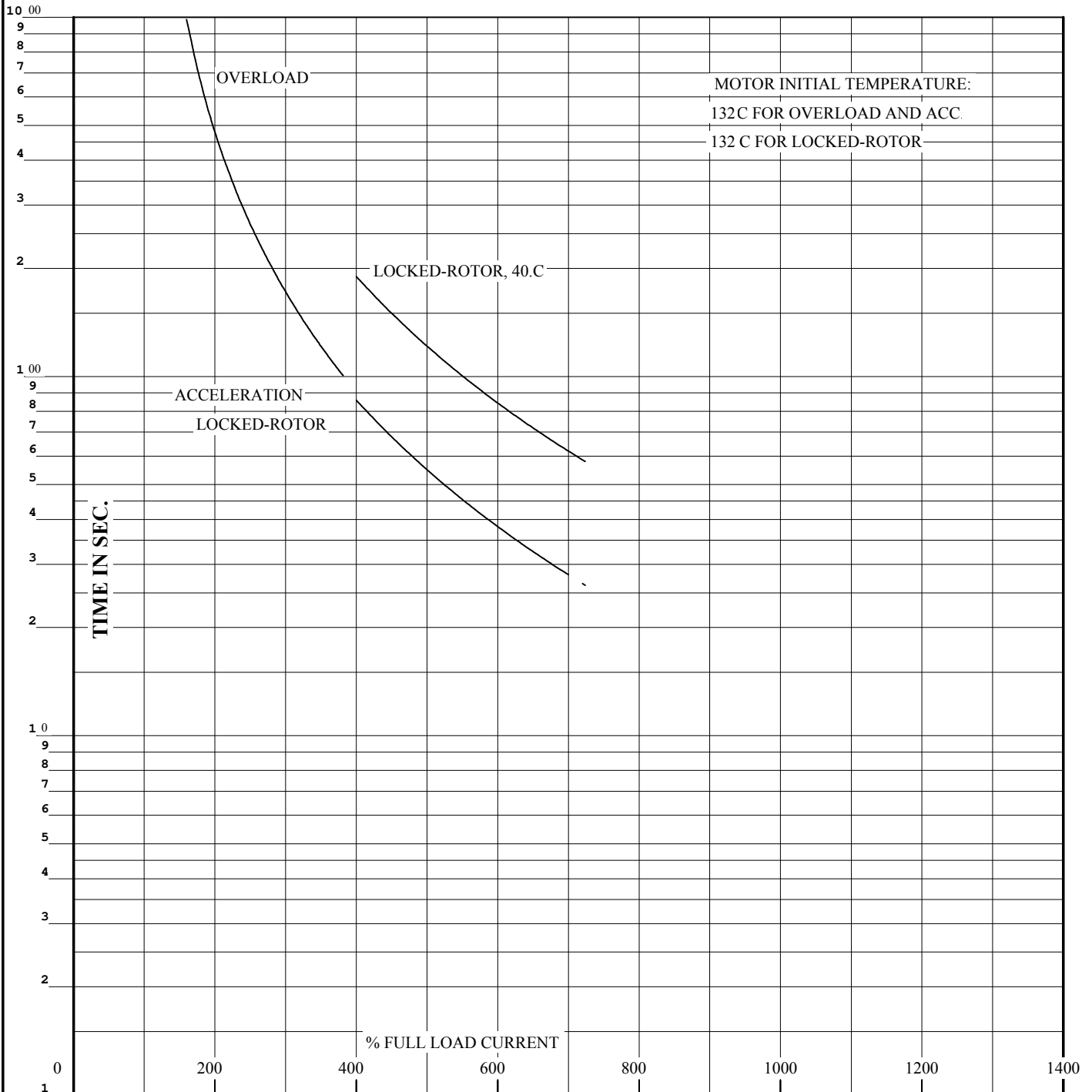
STATOR RES. @ 25 °C **.0128**

PHASE/HERTZ **3/60**

AMB °C/INSUL **40/F**

E/S **833428**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR-NEMA NOM. EFF. 96.2 PCT.

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

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**A-C MOTOR
PERFORMANCE
CURVES**
A44WG5150-R001

ISSUE DATE 04/23/21 Page 8 of 11

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

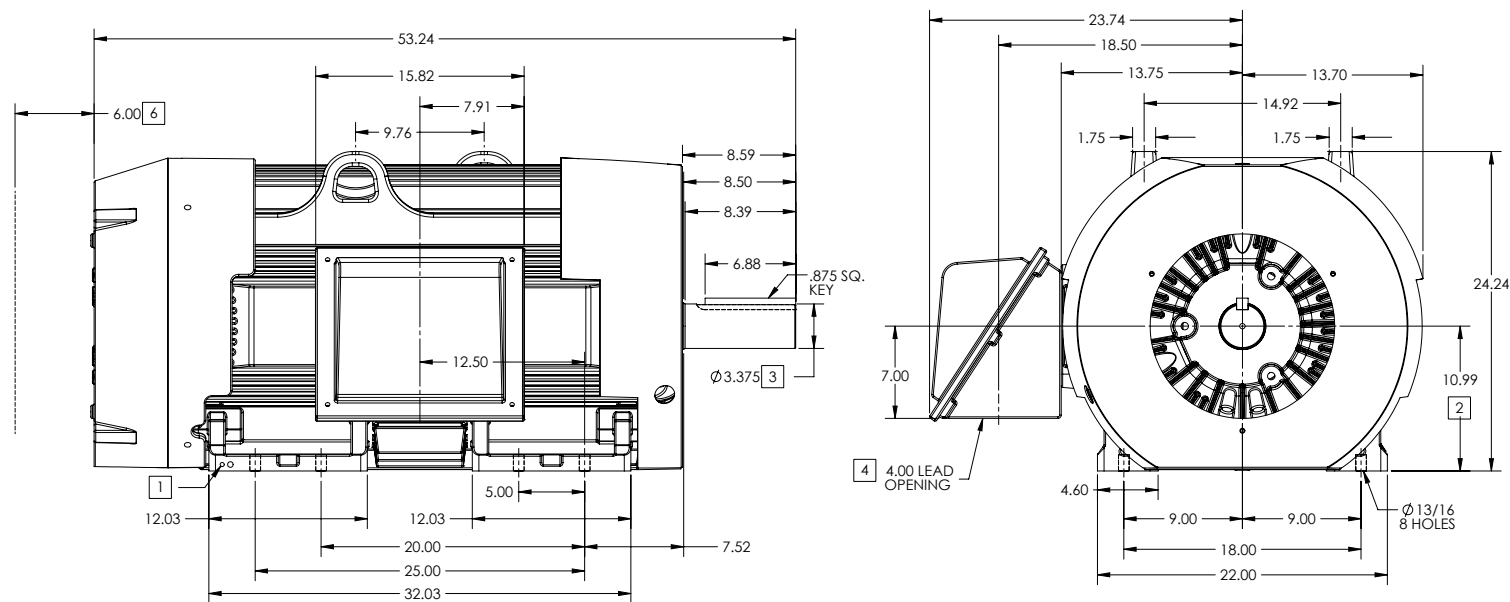
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-.06
3. VARIES +.000,-.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 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

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 .003" T.I.R. TO 5 INCH DIA.

[5] WEIGHT (LBS): 3080

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

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

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

SHEET NUMBER
1 OF 2

500P-LCP-119

REV. DESC: NEW DRAWING	VERSION: 02	REVISED: 11/32/36 10/23/2017	TDR: 000001048162
MODEL NO. 617427-003	BY: RAGRA		

BALDOR

G449T/447T STD - FOOTED - SIDE/CENTER C/B

617427-003

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

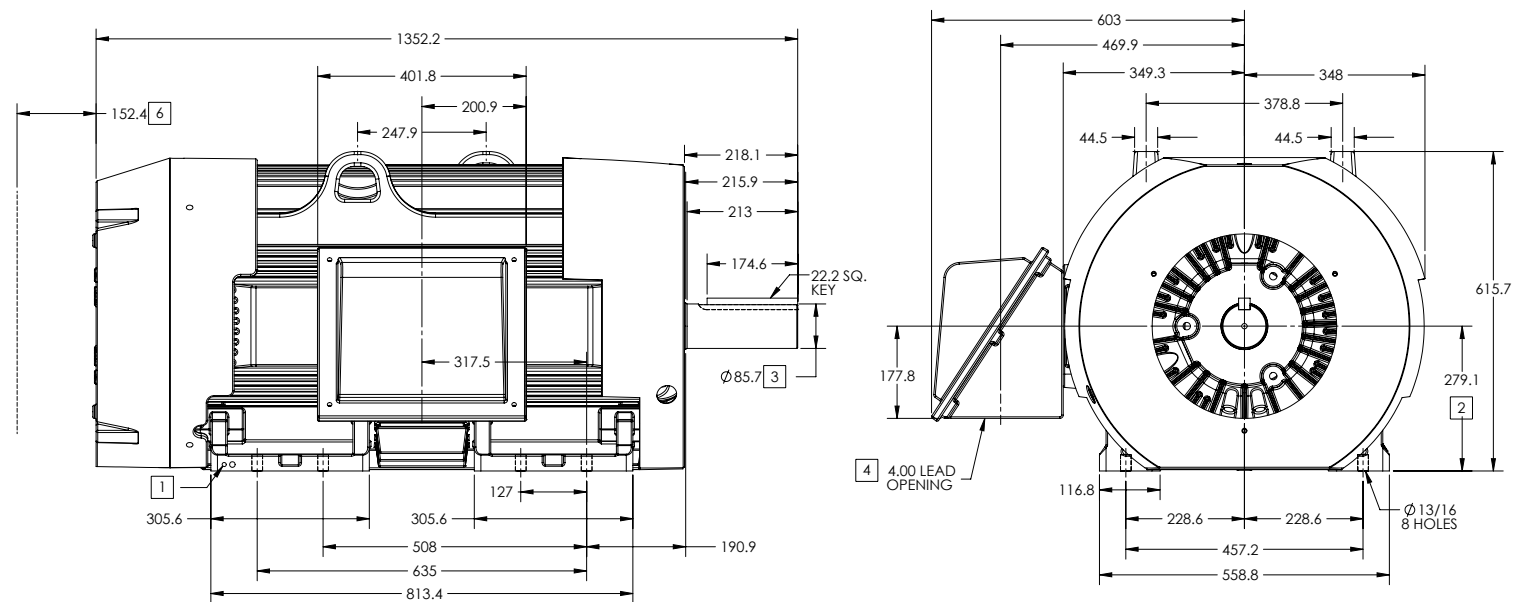
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00, -.06
3. VARIES +.000, -.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 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

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 .08 MM T.I.R. TO 127 MM DIA.

[5] WEIGHT (KGS): 1400

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

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

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

 SHEET NUMBER
2 OF 2

500P-LCP-119

REV. DESC. NEW DRAWING			
REV. B	VERSION: 02	REVISED: 11/32/36 10/23/2017	TDR: 000001048162
MODEL NO. 617427-003			
BY: RAGRA			

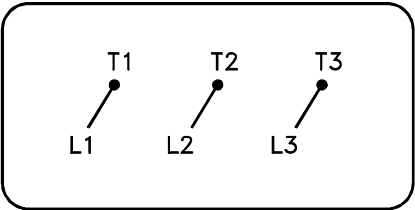
BALDOR

G449T/447T STD - FOOTED - SIDE/CENTER C/B

617427-003

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