

ABB BALDOR RELIANCE III

Customer information packet

ECP4408T-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	Polyrex EM (-20F +300F)
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	NEMA

Part Detail

Revision	T
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	08-10-2012

Motor Type	A44144M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	53.24 IN
Power Factor	88
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	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	ECP4408T-4			SPEC NO.		P44G3936							
HP	250	AMPS	276	VOLTS		460			DESIGN	B			
FRAME	449T	RPM	1785	HZ	60	AMB	40	SF	1.15				
D.E. BRG.DATA	6318	O.D.E. BRG.DATA			6318	PH	3	DUTY	CONT	INSUL.CLASS	F		
D.E. BRG.	90BC03J30X			TYPE	P	ENCL	TEFC	CODE	G				
O.D.E. BRG.	90BC03J30X			POWER FACTOR			88	NEMA NOM EFFICIENCY			96.2		
3/4 LOAD EFF.	96.6	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			2981						

Parts List

Part number	Description	Quantity
SA249391	SA P44G3936	1.000 ea
RA236256	RA P44G3936	1.000 ea
NP3238	SS CP XEX SEVERE DUTY MAIN NP,CURUS EEV	1.000 ea
000692000FF	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
004824015A	GREASE POLYREX EM	1.156 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
032620016LA	SOCKET SET SCREW-449	3.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
034530064AB	P/NIP 1/8 X 8" L Pipe Nipple	1.000 ea
034530064BB	P/NIP 1/4X8 PLATED	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034690005AB	PPLG 3/4 PLATED	2.000 ea
078548001R	FAN KB 234/150 (84) 400	1.000 ea
083199082RA	G28 SHORT FAN COVER W/BAFFLE ASSEMBLY	1.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
410700004A	WSHR	1.000 ea
415045002A	SLGR	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
034530064AB	P/NIP 1/8 X 8" L Pipe Nipple	1.000 ea
034530064BB	P/NIP 1/4X8 PLATED	1.000 ea

034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
089490099A	G28 BRKT 089490098WCA KB	1.000 ea
415915007G	GASK, LAC	1.000 ft
415045002E	SLGR	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
418151014G	RETAIN RING	1.000 ea
702623022A	G28 AIR DEFLECTOR DRIVE END -- PLASTIC	1.000 ea
702623013A	THERMAL BARRIER -- G28 -- BRACKET MTD	1.000 ea
032018008BK	HHCS 5/16-18X1L PLATED	4.000 ea
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
067053014A	GASK 440	1.000 ea
076870000BA	CONDUIT BOX - 440 - 1/2-13 GROUND	1.000 ea
076871000A	+CBOX CVR BLKT - 449	1.000 ea
406056007A	GASKET, 440	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180054KA	7/8 SQ X 6.75 KEY	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.375 ga
004824003CBY	WILKO PAINT 060.02 - ACTIVATOR	0.094 ga
L482401016	SPRAY AC-29-7S	0.019 ga
421948051	LABEL, MYLAR	1.000 ea
PK5005A01	WOODEN BASE 449, 60 X 41-1/2	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
412118006A	DRAIN	2.000 ea

Accessories

Part number	Description	Multiplier
089490106A	G28 C-FACE BRKT MACH-6318 089490105WCA	P1

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**

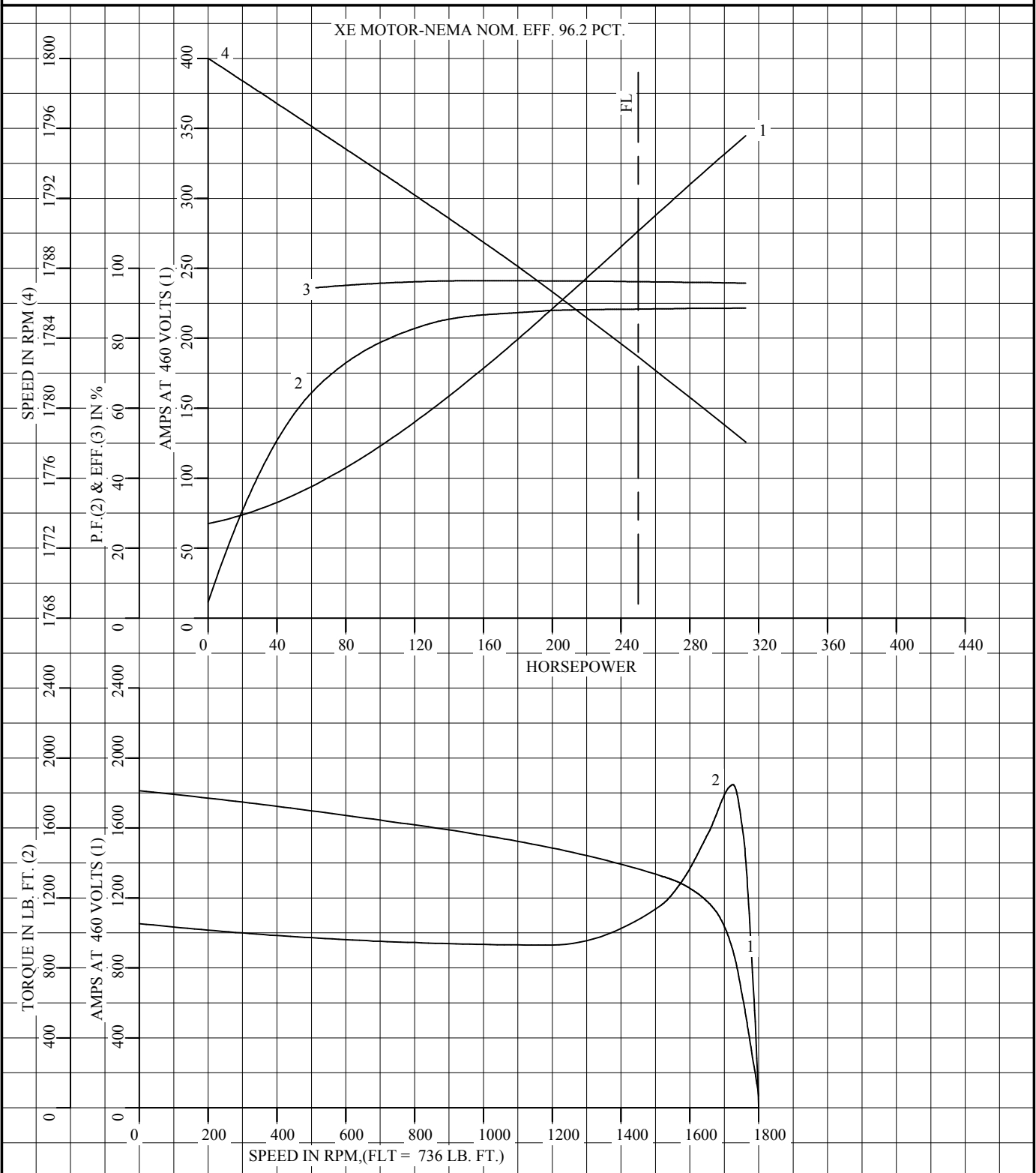
 STATOR RES. @ 25 °C **.0128**

 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 9 of 13

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**

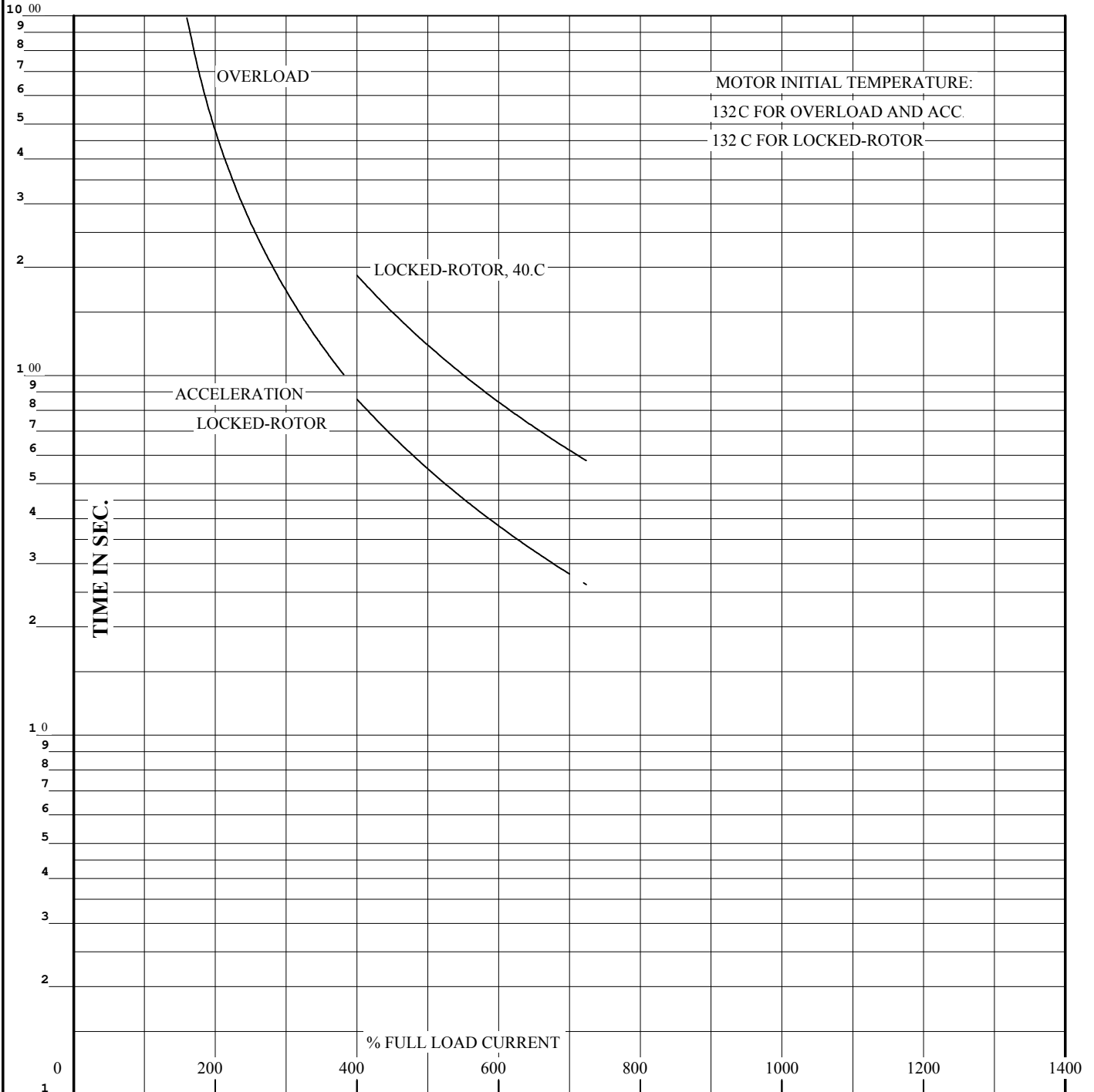
STATOR RES. @ 25 °C **.0128**

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.

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 10 of 13

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

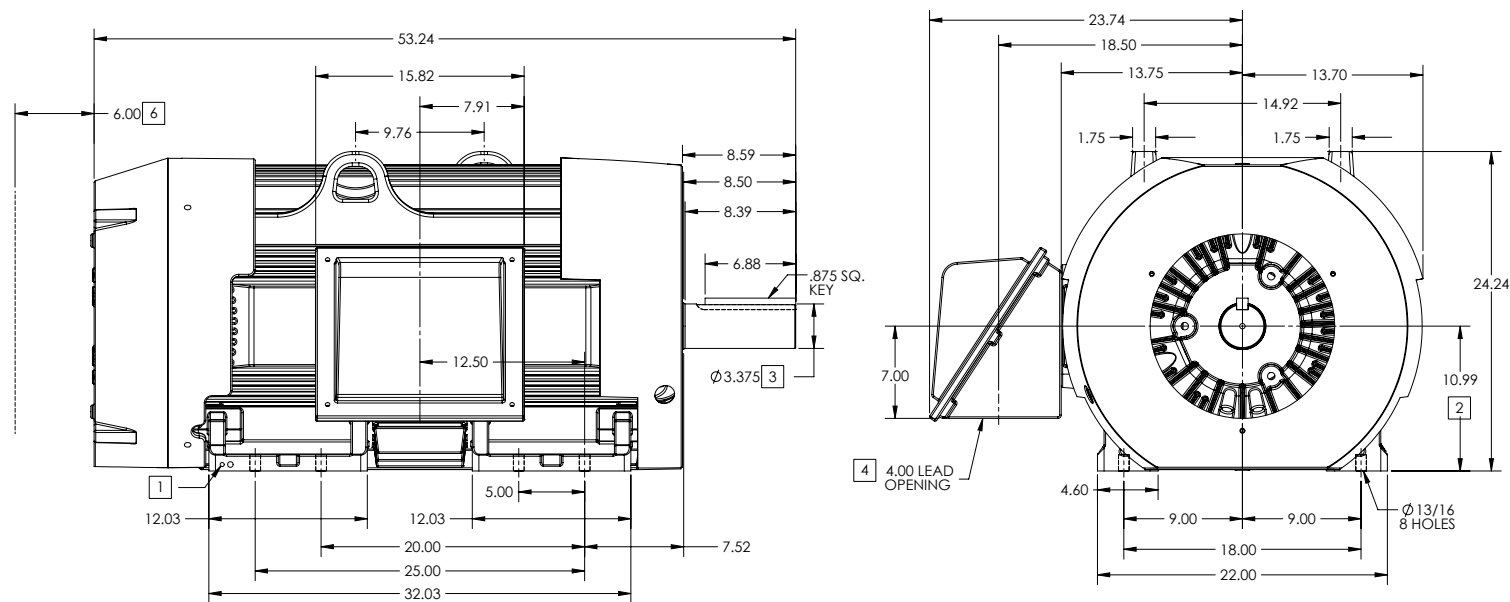
ENCLOSURE: TOTALLY ENCLOSED

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

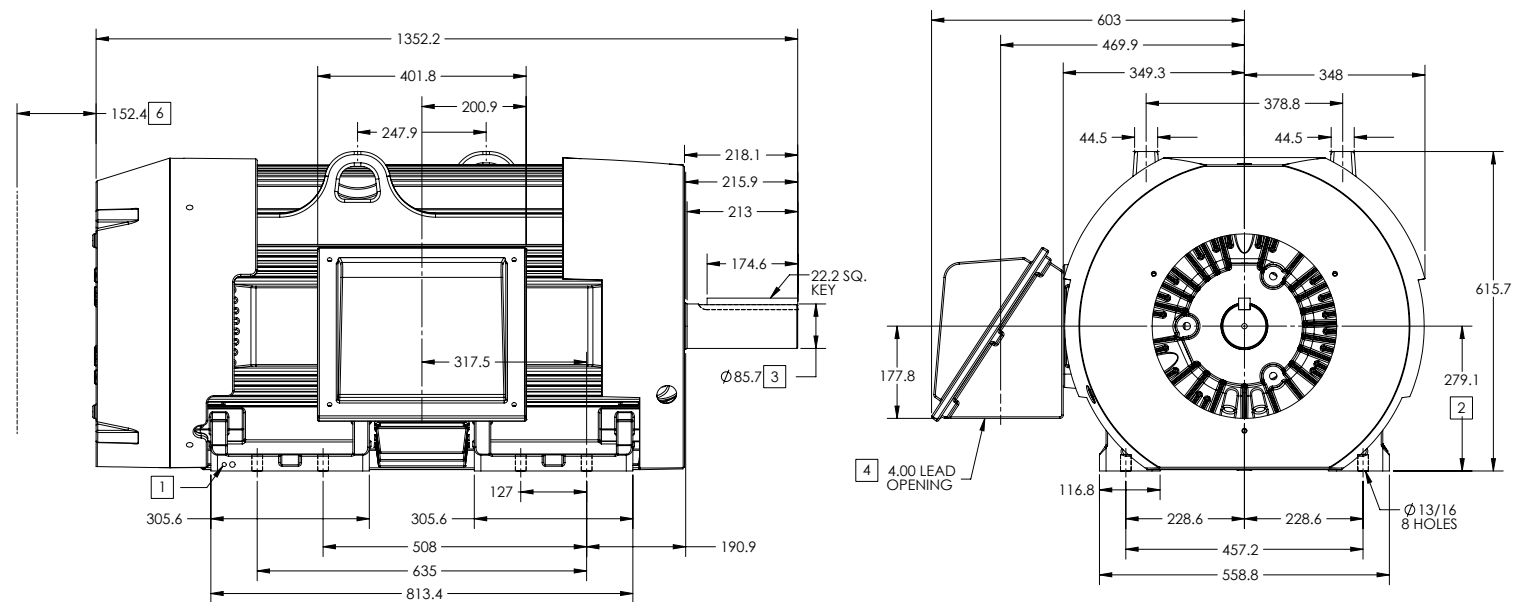
ENCLOSURE: TOTALLY ENCLOSED

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			

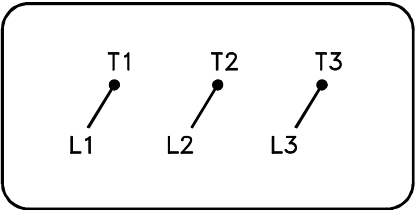
BALDOR

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