

ABB BALDOR RELIANCE III

Customer information packet

ECP4407T-4

200HP, 1785RPM, 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	200.000 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	222.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	222.0 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

Part Detail

Revision	W
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG0690
Layout	617427-002
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 Standards	NEMA
Motor Type	A44120M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	48.24 IN
Power Factor	87
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

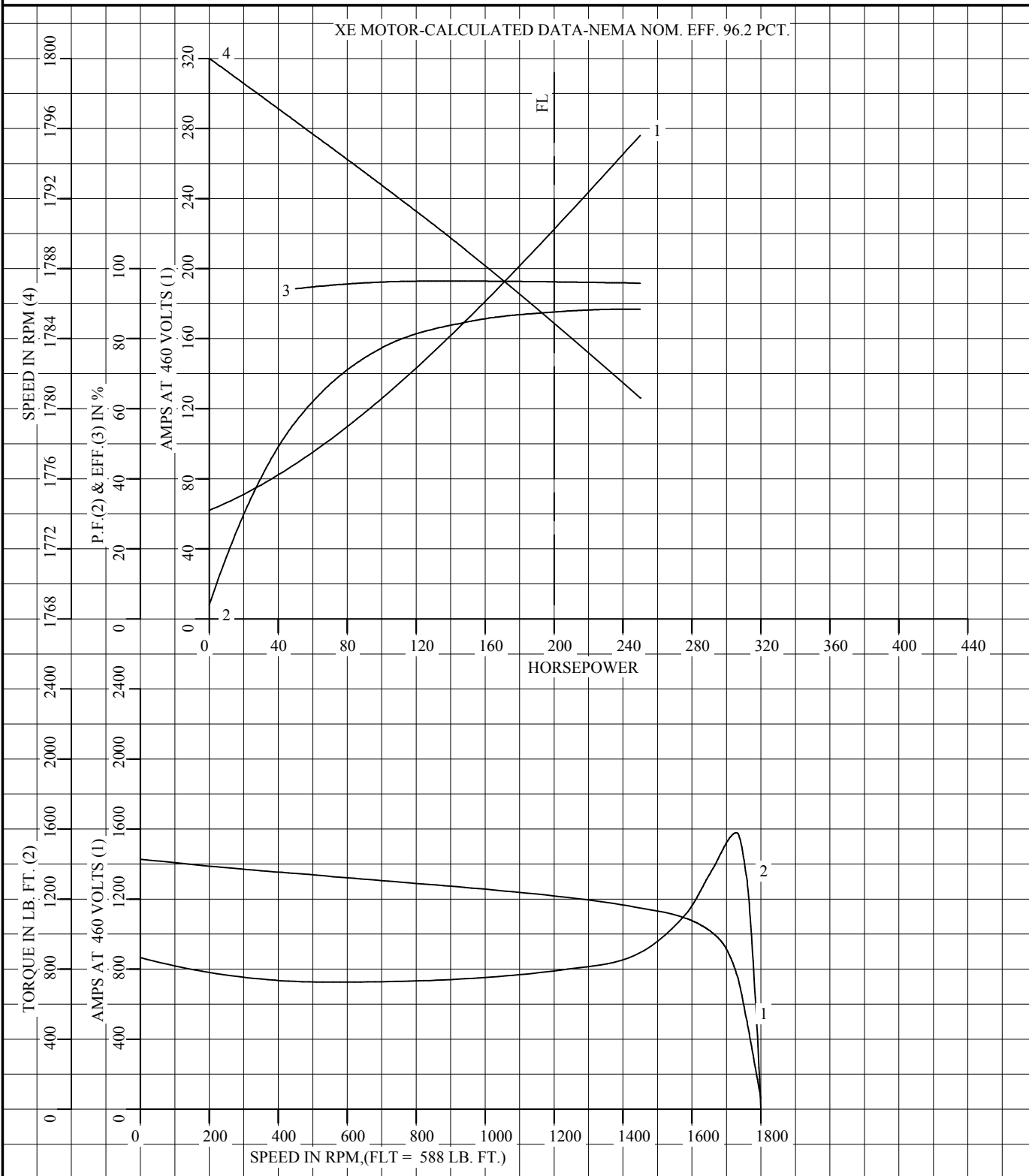
NP3238														
CAT NO	ECP4407T-4			SPEC NO.		P44G3932								
HP	200	AMPS	222	VOLTS		460			DESIGN	B				
FRAME	447T	RPM	1785	HZ	60	AMB	40	SF	1.15					
D.E. BRG.DATA	6318	O.D.E. BRG.DATA			6318	PH	3	DUTY	CONT	INSUL.CLASS	F			
D.E. BRG.	90BC03J30X			TYPE	P	ENCL	TEFC	CODE	G					
O.D.E. BRG.	90BC03J30X			POWER FACTOR			87	NEMA NOM EFFICIENCY			96.2			
3/4 LOAD EFF.	96.5	MAX CORR KVAR			32.0	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										

Accessories

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

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	447TD	200	P	3/60	1785	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
222	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
---	418143052CE	---	---	.0169		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	62.0	1800	4.07	0	
1/4	50.0	88.3	1796	56.3	94.3	
2/4	100	126	1793	77.4	96.2	
3/4	150	172	1789	84.8	96.4	
4/4	200	222	1785	87.6	96.2	
5/4	250	276	1781	88.4	95.8	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	147	865	1428	
PULL UP		540	123	726	1332	
BREAKDOWN		1730	268	1579	770	
FULL LOAD		1785	100	588	222	
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-CALCULATED DATA-NEMA NOM. EFF. 96.2 PCT.						
		DR. BY	T.G.KELATI	A-C MOTOR PERFORMANCE DATA A44WG0690-R001 ISSUE DATE 05/03/21 Page 6 of 11		
		CK. BY	E.J.CHRISTIAN			
		APP. BY	E.J.CHRISTIAN			
		DATE	07/06/17			

REL S.O.	RPM 1785	S.F. 1.15	ROTOR 418143052CE
FRAME 447TD	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 200	AMPS 222	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0169
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S ---	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 T.G. KELATI
CK. BY E.J. CHRISTIAN
APP. BY E.J. CHRISTIAN
DATE 07/06/17

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG0690-R001
ISSUE DATE 05/03/21

REL. S.O.

 RPM **1785**

 S.F. **1.15**

 ROTOR **418143052CE**

 FRAME **447TD**

 VOLTS **460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **200**

 AMPS **222**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

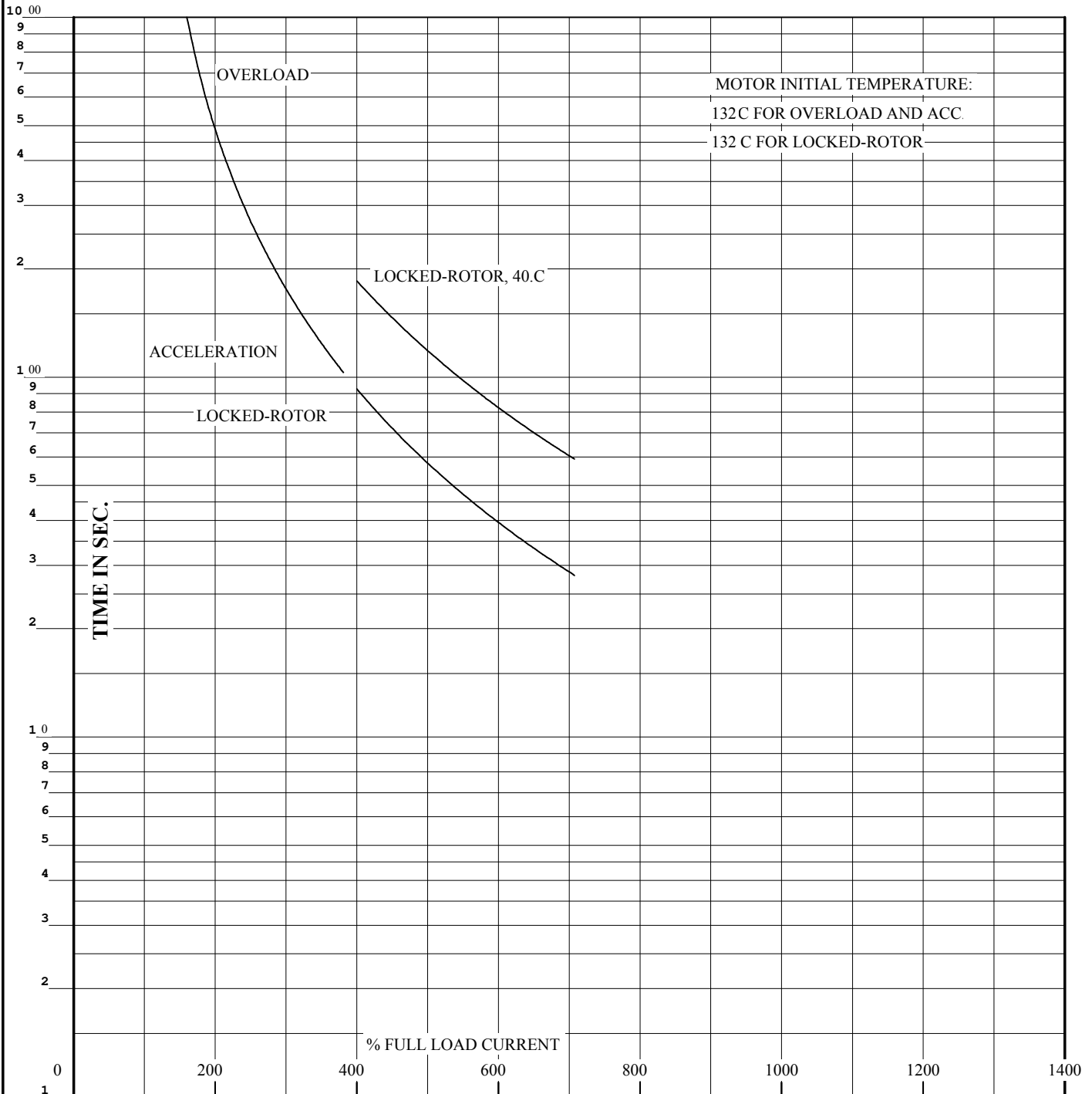
 STATOR RES. @ 25 °C **.0169**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **---**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR-CALCULATED DATA-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.

BALDOR
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 DR. BY T.G.KELATI
 CK. BY E.J.CHRISTIAN
 APP. BY E.J.CHRISTIAN
 DATE 07/06/17
**A-C MOTOR
PERFORMANCE
CURVES**
A44WG0690-R001

 ISSUE DATE 05/03/21 Page 8 of 11

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

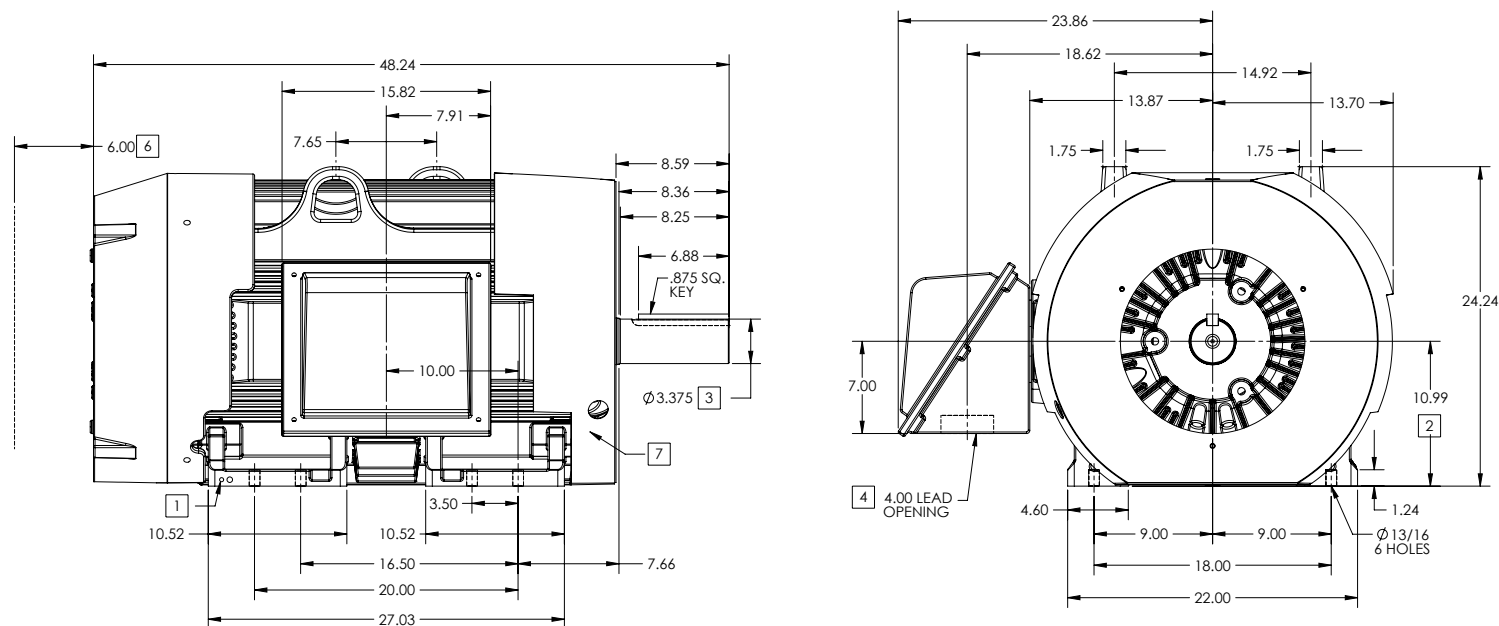
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES $\pm .00$ -.06
3. VARIES $\pm .000$ -.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 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 .003" T.I.R. TO 5 INCH DIA.

[5] WEIGHT (LBS): 2515

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

0007-27-119

REV. DESC: CHANGING ENCLOSURE TO "TOTALLY ENCLOSED" WAS "UL..."
REV: A VERSION: 01 REVISED: 08/25/13 02/15/2013 TDR: 000000786306
MODEL NO. 617427-002 REF:
BY: MGHWC Material:

BALDOR

G447T/445T STD - FOOTED - SIDE/CENTER C/B

617427-002

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

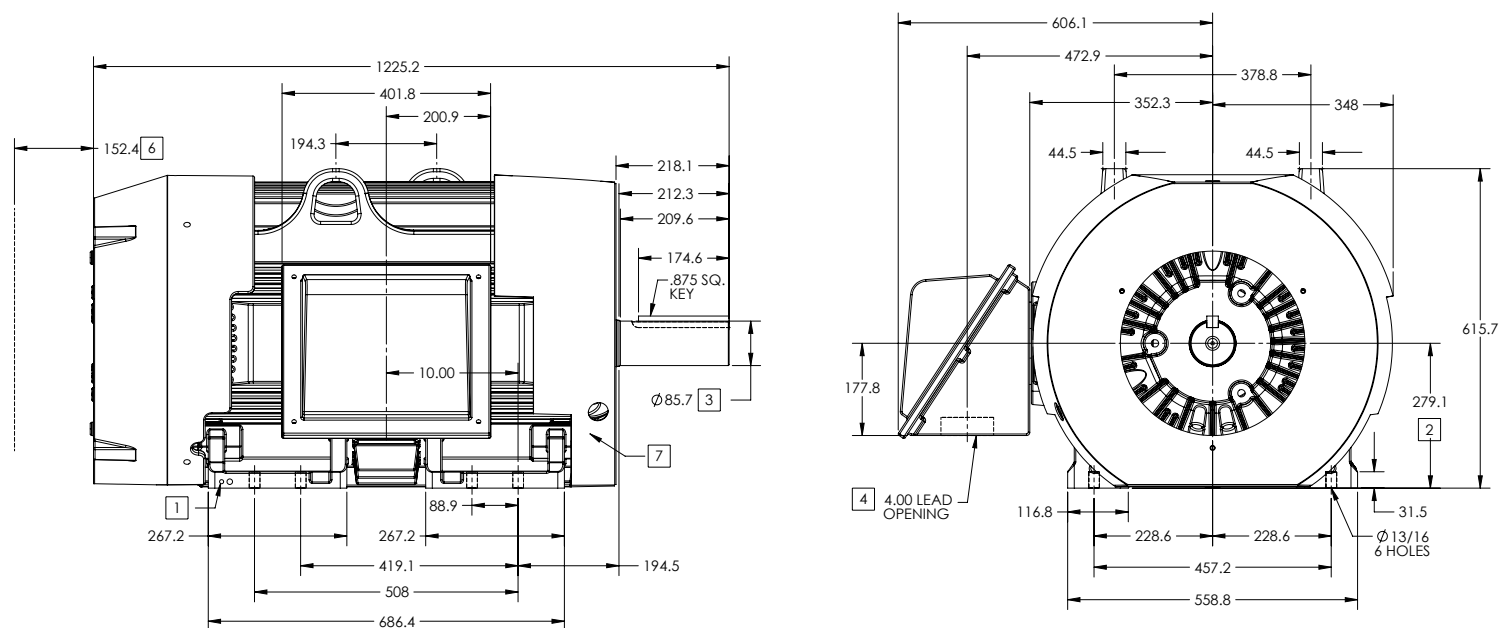
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES $\pm .00, -.06$
3. VARIES $\pm .000, -.001$
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 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 .08 MM T.I.R. TO 127 MM DIA.

5 WEIGHT (KGS): 1140

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.

REV. A	VERSION: 01	REVISED: 08/25/13 02/15/2013	TDR: 000000786306
MODEL NO. 617427-002	BY: MGHWC	Material:	REF:

BALDOR

G447T/445T STD - FOOTED - SIDE/CENTER C/B

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