

ABB BALDOR RELIANCE III

Customer information packet

ECP4421T-4

125HP, 885RPM, 3PH, 60HZ, 447T, TEFC, F1

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	125.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 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	149.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	149.0 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
Motor Standards	NEMA

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG2397
Layout	617427-002
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	08
Leads	3#1/0
Proprietary	False
Created date	01-09-2014

Motor Type	A44104M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	48.24 IN
Power Factor	83
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	885 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3238													
CAT NO	ECP4421T-4			SPEC NO.		A44-5310-2397							
HP	125	AMPS	149	VOLTS		460	DESIGN		B				
FRAME	447T	RPM	885	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	F				
O.D.E. BRG.	90BC03J30X			POWER FACTOR			83	NEMA NOM EFFICIENCY			95		
3/4 LOAD EFF.	95.4	MAX CORR KVAR			30.0	GUARANTEED EFFICIENCY			94.1				
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									

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	447T	125	P	3/60	885	460

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

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)
401871	418143-86-GE	---	---	.0388

PERFORMANCE					
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	46.0	900	4.14	0
1/4	31.3	58.5	897	53.8	93.1
2/4	62.6	83.1	894	74.0	95.2
3/4	93.7	114	890	80.6	95.4
4/4	125	149	886	82.7	95.0
5/4	156	186	882	83.6	94.3

SPEED TORQUE				
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	157	1160	870
PULL UP	270	148	1095	824
BREAKDOWN	841	242	1795	472
FULL LOAD	886	100	740	149

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-TYPICAL DATA-NEMA NOM. EFF. 95.0 PCT.
 GUARANTEED MIN. EFF. 94.5 PCT.

	DR. BY D. M. BYRD	A-C MOTOR PERFORMANCE A44WG2397-R001 DATA ISSUE DATE 02/22/12
	CK. BY J. T. PARKER	
	APP. BY D. M. BYRD	
	DATE 07/30/96	

FRAME 447T

RPM 885 VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 125

AMPS 149

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC-XEX

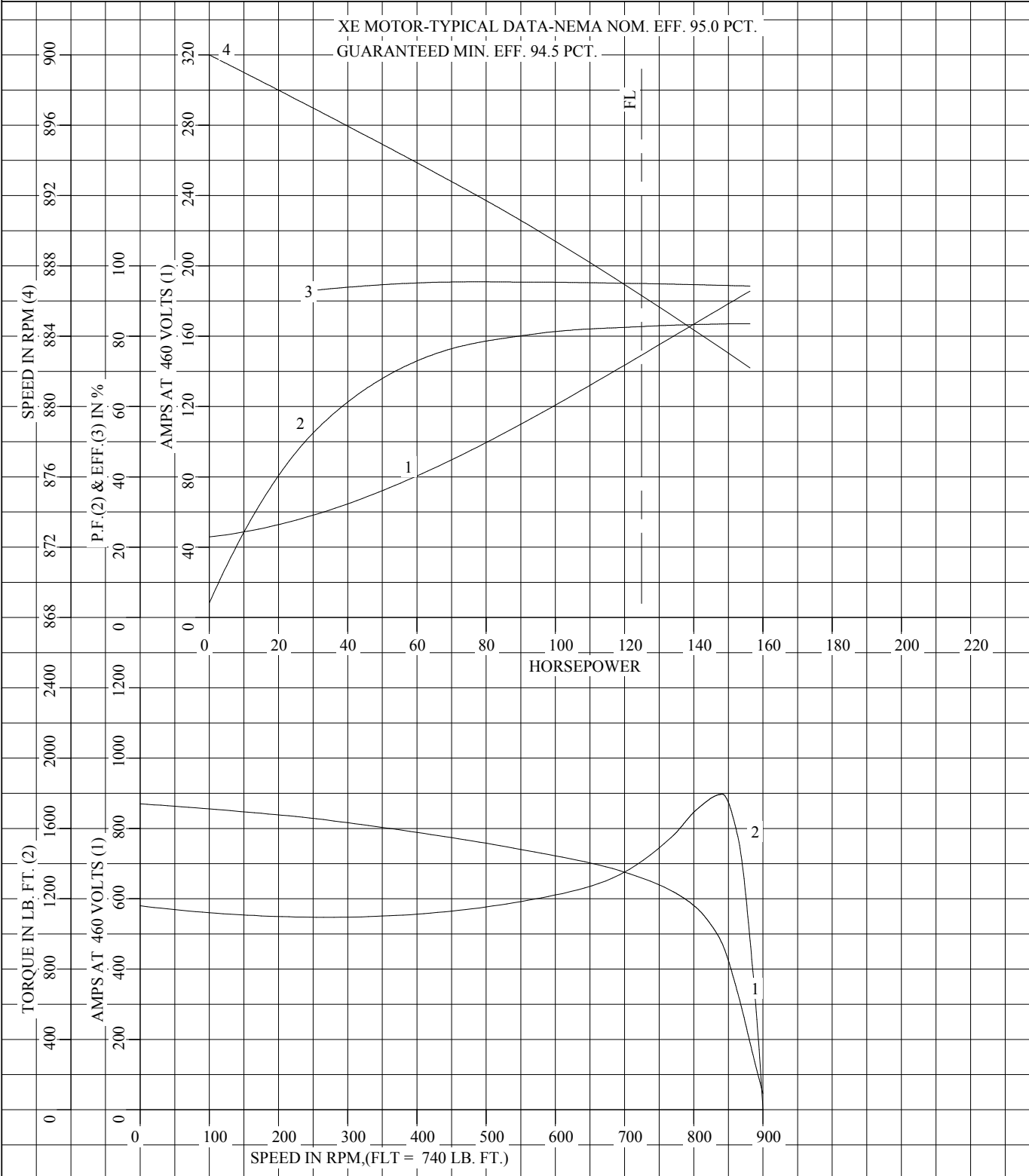
STATOR RES. @ 25 °C .0388

PHASE/HERTZ 3/60

AMB °C/INSUL 40/B

E/S 401871

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 D. M. BYRD
CK. BY J. T. PARKER
APP. BY D. M. BYRD
DATE 07/30/96

**A-C MOTOR
PERFORMANCE CURVES** A44WG2397-R001
ISSUE DATE 02/22/12

REL. S.O.

RPM 885

S.F. 1.15

ROTOR 418143-86-GE

FRAME 447T

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 125

AMPS 149

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC-XEX

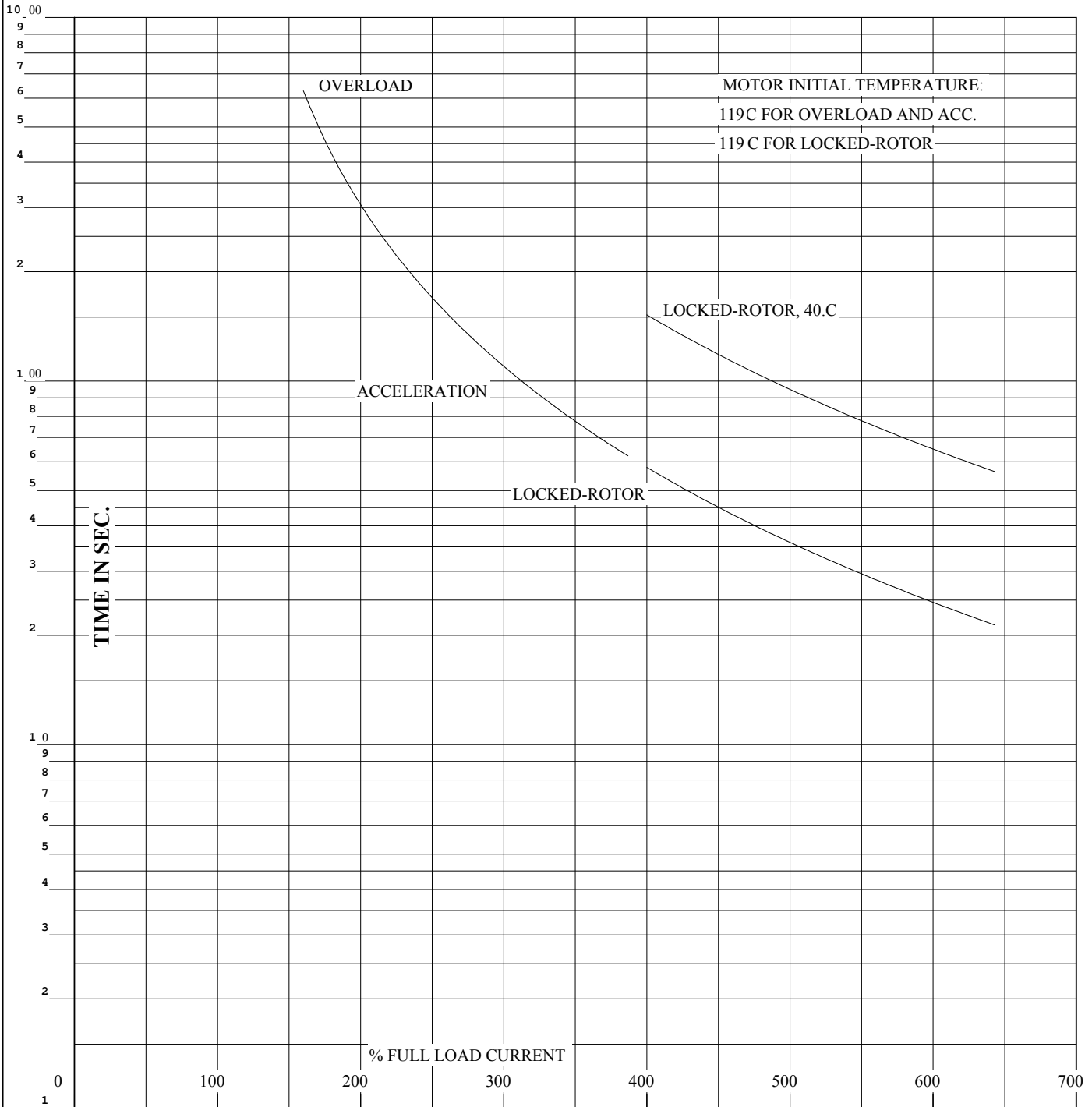
STATOR RES. @ 25 °C .0388

PHASE/HERTZ 3/60

AMB °C/INSUL 40/B

E/S 401871

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 95.0 PCT.

GUARANTEED MIN. EFF. 94.5 PCT.

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**A-C MOTOR
PERFORMANCE CURVES** A44WG2397-R001
ISSUE DATE 02/22/12

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

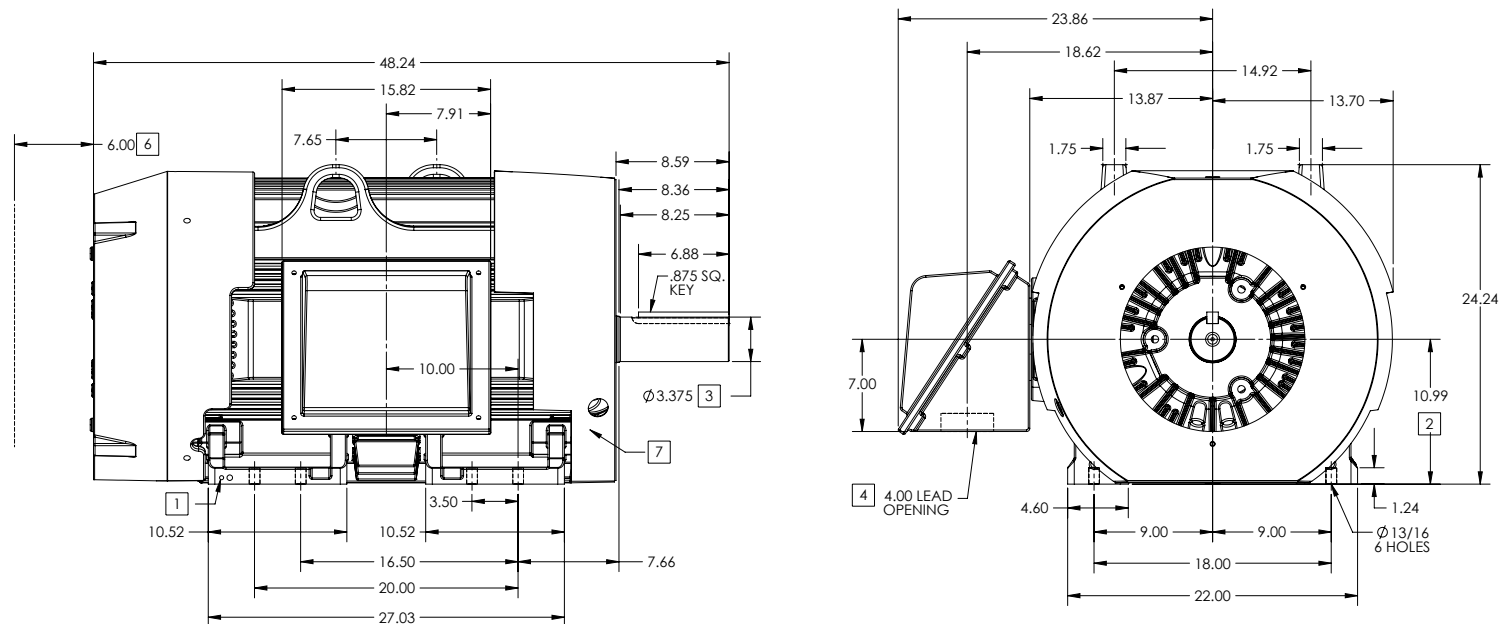
ENCLOSURE: TOTALLY ENCLOSED

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.

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

SHEET NUMBER
1 OF 2
0007-27-119

617427-002

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

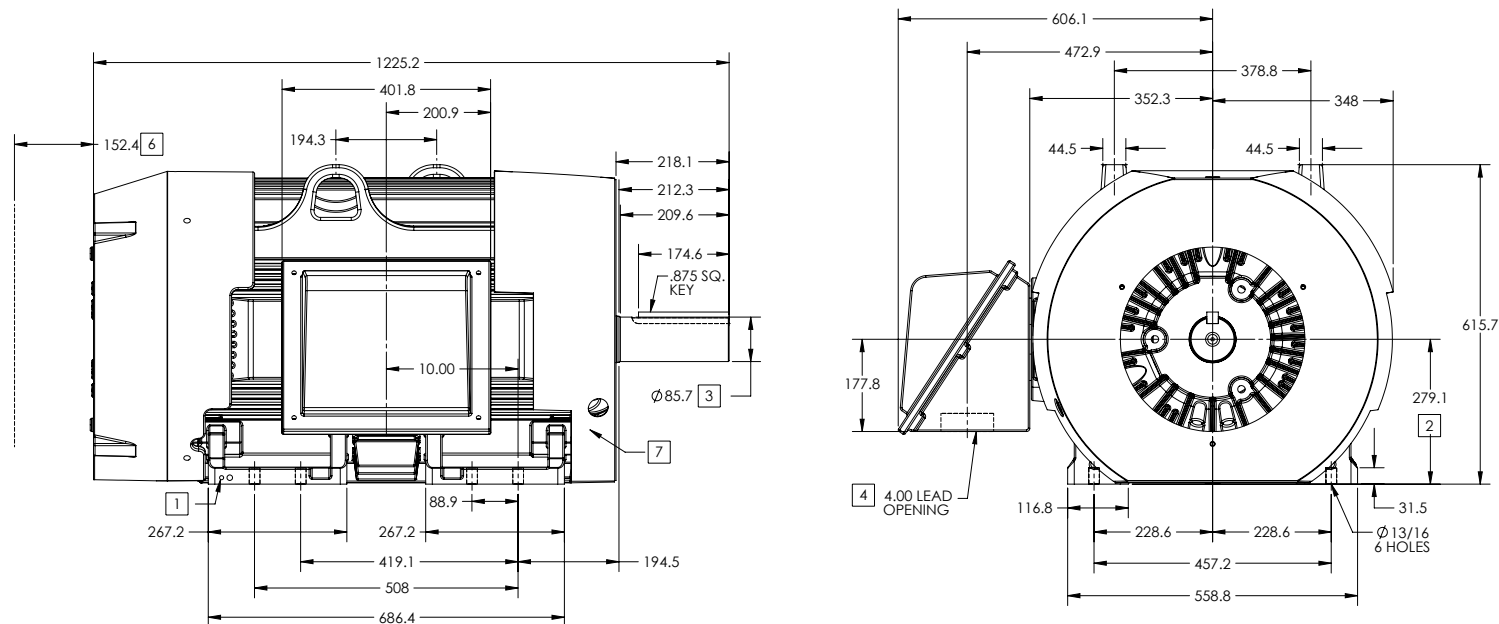
ENCLOSURE: TOTALLY ENCLOSED

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.

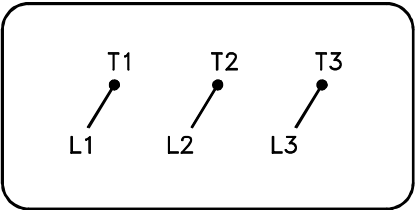
REV. A	VERSION: 01	REVISED: 08/25/13 02/15/2013	TDR: 000000786306
MODEL NO. 617427-002	BY: MGHWC	Material:	REF:

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