

ABB BALDOR RELIANCE III

Customer information packet

ECP44156T-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	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	15-60
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	T3
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
Motor Standards	NEMA

Part Detail

Revision	M
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG3369
Layout	617427-002
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	06
Leads	3#1/0
Proprietary	False
Created date	08-16-2012

Motor Type	A44120M
Mounting Arrangement	F1
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	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1190 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3238															
CAT NO	ECP44156T-4				SPEC NO.	P44G3945									
HP	150	AMPS	170			VOLTS	460			DESIGN	B				
FRAME	447T	RPM	1190	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			86	NEMA NOM EFFICIENCY			95.8			
3/4 LOAD EFF.	95.8	MAX CORR KVAR				25.0	GUARANTEED EFFICIENCY			95.0					
TEMP CODE	T3	TEMP =	200												
CHP HZ	60-90	CT HZ	15-60	VT HZ		0-60									
INVERTER-TEMP-CODE	T3														
SER.NO.					MOTOR WEIGHT										

Parts List

Part number	Description	Quantity
SA249715	SA P44G3945	1.000 ea
RA236575	RA P44G3945	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
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
078549001DA	FAN 400 078549001F	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
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
034530044AB	P/NIP 1/8X5-1/2L GALV.	1.000 ea
034530044BB	P/NIP 1/4X5-1/2L PLT	1.000 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
415045002A	SLGR	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
415915007G	GASK, LAC	1.000 ft
418151014G	RETAIN RING	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
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.375 ga
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180054KA	7/8 SQ X 6.75 KEY	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
604797056	WOOD BASE 447 60 X 41-1/2 BLT 20 X 18	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
034690005AB	PPLG 3/4 PLATED	2.000 ea

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	FCXE
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: CALCULATED DATA NEMA NOMINAL EFFICIENCY = 95.4 PCT.						
		DR. BY <u>W. L. SMITH</u> CK. BY <u>J. J. HARRISON</u> APP. BY <u>W. L. SMITH</u> DATE <u>04/27/10</u>		A-C MOTOR PERFORMANCE DATA		
				A44WG3369-R001 ISSUE DATE 04/27/10		

FRAME 447T

RPM 1190

VOLTS 460

NEMA DESIGN B

HP 150

AMPS 170

CODE LETTER F

TEST S.O. CALCULATED DATA

TYPE P

DUTY CONT

ENCLOSURE FCXE

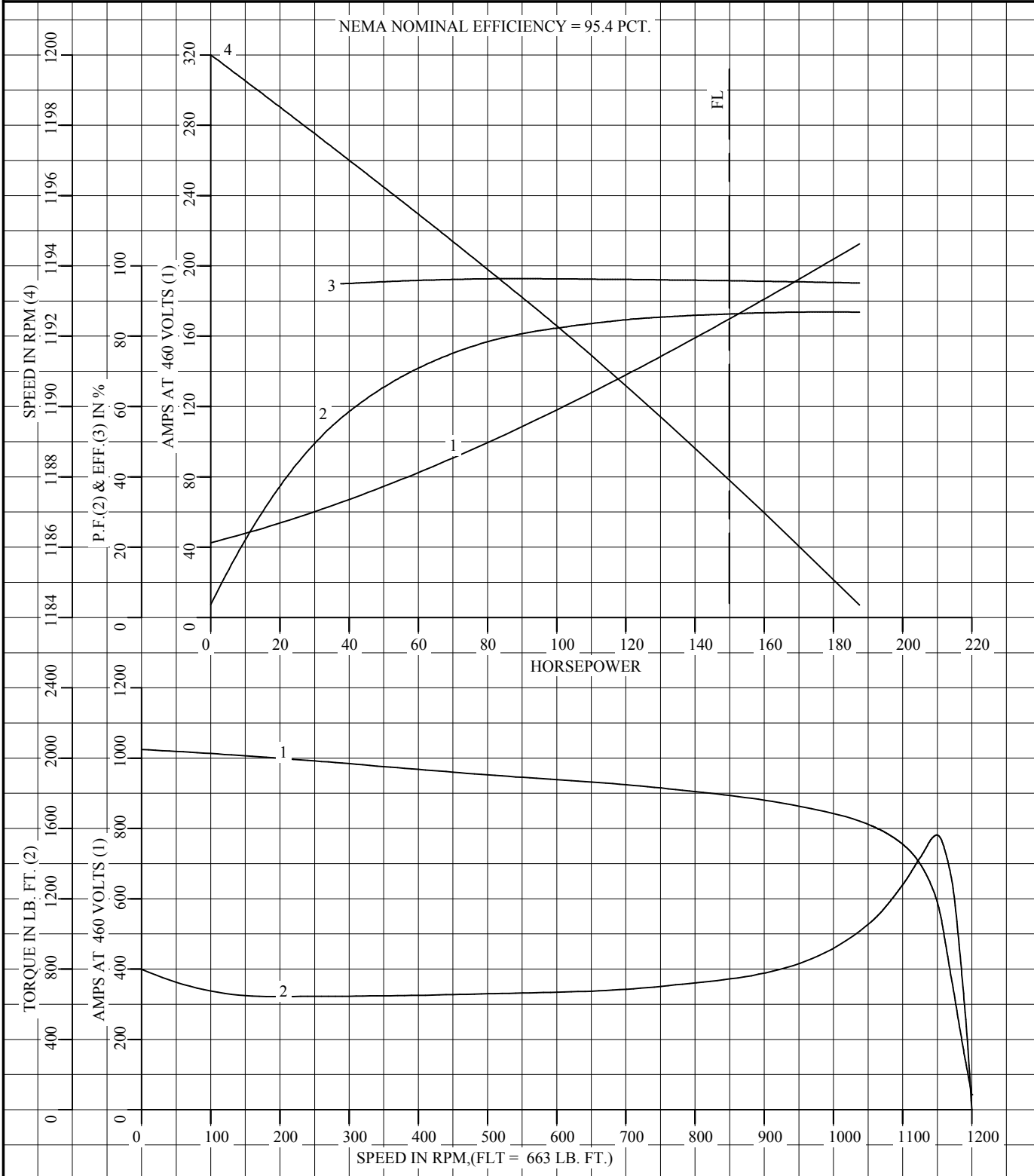
TEST DATE ---

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** A44WG3369-R001
ISSUE DATE 04/27/10

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

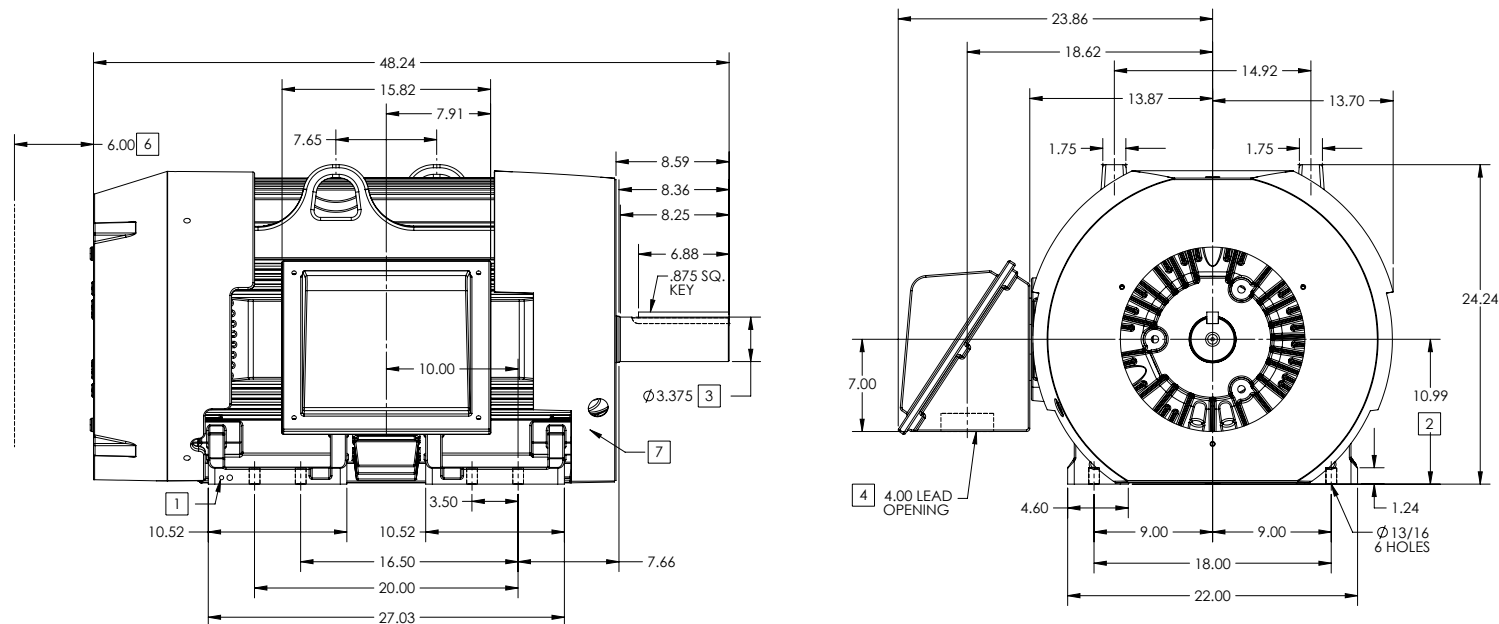
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445T FRAME MOUNTING HOLES



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

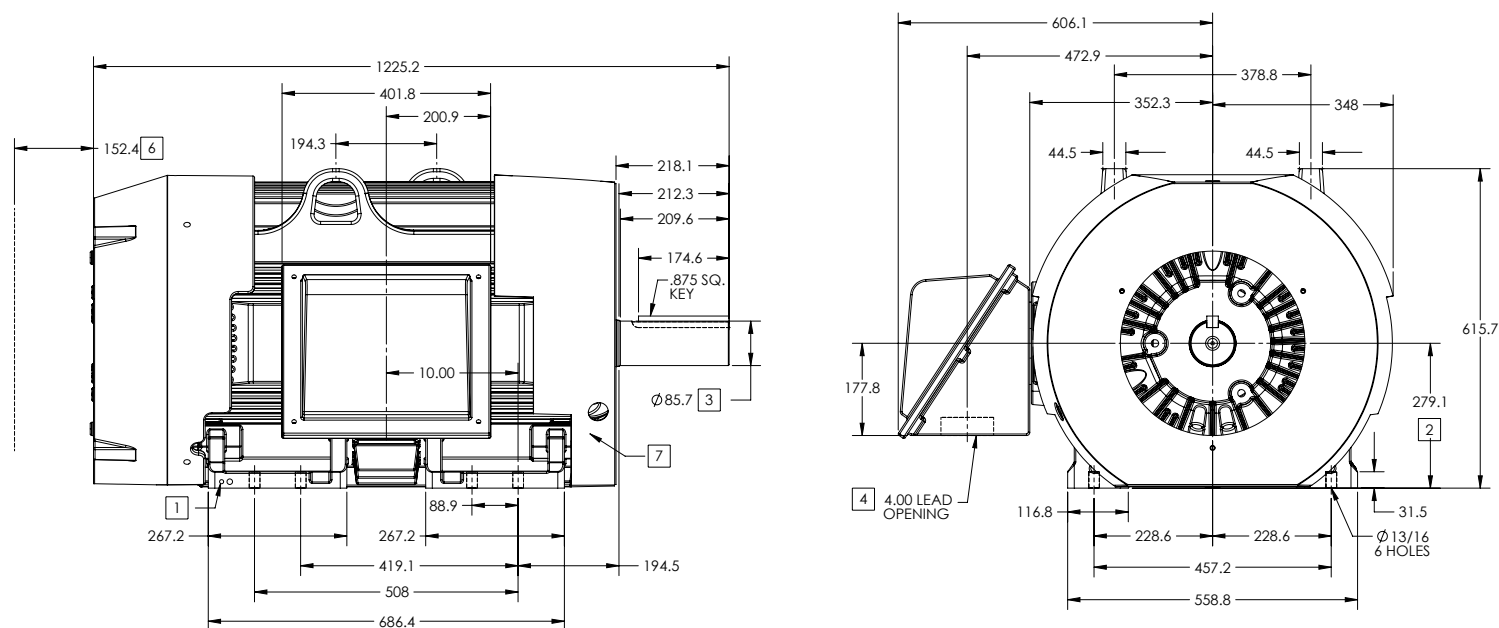
ENCLOSURE: TOTALLY ENCLOSED

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.

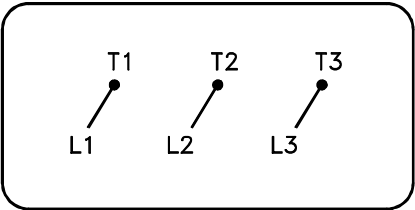
REV. A	VERSION: 01	REVISED: 08/25/13 02/15/2013	TDR: 000000786306
MODEL NO. 617427-002	BY: MGHWC	Material:	REF:

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