

ABB BALDOR RELIANCE III

Customer information packet

ECP4419T-4

75HP, 890RPM, 3PH, 60HZ, 444T, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	444T
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	75.000 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	10-60
Current @ Voltage	89.300 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.5 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	89.3 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA

Part Detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG2447
Layout	617427-001
Eff. date	12-10-2025
CD Diagram	416820-036
Poles	08
Leads	3#2
Proprietary	False
Created date	12-04-2013

Motor Type	A44072M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	44.75 IN
Power Factor	82
Product Family	General Industrial
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	890 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBIL POLYREX EM	

NP3238

CAT NO	ECP4419T-4			SPEC NO.		A44-5202-2447									
HP	75	AMPS	89.3	VOLTS		460		DESIGN	B						
FRAME	444T	RPM	890	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			82	NEMA NOM EFFICIENCY					94.5		
3/4 LOAD EFF.	94.7	MAX CORR KVAR			20.0		GUARANTEED EFFICIENCY						93.6		
TEMP CODE	T3	TEMP =		200											
CHP HZ	60-90	CT HZ	10-60		VT HZ	0-60									
INVERTER-TEMP-CODE	T3														
SER.NO.				MOTOR WEIGHT											

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS		
	444T	75	P	3/60	890	460		
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.		
89.3	CONT	40/F	1.15	B	F	TEFC		
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)				
497397	418143-083-PE	---	---	.0724				
PERFORMANCE								
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY			
NO LOAD	0	28.9	900	5.34	0			
1/4	18.8	35.5	897	54.4	91.2			
2/4	37.5	49.3	895	75.7	94.2			
3/4	56.2	67.5	892	82.4	94.7			
4/4	75.0	89.3	889	83.1	94.5			
5/4	93.8	115	885	81.3	94.0			
SPEED TORQUE								
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES			
LOCKED ROTOR		0	149	658	510			
PULL UP		250	139	616	466			
BREAKDOWN		843	243	1077	298			
FULL LOAD		889	100	443	89.3			
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 94.5 PCT. GUAR MIN EFF 93.6 PCT.								
		DR. BY	R.K. BRIDGES	A-C MOTOR PERFORMANCE DATA A44WG2447-R001 ISSUE DATE 07/05/17 Page 6 of 11				
		CK. BY	W.L. SMITH					
		APP. BY	W.L. SMITH					
		DATE	10/24/13					

REL S.O.

 RPM **890**

 S.F. **1.15**

 ROTOR **418143-083-PE**

 FRAME **444T**

 VOLTS **460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **75**

 AMPS **89.3**

 CODE LETTER **F**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

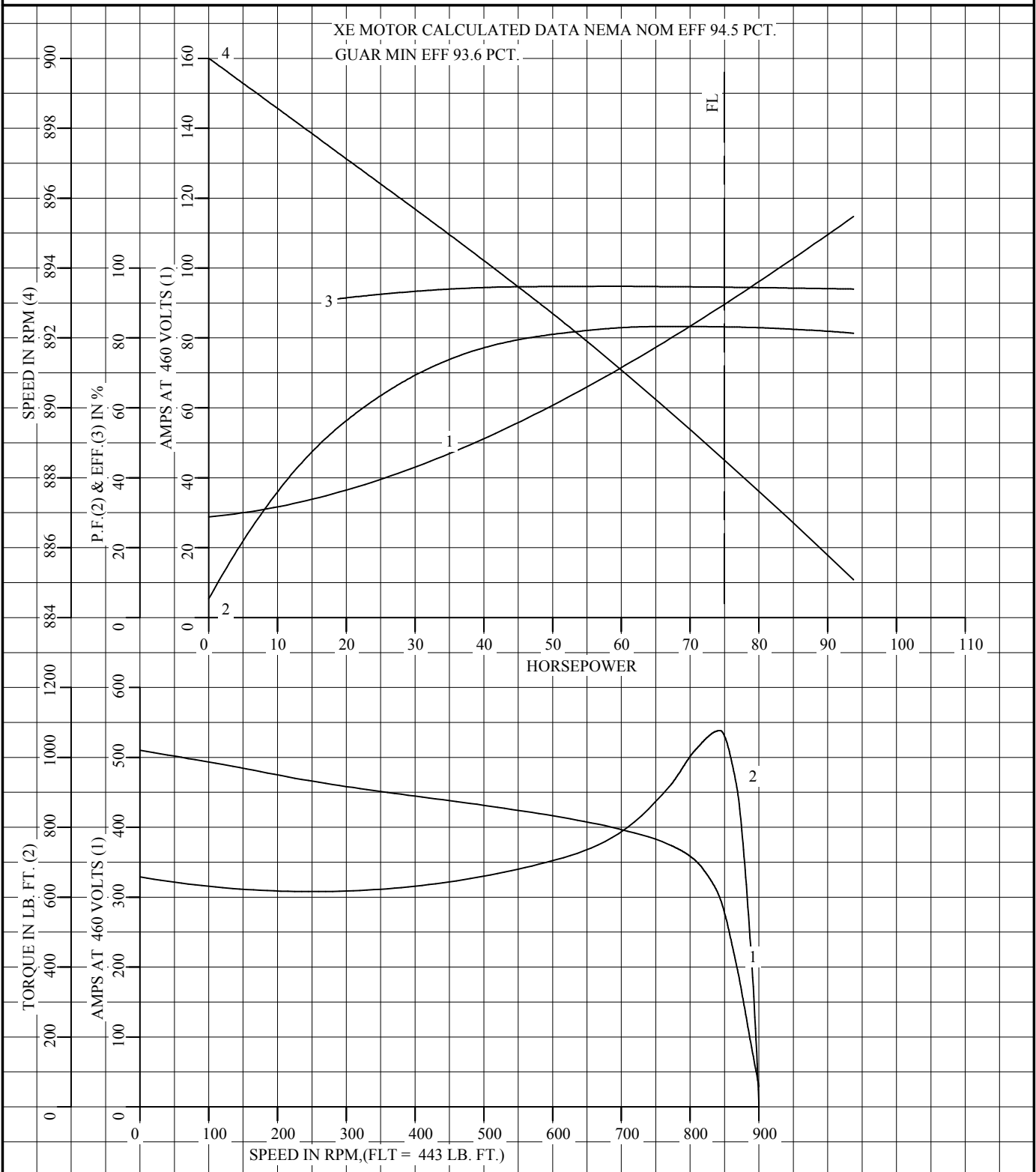
 STATOR RES. @ 25 °C **.0724**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **497397**

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 R.K. BRIDGES
 CK. BY W.L. SMITH
 APP. BY W.L. SMITH
 DATE 10/24/13

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG2447-R001

ISSUE DATE 07/05/17 Page 7 of 11

REL. S.O.

FRAME **444T**

HP **75**

TYPE **P**

PHASE/HERTZ **3/60**

RPM **890**

VOLTS **460**

AMPS **89.3**

DUTY **CONT**

AMB °C/INSUL **40/F**

S.F. **1.15**

NEMA DESIGN **B**

CODE LETTER **F**

ENCLOSURE **TEFC**

E/S **497397**

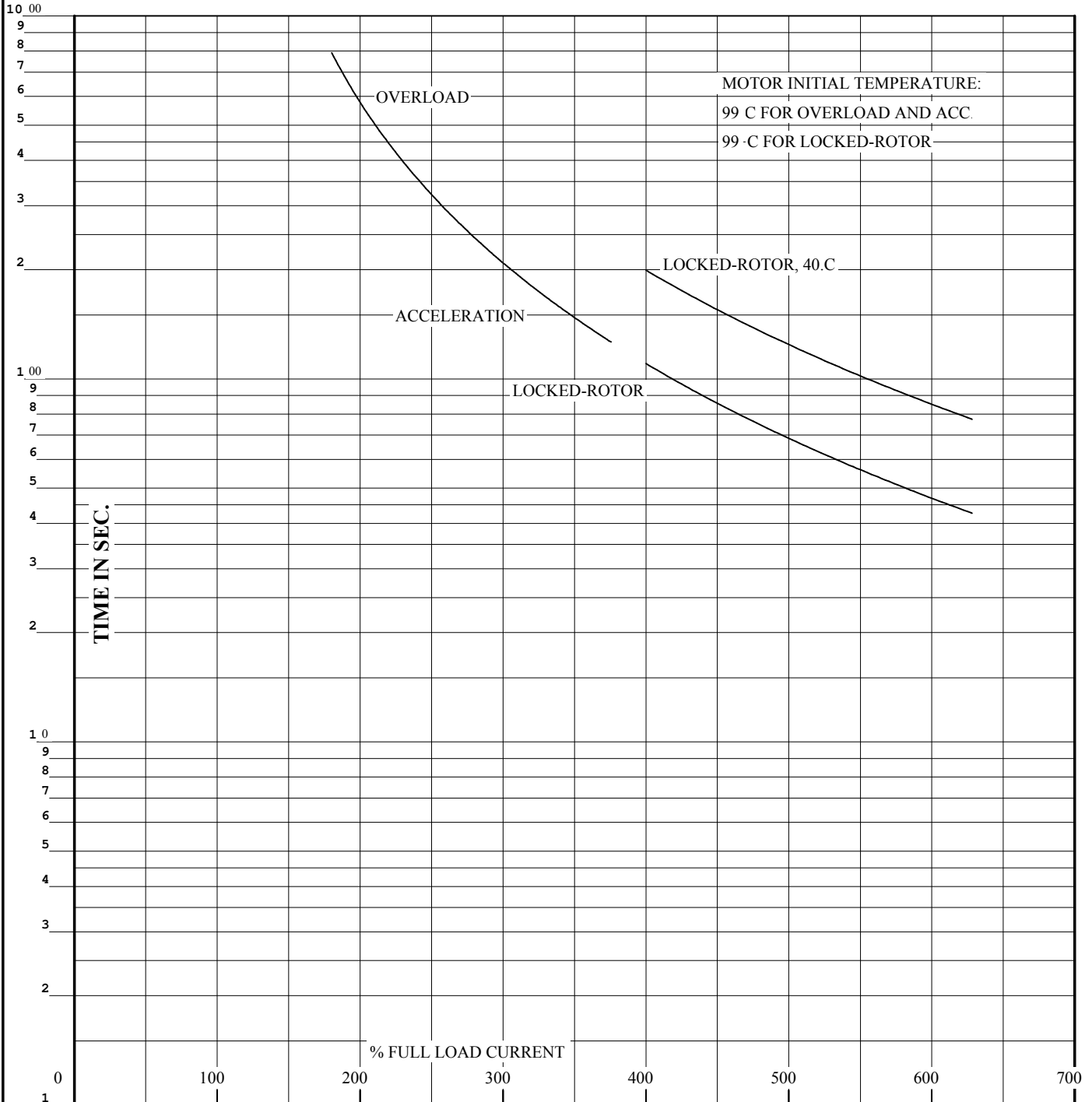
ROTOR **418143-083-PE**

TEST S.O. **TYPICAL DATA**

TEST DATE **---**

STATOR RES. @ 25 °C **.0724**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR CALCULATED DATA NEMA NOM EFF 94.5 PCT.

GUAR MIN EFF 93.6 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 R.K. BRIDGES
CK. BY W.L. SMITH
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DATE 10/24/13
**A-C MOTOR
PERFORMANCE
CURVES**
A44WG2447-R001

ISSUE DATE 07/05/17 Page 8 of 11

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

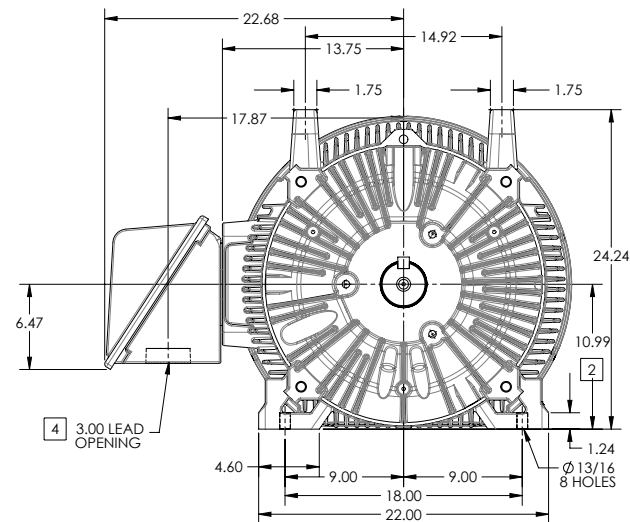
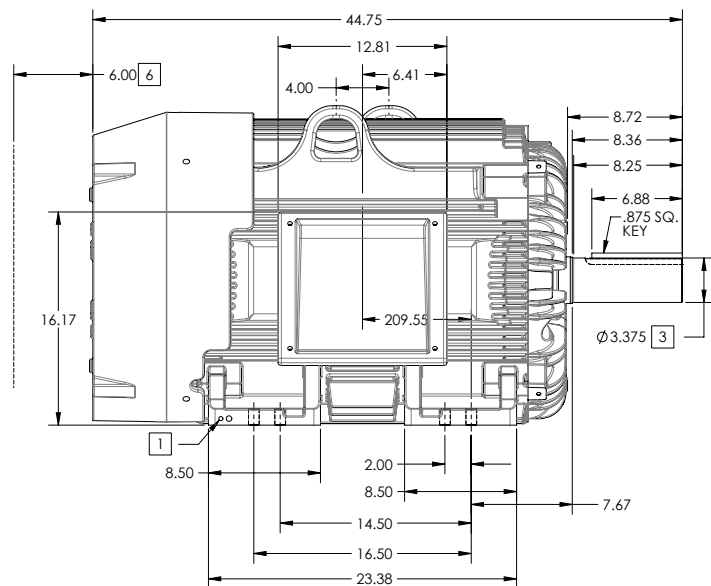
ENCLOSURE: TOTALLY ENCLOSED

FRAME G445T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 444T 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 NOT ENCR OACH 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): 2130

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

100-2272119

REV. DESC: SHEET 2 NEEDS METRIC FOOT HOLE DIMENSION			
REV: E	VERSION: 05	REVISED: 09-22-56 06/12/2014	TDR: 000000857938
MODEL NO. 617427-001		REF:	
BY: RAGRA	Material:		

BALDOR

G445T444T STD - FOOTED - SIDE/CENTER C/B

617427-001

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

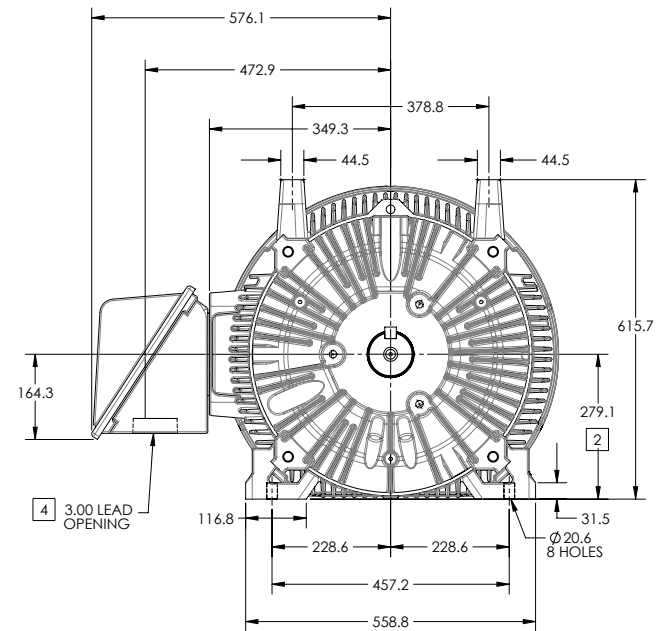
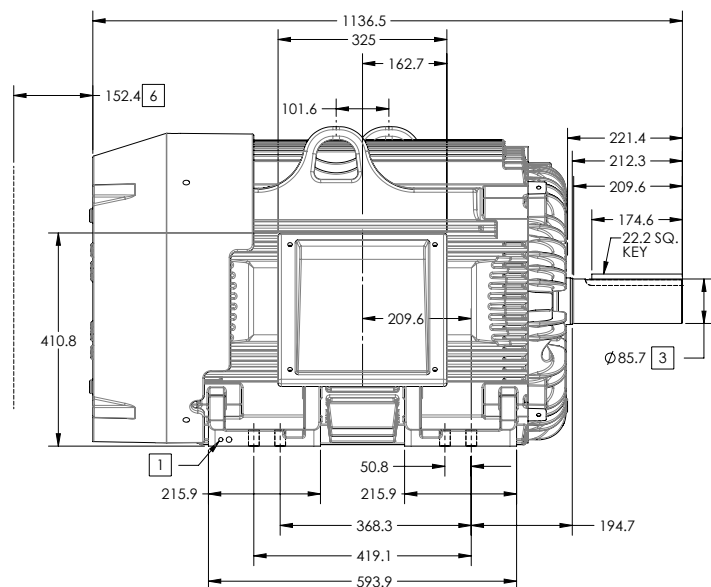
ENCLOSURE: TOTALLY ENCLOSED

FRAME G445T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 444T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +0,-1.5
3. VARIES +00,-03
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 NOT 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): 970

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

100-227-119

REV. DESC: SHEET 2 NEEDS METRIC FOOT HOLE DIMENSION	
REV: E VERSION: 05	REVISED: 09-22-56 06/12/2014
MODEL NO. 617427-001	TDR: 00000857938
BY: RAGRA	REF:
Material:	

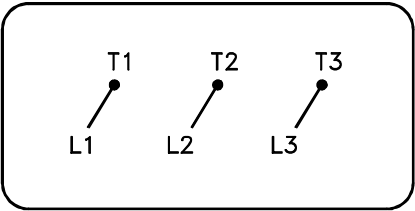
BALDOR

G445T444T STD - FOOTED - SIDE/CENTER C/B

617427-001

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