

ABB BALDOR RELIANCE III

Customer information packet

ECP4409TR-4

100HP, 1190RPM, 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	100.000 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	Mobil SHC 220 (Athens Only)
Constant Torque Speed Range	15-60
Current @ Voltage	119.000 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	119.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA

Part Detail

Revision	P
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG3905
Layout	617427-001
Eff. date	12-10-2025
CD Diagram	416820-036
Poles	06
Leads	3#2
Proprietary	False
Created date	12-02-2013

Motor Type	A44064M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	44.75 IN
Power Factor	82
Product Family	General Industrial
Pulley End Bearing Type	Roller
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	No Slinger
Speed	1190 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBILITH SHC 220	

NP3238

CAT NO	ECP4409TR-4			SPEC NO.		A44-5186-3905							
HP	100	AMPS	119	VOLTS		460		DESIGN	B				
FRAME	444T	RPM	1190	HZ	60	AMB	40	SF	1.15				
D.E. BRG.DATA	NU222		O.D.E. BRG.DATA			6318		PH	3	DUTY	CONT	INSUL.CLASS	F
D.E. BRG.	110RU02M30X			TYPE	P	ENCL	TEFC	CODE	G				
O.D.E. BRG.	90BC03J30X			POWER FACTOR			82	NEMA NOM EFFICIENCY				95	
3/4 LOAD EFF.	95.3	MAX CORR KVAR			27.0		GUARANTEED EFFICIENCY				94.1		
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								

ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET							ECP4409TR-4 - 100HP, 1190RPM, 3PH, 60HZ, 444T, TEFC, F1						
S/O			FRAME			HP			TYPE			PHASE/ HERTZ			RPM			VOLTS		
			444T			100			P			3/60			1190			460		
AMPS			DUTY			AMB °C/ INSUL			S.F.			NEMA DESIGN			CODE LETTER			ENCLOSURE		
119			CONT			40/F			1.15			B			G			TEFC		
E/S			ROTOR			TEST S.O.			TEST DATE			STATOR RES. @25 °C OHMS (BETWEEN LINES)								
497780			418143098VE			---			---			.0547								
PERFORMANCE																				
LOAD			HP			AMPERES			RPM			% POWER FACTOR			% EFFICIENCY					
NO LOAD			0			39.9			1200			4.01			0					
1/4			25.0			55.8			1197			45.5			92.5					
2/4			50.0			72.5			1194			68.0			95.0					
3/4			75.0			94.3			1191			78.0			95.3					
4/4			100			119			1188			82.5			95.0					
5/4			125			147			1184			84.3			94.4					
SPEED TORQUE																				
						RPM			TORQUE % FULL LOAD			TORQUE LB.-FT.			AMPERES					
LOCKED ROTOR						0			142			627			730					
PULL UP						168			126			558			717					
BREAKDOWN						1146			266			1175			438					
FULL LOAD						1188			100			442			119					
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.																				
TYPICAL DATA NEMA NOMINAL EFFICIENCY = 95.0 PCT.																				
						DRAWN BY: <u>W. L. SMITH</u> CHECKED BY: <u>J.J.HARRISON</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>12/06/10</u>						AC MOTOR PERFORMANCE DATA				A44WG3905-R001 DATE ISSUED 08/09/19				

FRAME 444T

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 100

AMPS 119

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

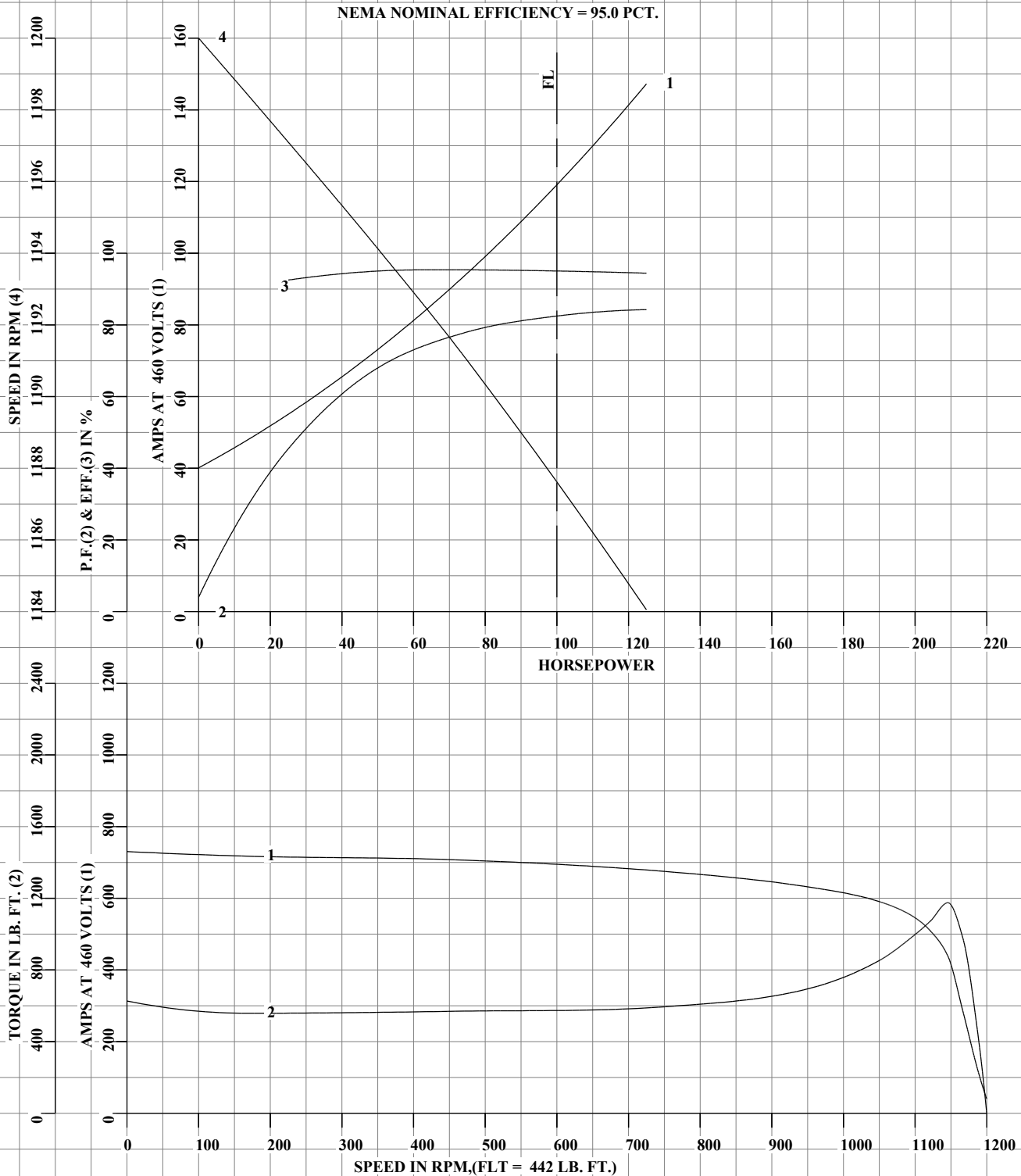
STATOR RES. @ 25°C .0547

PHASE / HERTZ 3/60

AMB °C / INSUL 40/F

E/S 497780

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



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AC MOTOR
PERFORMANCE
DATA

A44WG3905-R001

ISSUE DATE 08/09/19

FRAME 444T

RPM 1190

S.F. 1.15

ROTOR 418143098VE

HP 100

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 119

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

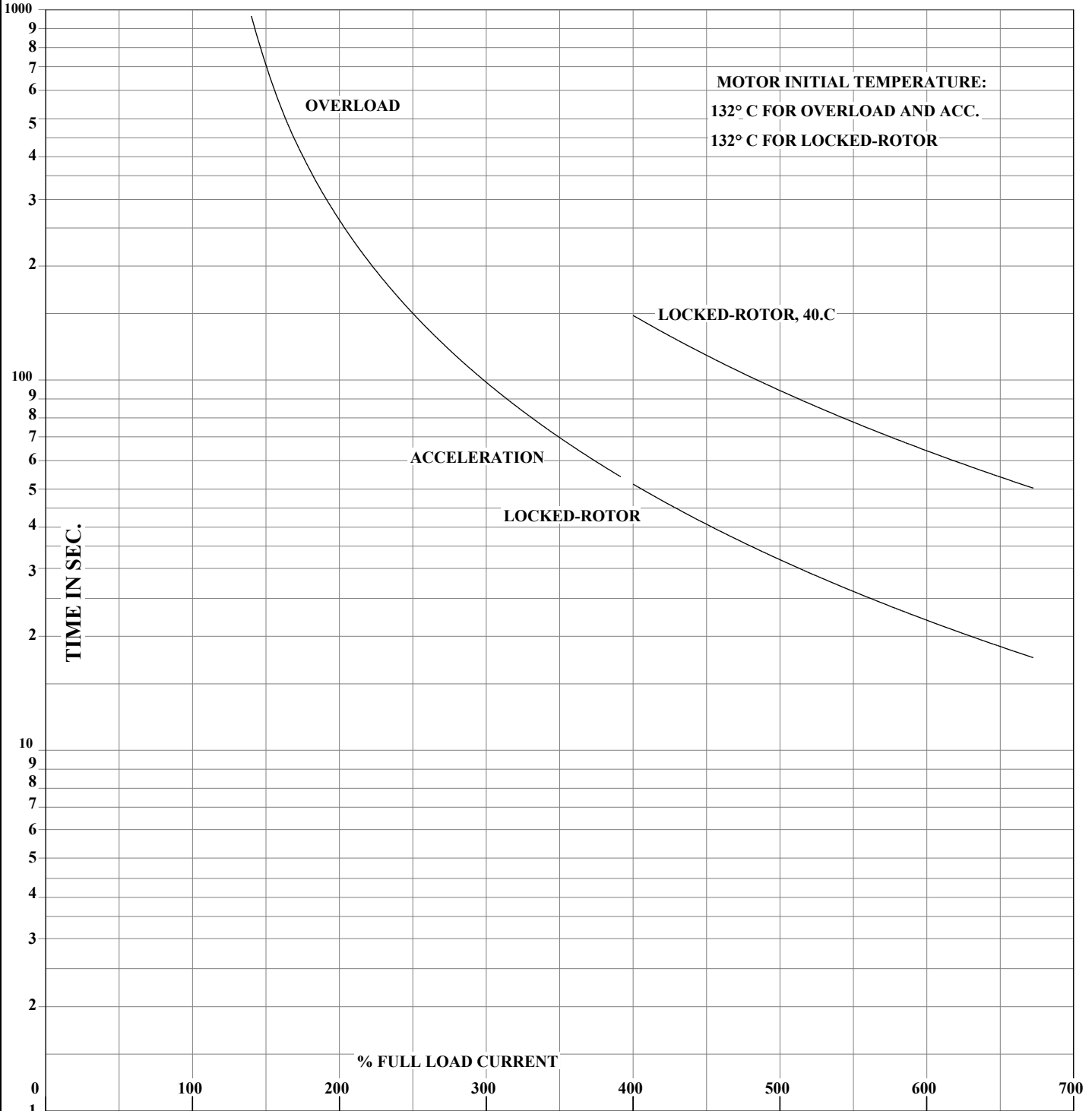
ENCLOSURE TEFC

STATOR RES. @ 25°C .0547

AMB °C / INSUL 40/F

E/S 497780

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
NEMA NOMINAL EFFICIENCY = 95.0 PCT.

AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



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DATE: 12/06/10

AC MOTOR
PERFORMANCE
DATA

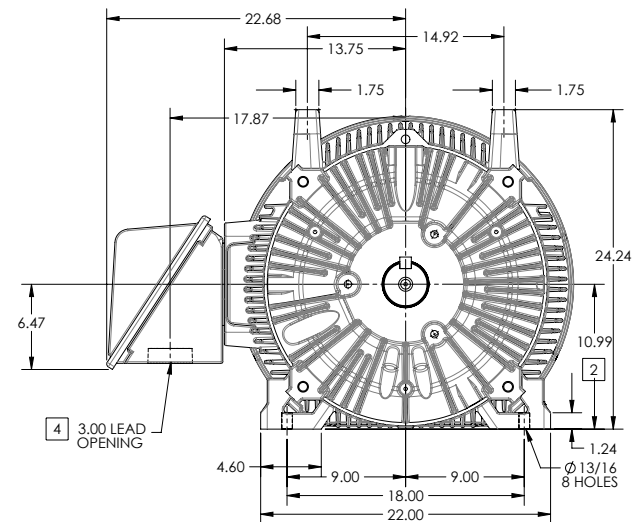
A44WG3905-R001

ISSUE DATE 08/09/19

SQUIRREL-CAGE INDUCTION

COOLING: FAN COOLED

INCLUDES 444T FRAME MOUNTING HOLES



- 5 WEIGHT (LBS): 2130

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. 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

G445T/444T STD – FOOTED – SIDE/CENTER C/B

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

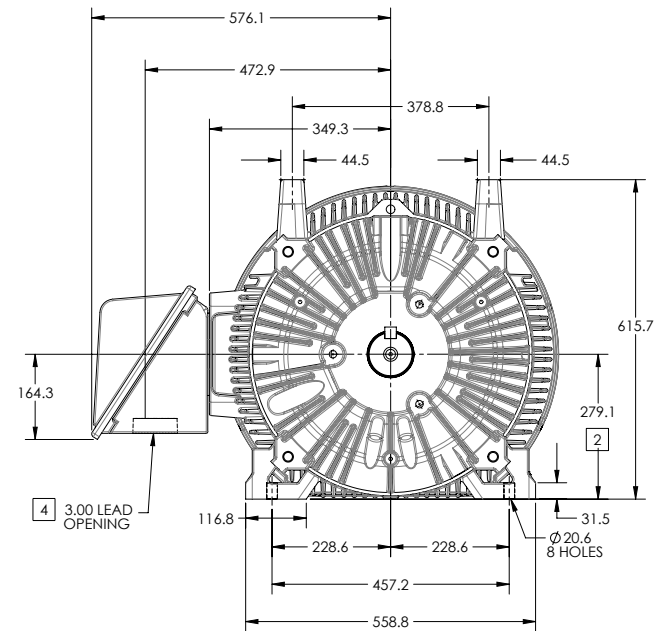
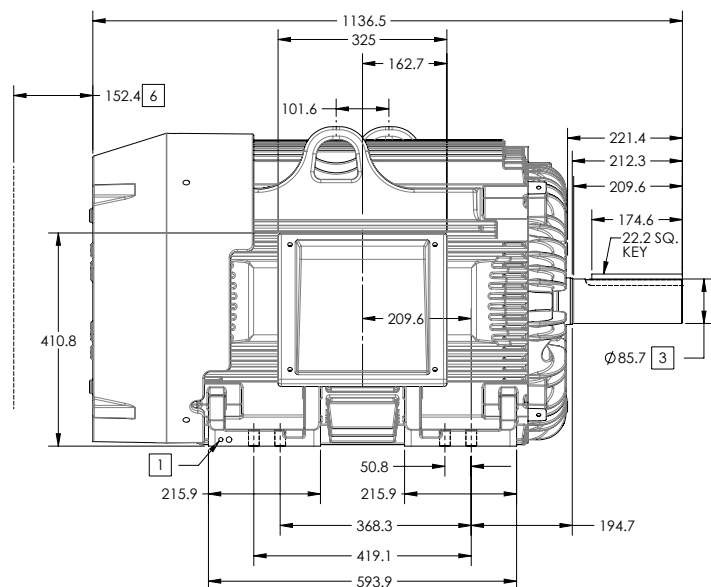
ENCLOSURE: TOTALLY ENCLOSED

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	TDR: 00000857938
REV: E VERSION: 05	REVISED: 09-22-56 06/12/2014
MODEL NO. 617427-001	REF:
BY: RAGRA	Material:

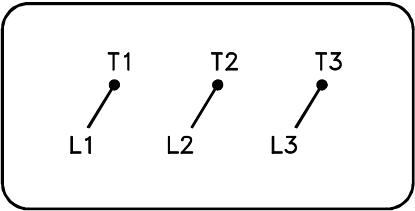
BALDOR

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