

ABB BALDOR RELIANCE III

Customer information packet

EM44354T-4

350HP, 1780RPM, 3PH, 60HZ, 449T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	449T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	350.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	389.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	389.0 a
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	G
Motor Lead Quantity/Wire Size	12 @ 1 AWG
Motor Standards	NEMA
Motor Type	A44160M
Mounting Arrangement	F1

Part Detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG5597
Layout	617427-176
Eff. date	10-22-2025
CD Diagram	416820-008
Poles	04
Leads	6#1 (02 per group)
Proprietary	False
Created date	04-02-2015

Number of Poles	4
Overall Length	53.24 IN
Power Factor	88
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	No Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L
MOBIL POLYREX EM

NP2349L

SPEC NO.	A44-7087-3038	CAT.NO.	EM44354T-4	FRAME	449T				
HP	350	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P
RPM	1785	AMPS	389	HZ	60	AMB	40	SF	1.15
DRIVE END BEARING	90BC03J30X	DUTY	CONT	INSUL.CLASS	F				
OPP D.E. BEARING	90BC03J30X	ENCL	TEFC	CODE	G				
SER.NO.		POWER FACTOR	88	NEMA-NOM-EFFICIENCY	96.2				
		MAX CORR KVAR	60	GUARANTEED EFFICIENCY	95.4				
		NEMA NOM/CSA QUOTED EFF							
		MOTOR WEIGHT							

CUSTOMER INFORMATION PACKET		EM44354T-4 - 350HP, 1780RPM, 3PH, 60HZ, 449T, TEFC, F1				
FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS	
449T	350	P	3/60	1785	460	

AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
389	CONT	40/F	1.15	B	G	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)	
---	418143059AEQ	---	---	.00938	

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	108	1800	3.69	0
1/4	87.6	142	1796	60.8	94.8
2/4	175	211	1792	80.5	96.4
3/4	262	296	1788	86.0	96.5
4/4	350	389	1783	87.6	96.2
5/4	438	485	1779	88.2	95.7

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	187	1930	2550
PULL UP	600	160	1645	2280
BREAKDOWN	1726	250	2580	1325
FULL LOAD	1783	100	1031	389

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

TYPICAL DATA
XE MOTOR-NEMA NOM. EFF. 96.2 PCT.



DRAWN BY: E.J.CHRISTIAN
 CHECKED BY: W.L. SMITH
 APPROVED BY: E.J.CHRISTIAN
 DATE: 07/18/16

**AC MOTOR
PERFORMANCE
DATA**

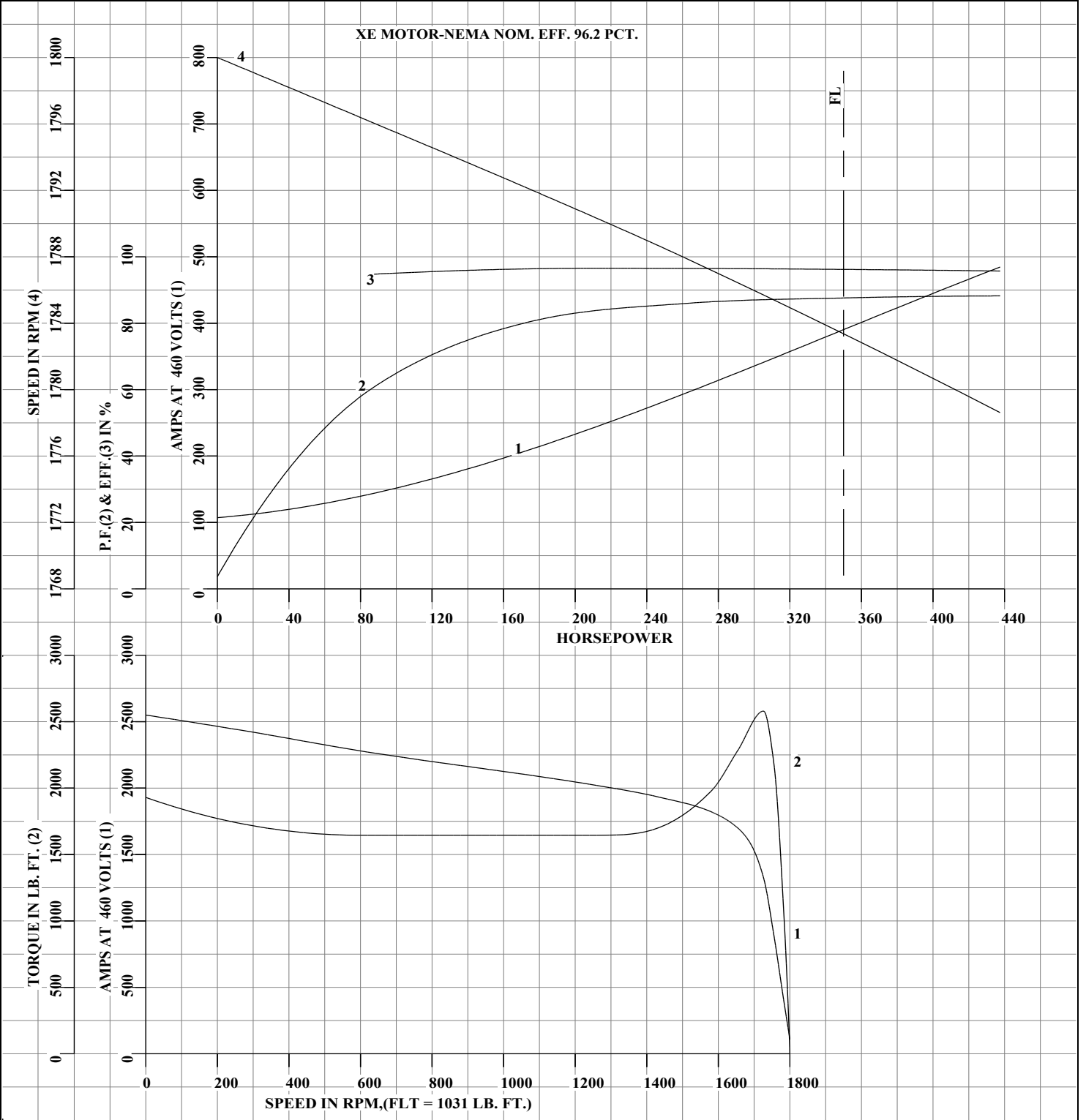
A44WG5597-R001
DATE ISSUED 12/04/17

FRAME 449T
HP 350
TYPE P
PHASE / HERTZ 3/60

RPM 1785
VOLTS 460
AMPS 389
DUTY CONT
AMB °C / INSUL 40/F

S.F. 1.15
NEMA DESIGN B
CODE LETTER G
ENCLOSURE TEFC
E/S ---

ROTOR 48143059AEQ
TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25°C .00938
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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 CHECKED BY: W.L. SMITH
 APPROVED BY: E.J.CHRISTIAN
 DATE: 07/18/16

AC MOTOR
PERFORMANCE
DATA

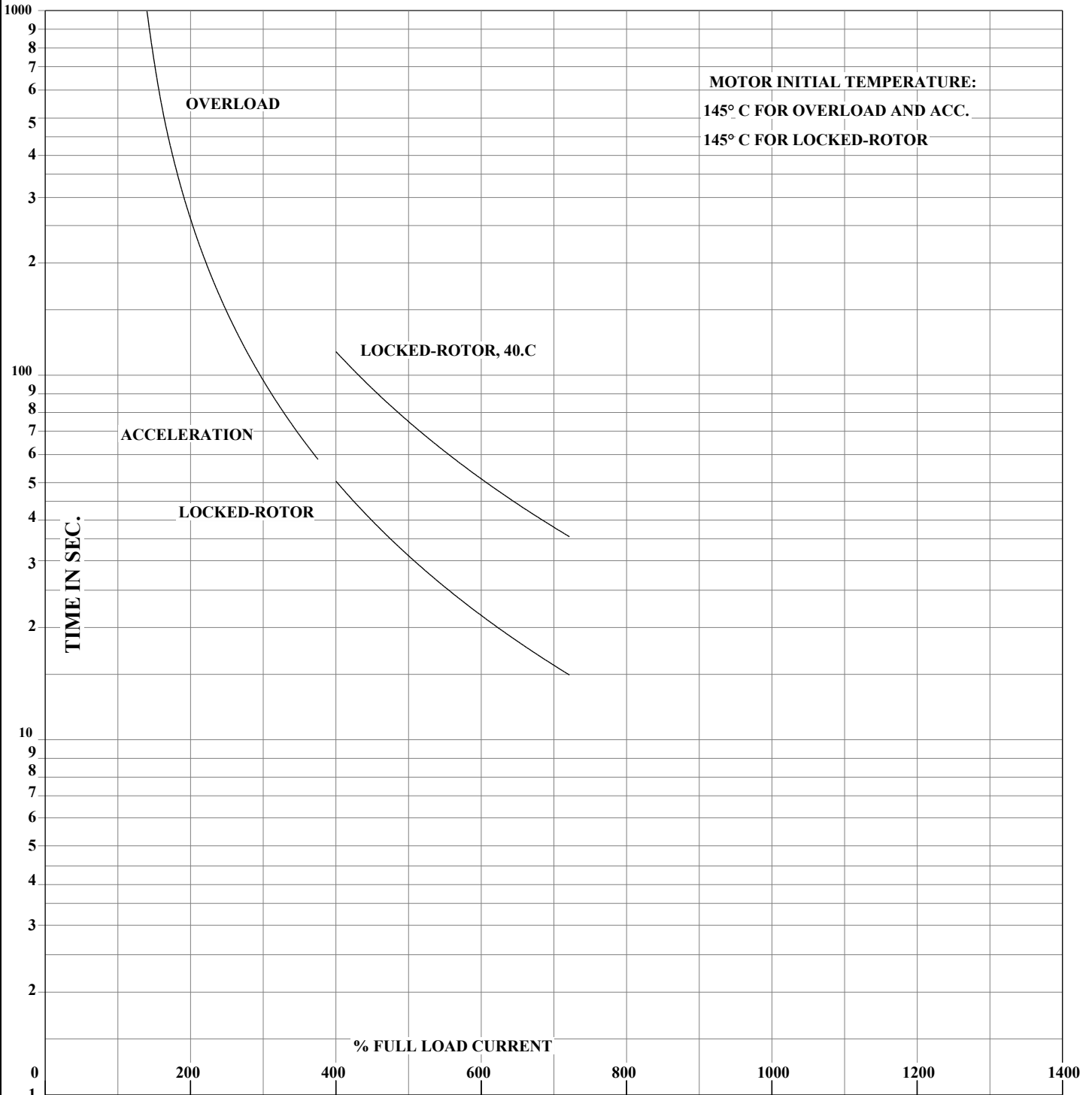
A44WG5597-R001
ISSUE DATE 12/04/17

FRAME 449T
HP 350
TYPE P
PHASE / HERTZ 3/60

RPM 1785
VOLTS 460
AMPS 389
DUTY CONT
AMB °C / INSUL 40/F

S.F. 1.15
NEMA DESIGN B
CODE LETTER G
ENCLOSURE TEFC
E/S ---

TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25°C .00938
OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

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

A44WG5597-R001
ISSUE DATE 12/04/17

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

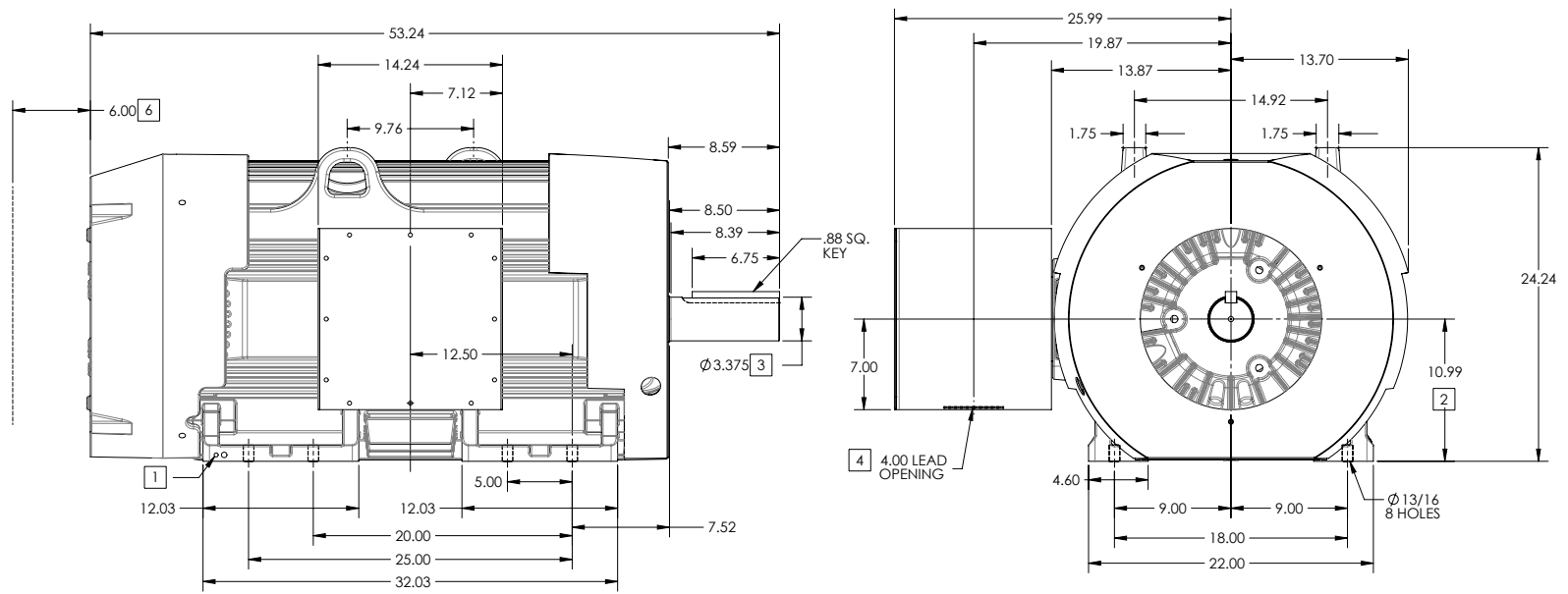
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MTG 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 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

[5] WEIGHT (LBS): 3130

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.

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.

SHEET NUMBER
1 OF 2
9L17427-176

REV. DESC: NEW DRAWING	VERSION: 00	REVISED: 03-12-20 02/04/2014	TDR: 000000836085
MODEL NO. 617427-176	BY: RAGEC		

BALDOR

G449T FT MTG 14X14X12 CENTER C/B F1

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

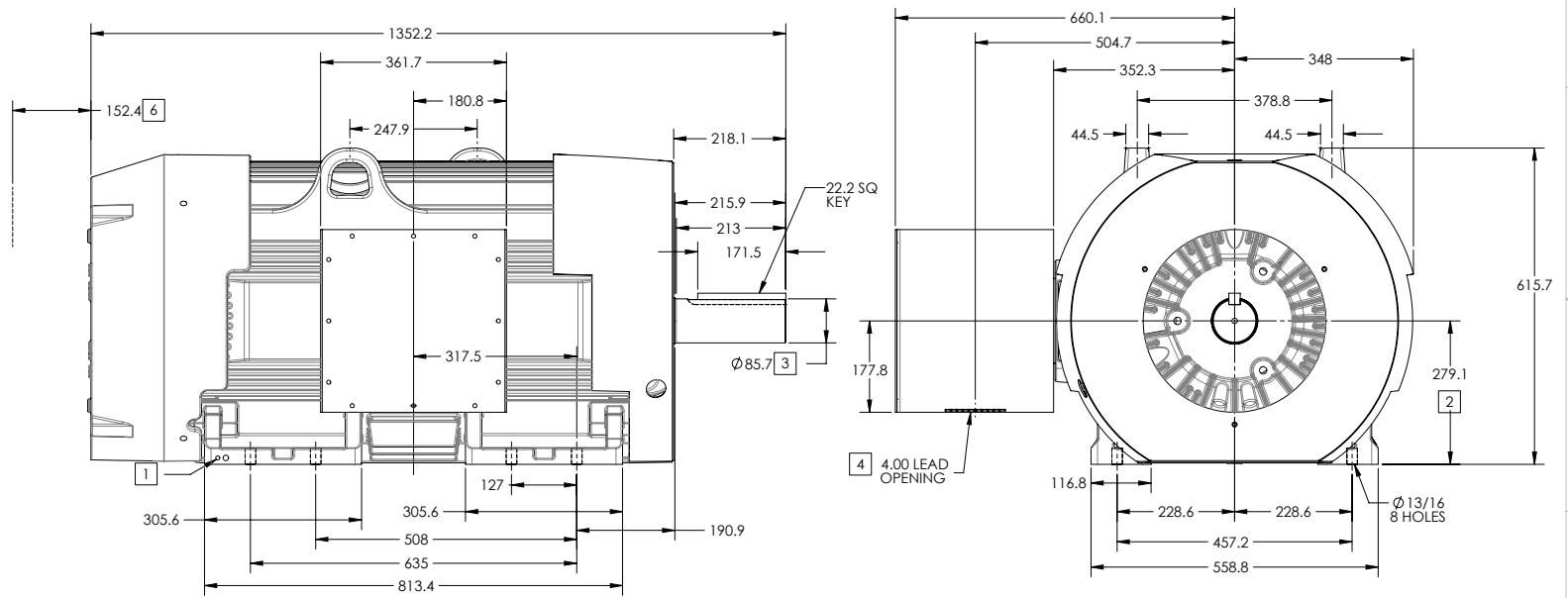
ENCLOSURE: TOTALLY ENCLOSED

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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 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO 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): 1420

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

9/L1-27219

REV. DESC: NEW DRAWING	VERSION: 00	REVISED: 03-12-20 02/04/2014	TDR: 000000836085
MODEL NO. 617427-176	BY: RAGEC		

BALDOR

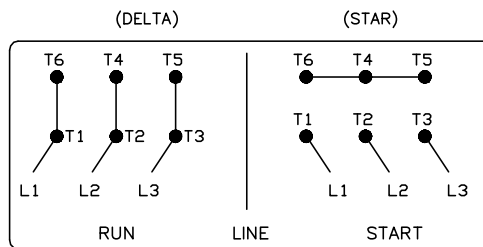
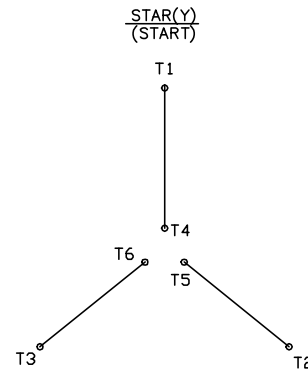
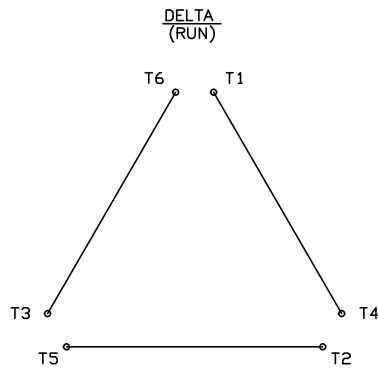
G449T FT MTG 14X14X12 CENTER C/B F1

416820-008

A-C MOTOR CONNECTION DIAGRAM

STANDARD 6 LEAD

Y START - DELTA RUN



< N. P. 1767-DC >

REV. DESC: ADDED T4 TO Y CONNECT DIAGRAM		
REV. LTR: D	VERSION: 04	TDR: 00000847713
FILE: \RAG\00001\808	REVISED: 10: 41: 26 04/08/2014	BY: RAGJSS1
MTL: -	© □	

BALDOR

CONNECT DIAGRAM STD 6 LEAD Y START DELTA RUN

SH 1 of 1

416820-008