

ABB BALDOR RELIANCE III

Customer information packet

EM44404T-4

400HP, 1785RPM, 3PH, 60HZ, L449T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	L449T
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	400.000 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	436.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Feedback Device	NO FEEDBACK
Frame Prefix	L
Heater Indicator	No Heater
High Voltage Full Load Amps	436.0 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	A44208M

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG4239
Layout	617423-200
Eff. date	07-26-2023
CD Diagram	416820-008
Poles	04
Leads	6#1 (02 per group)
Proprietary	False
Created date	04-13-2015

Mounting Arrangement	F1
Number of Poles	4
Overall Length	60.21 IN
Power Factor	89
Product Family	General Industrial
Pulley End Bearing Type	Ball
Service Factor	1.00
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

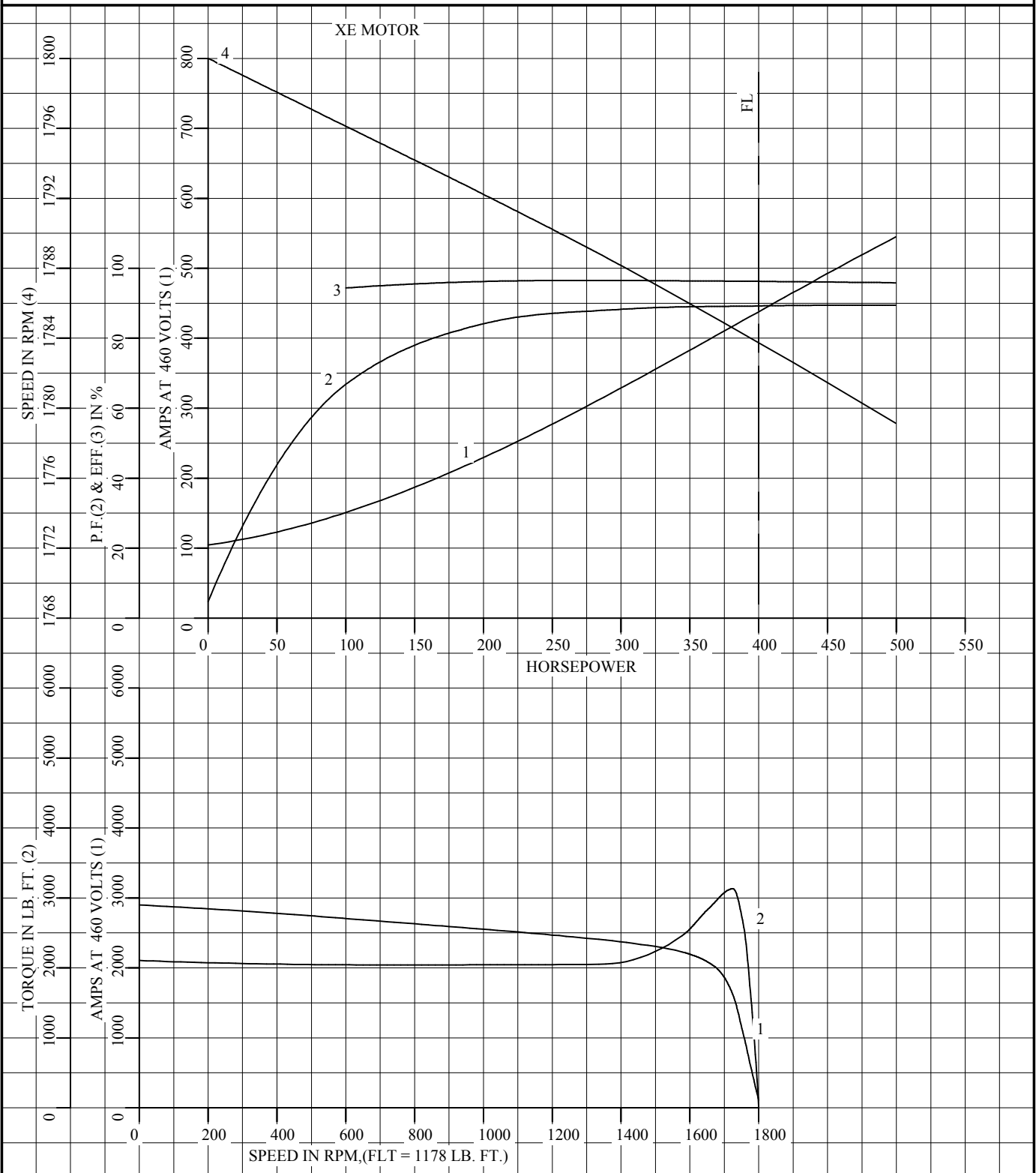
NP2496L	
MOBIL POLYREX EM	

NP2349L

SPEC NO.	A44-7128-4239			CAT.NO.	EM44404T-4				FRAME	L449T	
HP	400	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P		
RPM	1785	AMPS	436	HZ	60	AMB	40	SF	1.00		
DRIVE END BEARING	110BC02J30X		DUTY	CONT	INSUL.CLASS		F				
OPP D.E. BEARING	90BC03J30X		ENCL	TEFC	CODE	G					
SER.NO.				POWER FACTOR	89	NEMA-NOM-EFFICIENCY			96.2		
						MAX CORR KVAR	75.2	GUARANTEED EFFICIENCY		95.4	
						NEMA NOM/CSA QUOTED EFF					
									MOTOR WEIGHT	3765	

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS		
	L449T	400	P	3/60	1785	460		
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.		
436	CONT	40/F	1.00	B	G	TEFC		
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)				
444239	418143041SE	---	---	.00719				
PERFORMANCE								
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY			
NO LOAD	0	105	1800	4.75	0			
1/4	100	149	1796	66.8	94.4			
2/4	200	231	1792	84.1	96.2			
3/4	300	330	1788	88.3	96.5			
4/4	400	436	1784	89.2	96.3			
5/4	500	545	1779	89.5	95.9			
SPEED TORQUE								
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES			
LOCKED ROTOR		0	179	2105	2900			
PULL UP		700	173	2042	2668			
BREAKDOWN		1726	266	3132	1608			
FULL LOAD		1784	100	1178	436			
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								
		DR. BY	G. R. WEBB	A-C MOTOR PERFORMANCE DATA				
		CK. BY	W. L. SMITH					
		APP. BY	W. L. SMITH					
		DATE	04/10/15					
			A44WG4239-R001 ISSUE DATE 04/13/15					

REL S.O.	RPM 1785	S.F. 1.00	ROTOR 418143041SE
FRAME L449T	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 400	AMPS 436	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .00719
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 444239	OHMS (BETWEEN LINES)



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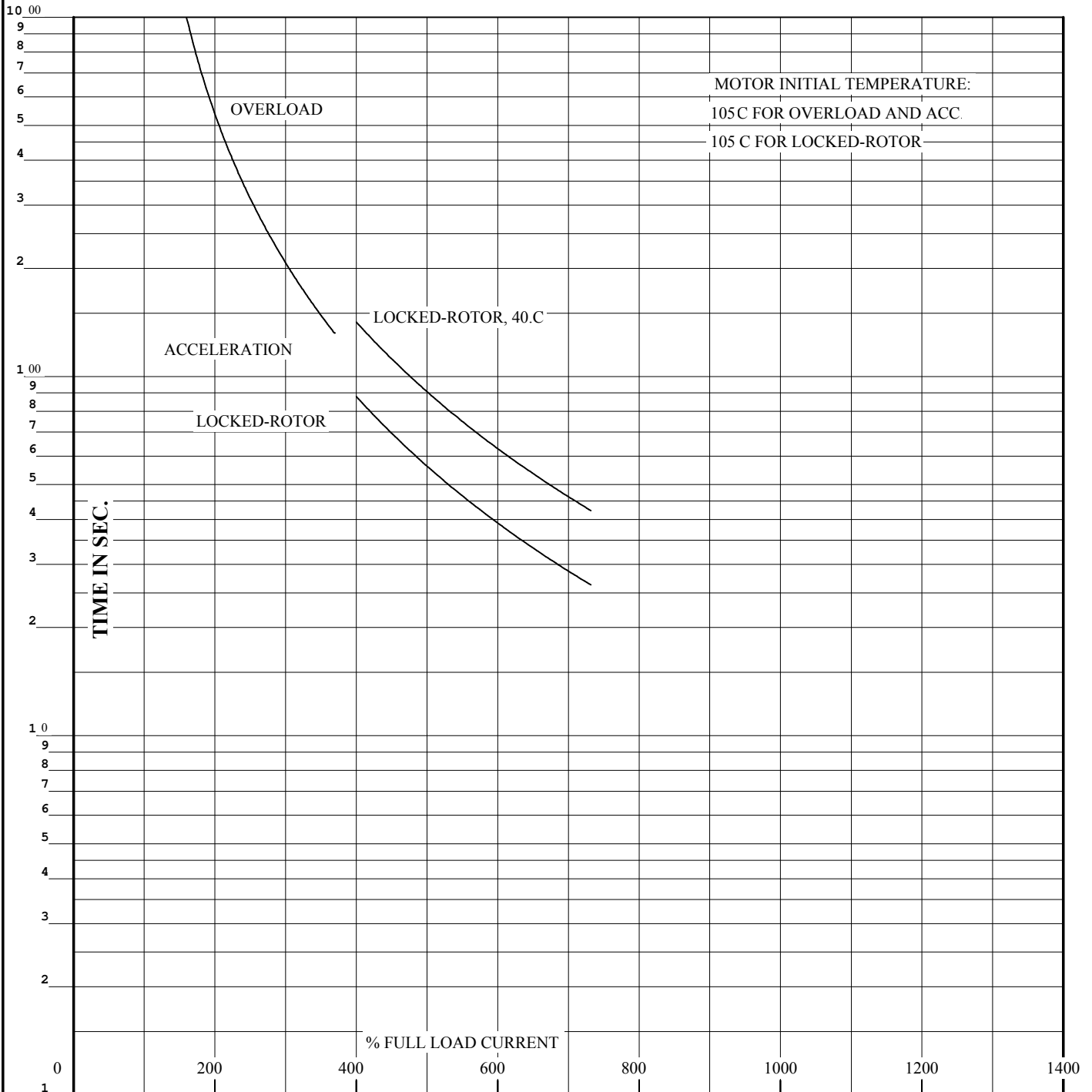
BALDOR
A MEMBER OF THE ABB GROUP

DR. BY G. R. WEBB
CK. BY W. L. SMITH
APP. BY W. L. SMITH
DATE 04/10/15

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG4239-R001
ISSUE DATE 04/13/15

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PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 444239	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: XE MOTOR

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**A-C MOTOR
PERFORMANCE
CURVES**

A44WG4239-R001
ISSUE DATE 04/13/15 Page 8 of 11

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

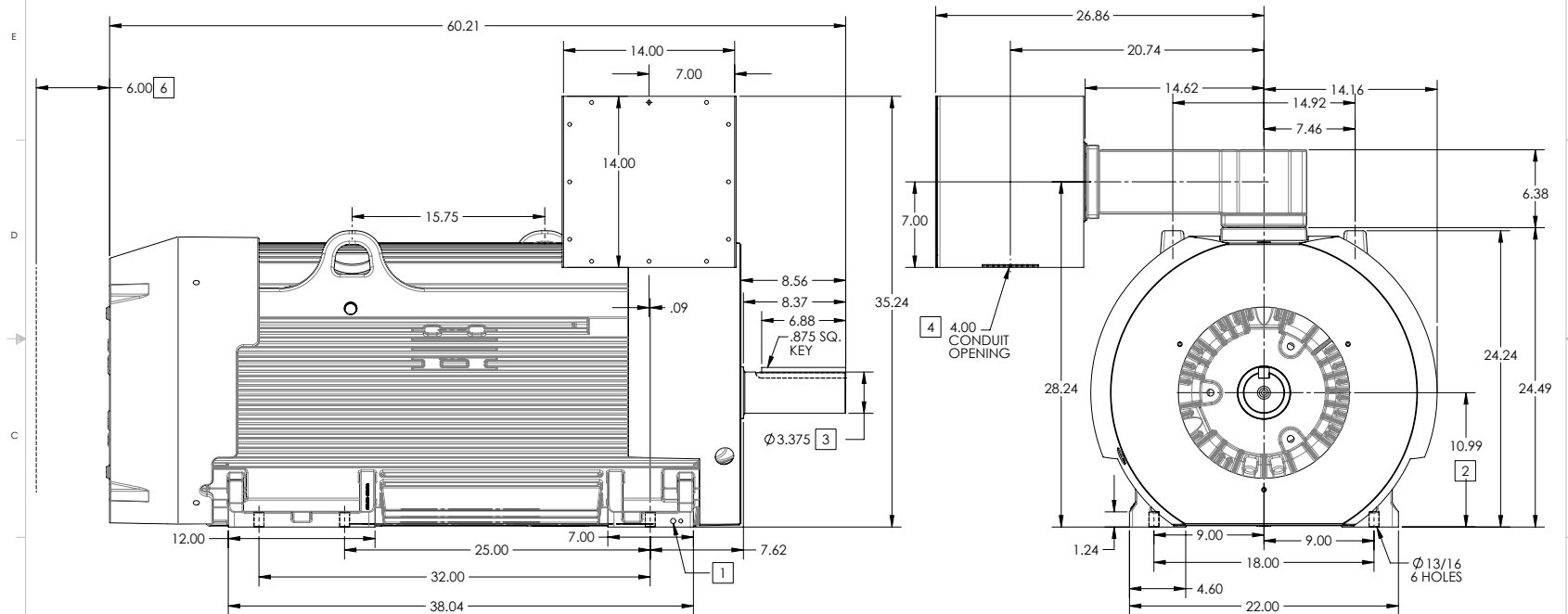
ENCLOSURE: TOTALLY ENCLOSED

FRAME GL449T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES G449T 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. FABRICATED STEEL CONDUIT BOX WITH AN OPENING FOR CONDUIT.
5. MOTOR WEIGHTS MAY VARY BY 1.5% 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 .003" T.I.R. TO 5 INCH DIA.

WEIGHT (LBS): 3875

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. DESC: NEW DRAWING			
REV: -	VERSION: 00	REVISED: 12/31/00 09/22/2014	TDR: 000000871203
MODEL NO. 617423-200		REF:	
BY: RAGEC	Material:		

BALDOR

DIM SHEET GL449T/449T FOOT MOUNTED HORIZONTAL 14X14X12 CBOX

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

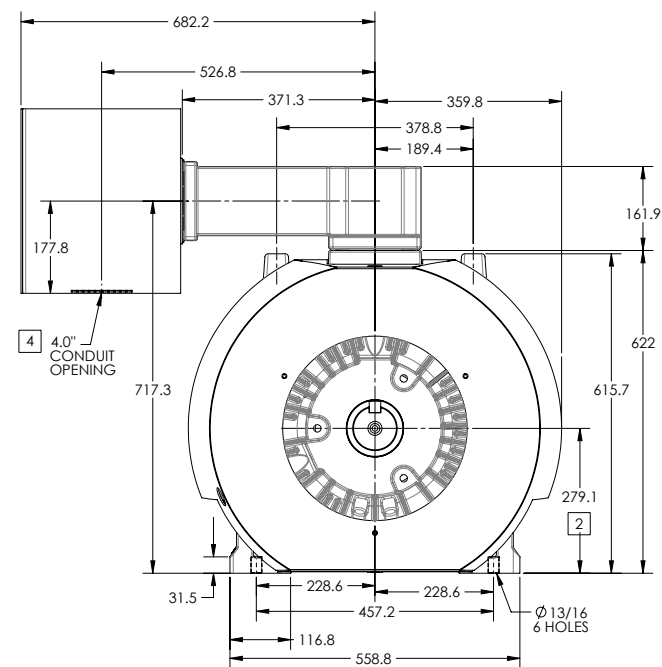
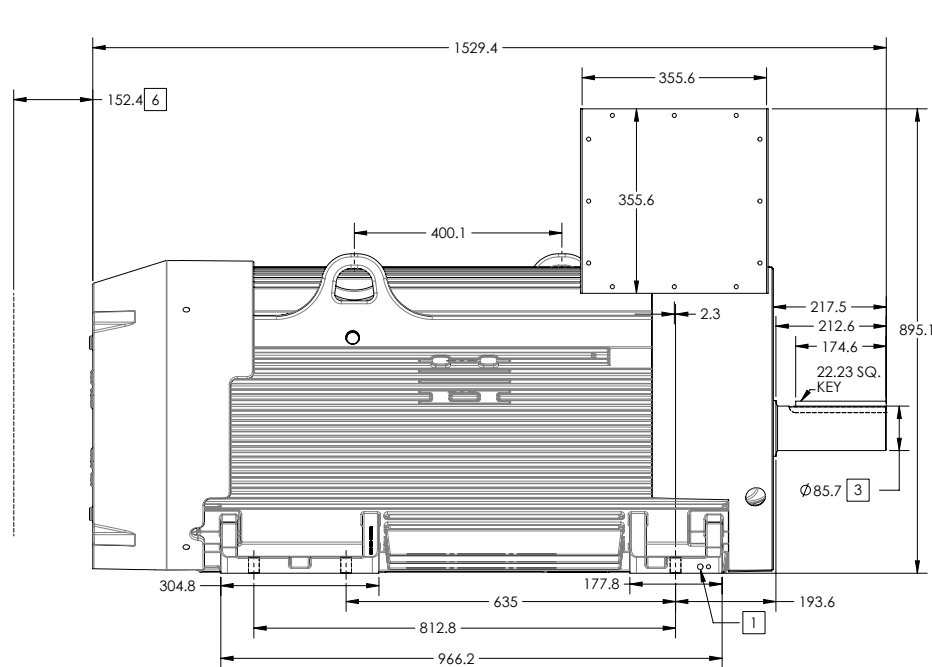
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IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .08 MM T.I.R. TO 127 MM DIA.

WEIGHT (KGS): 1760

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

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REV: -	VERSION: 00	REVISED: 12/31/00 09/22/2014	TDR: 000000871203
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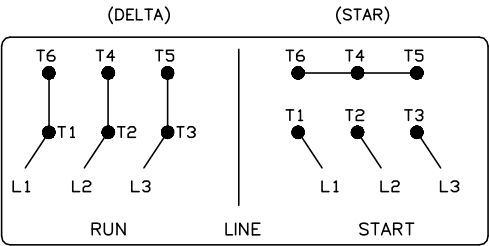
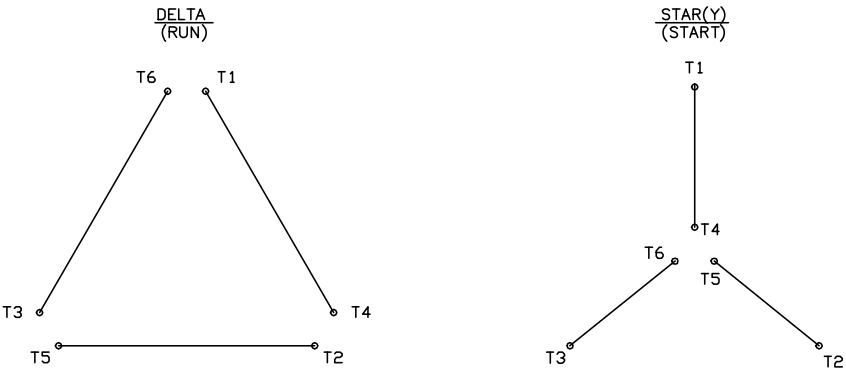
BALDOR

DIM SHEET GL449T/449T FOOT MOUNTED HORIZONTAL 14X14X12 CBOX

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: 000000847713
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