

ABB BALDOR RELIANCE III

Customer information packet

ECR94004TR-4

400HP, 1800RPM, 3PH, 60HZ, GL449T, TEFC

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	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	30-60
Current @ Voltage	442.000 A @ 460.0 V
Design Code	A
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	442.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Max Speed	3000 rpm
Motor Lead Quantity/Wire Size	12 @ 1 AWG

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG5274
Layout	617423-218
Eff. date	04-08-2021
CD Diagram	416820-036
Poles	04
Leads	3#1 (04 per group)
Proprietary	False
Created date	08-28-2015

Motor Standards	NEMA
Motor Type	A44192M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	60.21 IN
Power Factor	88
Product Family	Crusher / Chipper
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	Shaft Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

000613007PV																
CAT NO	ECR94004TR-4				SPEC NO.		P44G1832									
HP	400	AMPS		442		VOLTS		460		DESIGN		A				
RPM	1785	RPM MAX		3000		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
FRAME	L 449T		I.P.		55	TYPE		P	ENCL		TEFC	CODE		H		
POWER FACTOR	88		3/4 LOAD EFF.				96.2			NEMA NOM EFFICIENCY				96.2		
CHP HZ	60-90		CT HZ		30-60		VT HZ		6-60							
SER.NO.					MOTOR WEIGHT											

NP2496L	
MOBIL SHC -220 GREASE	

CUSTOMER INFORMATION PACKET	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
ECR94004TR-4 - 400HP, 1800RPM, 3PH, 60HZ, GL449T, TEFC	449T	400	P	3/60	1785	460

AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
442	CONT	40/F	1.15	A	H	TEFC

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)
-	418143048YE	---	---	.00681

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	106	1800	5.93	0
1/4	100	150	1796	67.0	93.2
2/4	200	233	1793	83.9	95.7
3/4	300	334	1789	87.5	96.2
4/4	400	442	1785	88.1	96.1
5/4	500	553	1780	88.2	95.9

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	283	3329	3323
PULL UP	1450	196	2312	2153
BREAKDOWN	1728	244	2873	1487
FULL LOAD	1785	100	1177	442

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

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

FRAME 449T

HP 400

TYPE P

PHASE / HERTZ 3/60

CUSTOMER INFORMATION PACKET

RPM 1785

VOLTS 460

AMPS 442

DUTY CONT

AMB °C / INSUL 40/F

ECR94004 TR-1 400HP, 1800RPM, 3PH, 60HZ, 480V, TEFC

S.F. 1.15

NEMA DESIGN A

CODE LETTER H

ENCLOSURE TEFC

E/S -

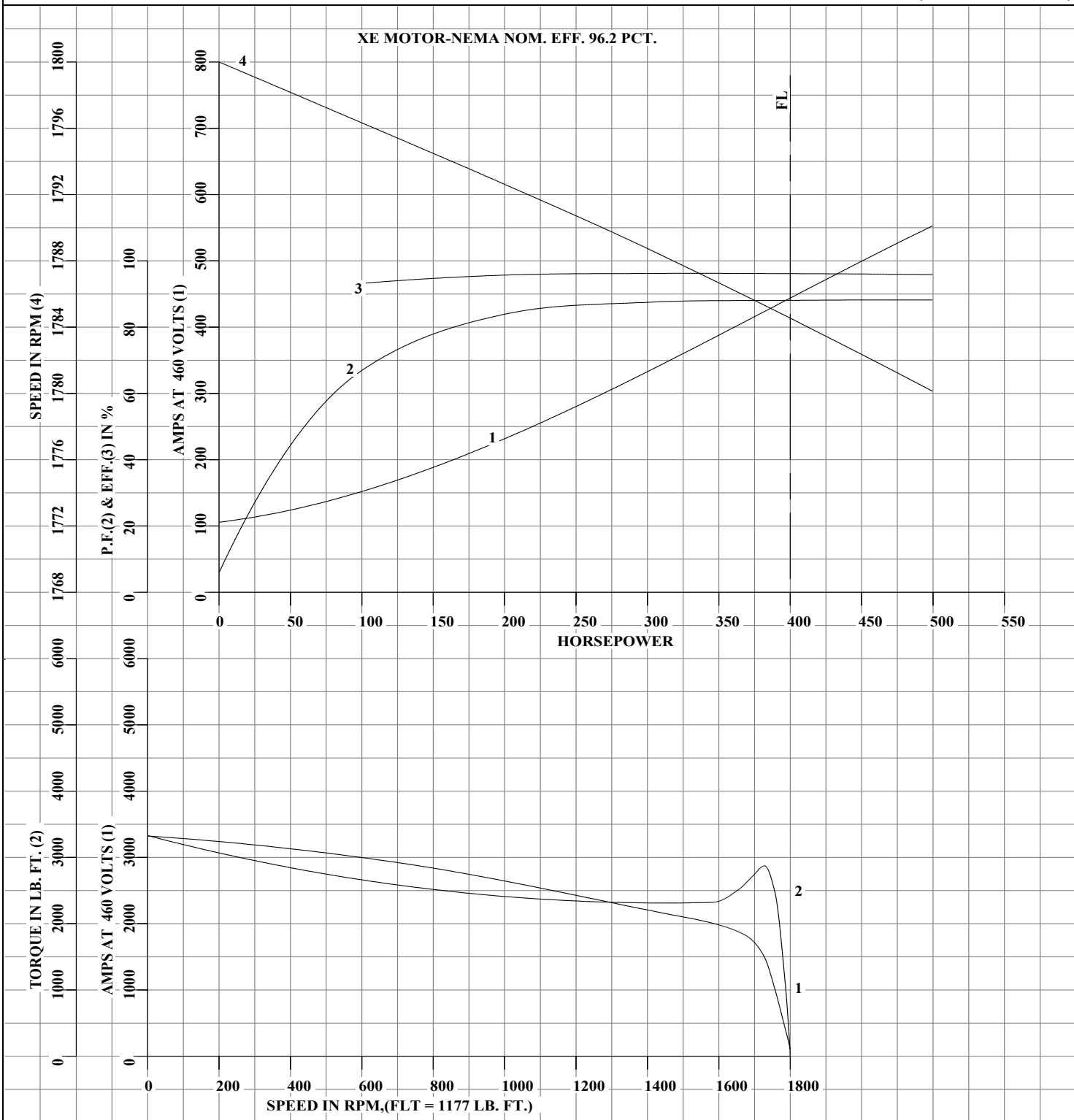
ROTOR 418143048YE

TEST S.O. CALCULATED DATA

TEST DATE ---

STATOR RES. @ 25°C .00681

OHMS (BETWEEN LINES)



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

FRAME 449T

RPM 1785

S.F. 1.15

ROTOR 418143648YE

HP 400

VOLTS 460

NEMA DESIGN A

TEST S.O. CALCULATED DATA

TYPE P

AMPS 442

CODE LETTER H

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

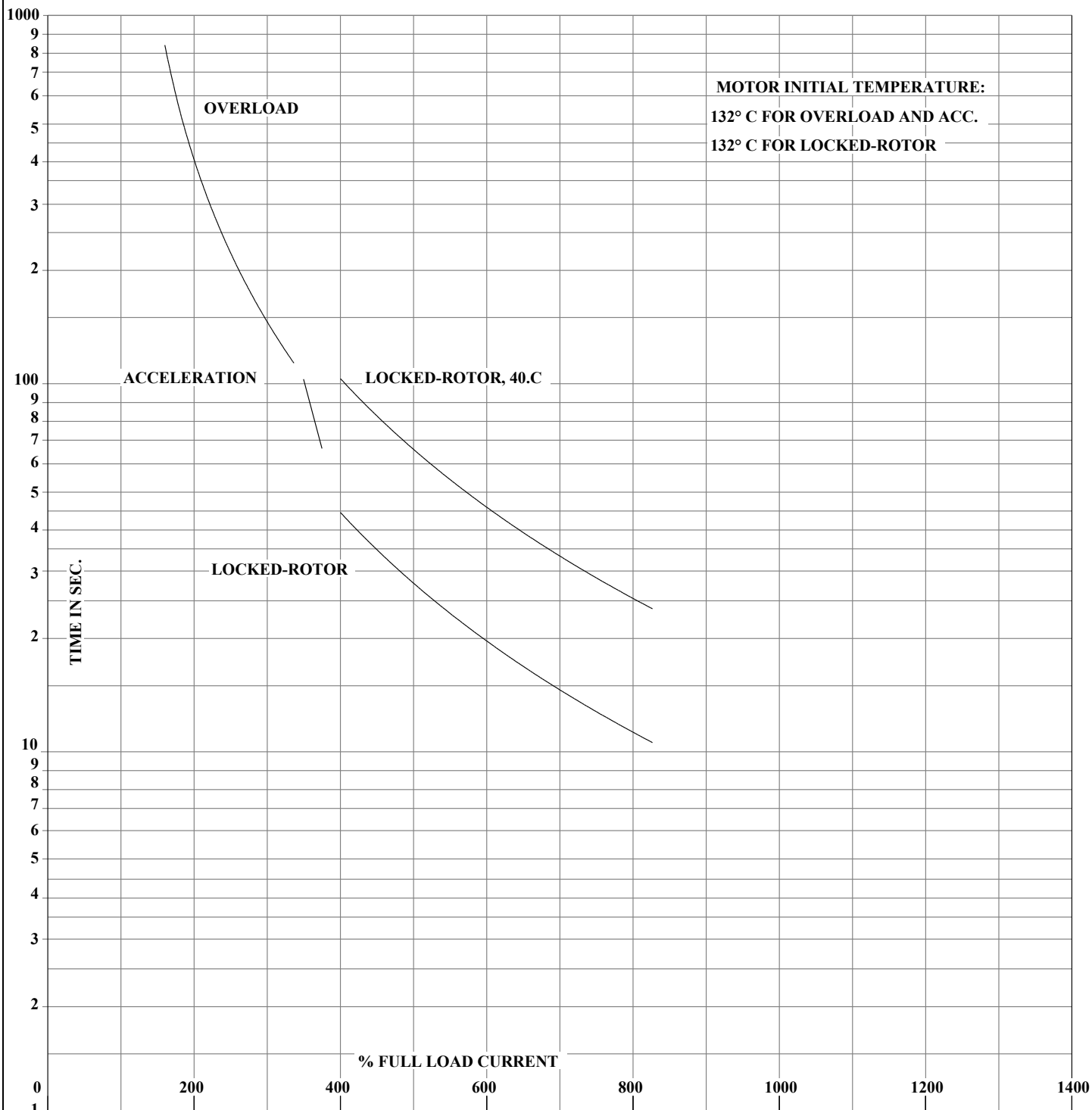
ENCLOSURE TEFC

STATOR RES. @ 25°C .00681

AMB °C / INSUL 40/F

E/S -

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.

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

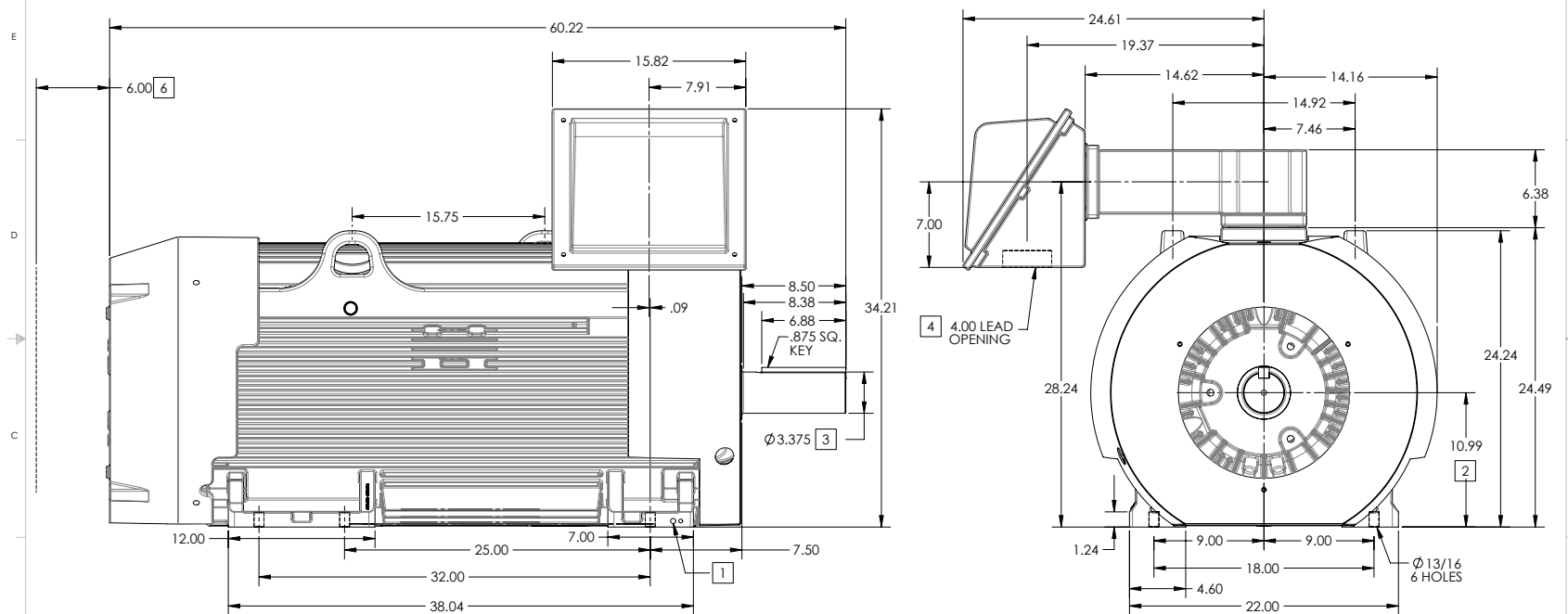
ENCLOSURE: TOTALLY ENCLOSED

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 +.00,-.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 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.

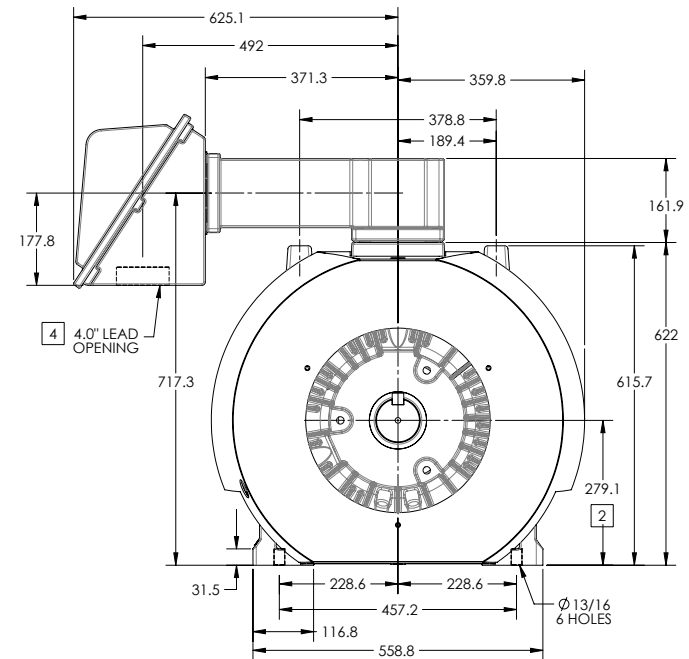
REV. DESC: NEW ISSUE			
REV: -	VERSION: 00	REVISED: 09-28-57 02/11/2015	TDR: 000000884510
MODEL NO. 617423-218		REF:	
BY: RAGGDM	Material:		

BALDOR

G28 DIMENSION SHEET ASSEMBLY: GL449/449T BA-7.50

SQUIRREL-CAGE INDUCTION

INCLUDES G449T FRAME MOUNTING HOLES



- 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.

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

BALDOR®

G28 DIMENSION SHEET ASSEMBLY: GL449/449T BA=7.50

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