

ABB BALDOR RELIANCE III

Customer information packet

ECR93004T-4

300HP, 1785RPM, 3PH, 60HZ, 449T, A44144M, TEFC

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	300.000 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	Polyrex EM (-20F +300F)
Constant Torque Speed Range	30-60
Current @ Voltage	336.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	336.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	No Lifting Lugs
Max Speed	3600 rpm
Motor Lead Quantity/Wire Size	12 @ 1 AWG
Motor Standards	NEMA

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG5110
Layout	617427-091
Eff. date	04-08-2021
CD Diagram	416820-036
Poles	04
Leads	3#1 (04 per group)
Proprietary	False
Created date	02-05-2015

Motor Type	A44144M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	53.24 IN
Power Factor	87
Product Family	Crusher / Chipper
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	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

000613007PV														
CAT NO	ECR93004T-4			SPEC NO.		P44G1818								
HP	300	AMPS	336		VOLTS		460		DESIGN	A				
RPM	1785	RPM MAX		3600		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
FRAME	449T	I.P.	55	TYPE	P	ENCL		TEFC	CODE	H				
POWER FACTOR	87	3/4 LOAD EFF.				96.1		NEMA NOM EFFICIENCY				96.2		
CHP HZ	60-90	CT HZ		30-60		VT HZ		6-60						
SER.NO.				MOTOR WEIGHT										

NP2496L	
MOBIL POLYREX EM	

ABB BALDOR RELIANCE III S/O	CUSTOMER INFORMATION PACKET						ECR93004T-4 - 300HP, 1785RPM, 3PH, 60HZ, 449T, A44144M, TEFC					
	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS						
	449T	300	P	3/60	1785	460						
AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE						
336	CONT	40/F	1.15	A	H	TEFC						
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)								
-	418143031XE	---	---	.00907								
PERFORMANCE												
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY							
NO LOAD	0	91.7	1800	5.40	0							
1/4	75.0	123	1797	61.5	92.9							
2/4	150	184	1793	79.8	95.6							
3/4	225	257	1790	85.4	96.1							
4/4	300	337	1786	86.8	96.1							
5/4	375	419	1782	87.4	95.9							
SPEED TORQUE												
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES								
LOCKED ROTOR	0	276	2435	2613								
PULL UP	1450	206	1813	1723								
BREAKDOWN	1732	258	2274	1171								
FULL LOAD	1786	100	882	337								
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.												
 A MEMBER OF THE ABB GROUP		DRAWN BY: <u>CD</u> CHECKED BY: <u>T. KELATI</u> APPROVED BY: <u>T. KELATI</u> DATE: <u>02/05/2015</u>		AC MOTOR PERFORMANCE DATA		A44WG5110-R001						
						DATE ISSUED 02/05/20						

FRAME 449T

RPM 1785

S.F. 1.15

ROTOR 418143031XE

HP 300

VOLTS 460

NEMA DESIGN A

TEST S.O. CALCULATED DATA

TYPE P

AMPS 336

CODE LETTER H

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

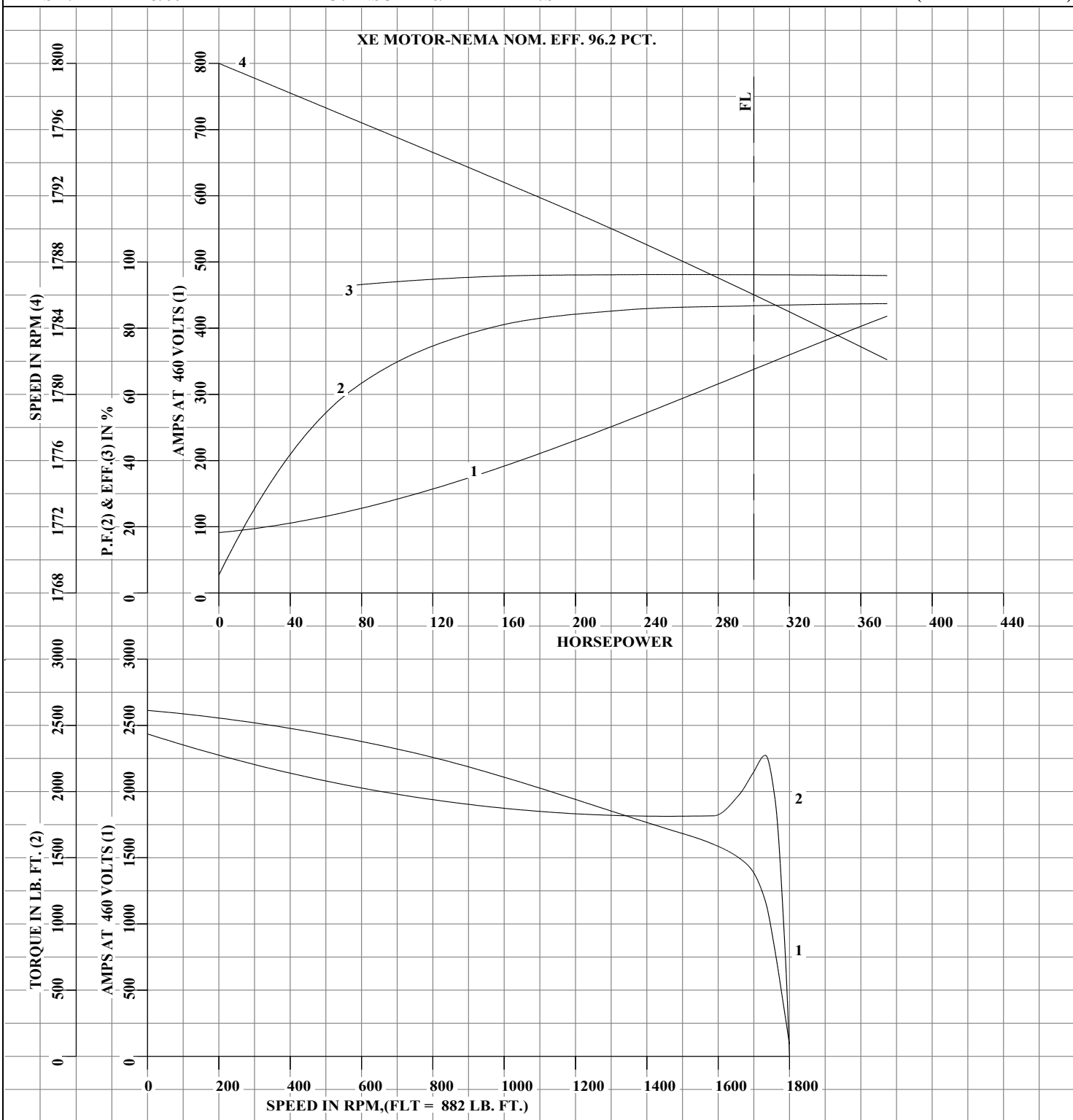
ENCLOSURE TEFC

STATOR RES. @ 25°C .00907

AMB °C / INSUL 40/F

E/S -

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

DRAWN BY: CD
CHECKED BY: T. KELATI
APPROVED BY: T. KELATI
DATE: 02/05/2015

AC MOTOR
PERFORMANCE
DATA

A44WG5110-R001

ISSUE DATE 02/05/2015

FRAME 449T

RPM 1785

S.F. 1.15

ROTOR 418143031XE

HP 300

VOLTS 460

NEMA DESIGN A

TEST S.O. CALCULATED DATA

TYPE P

AMPS 336

CODE LETTER H

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

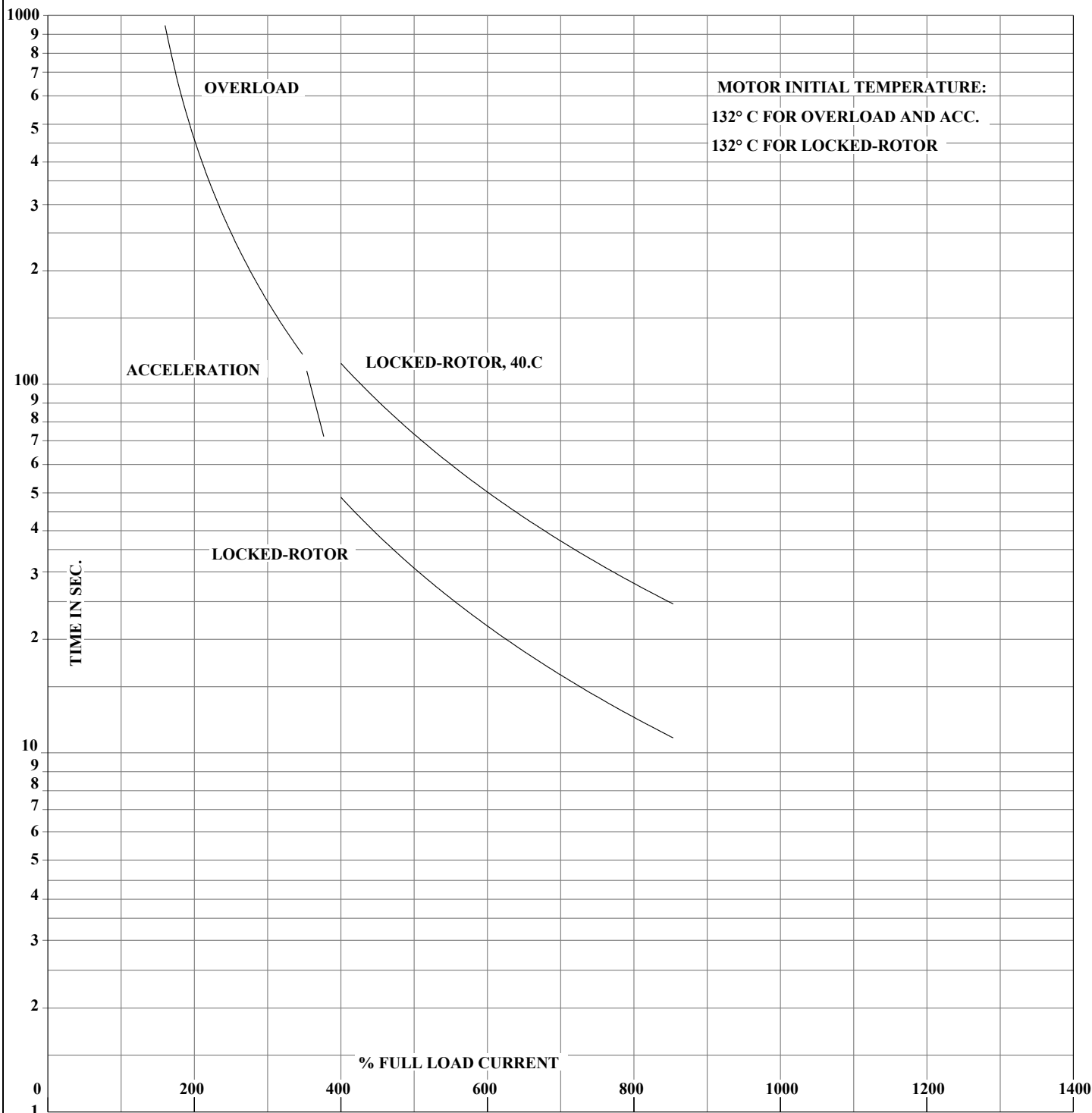
ENCLOSURE TEFC

STATOR RES. @ 25°C .00907

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

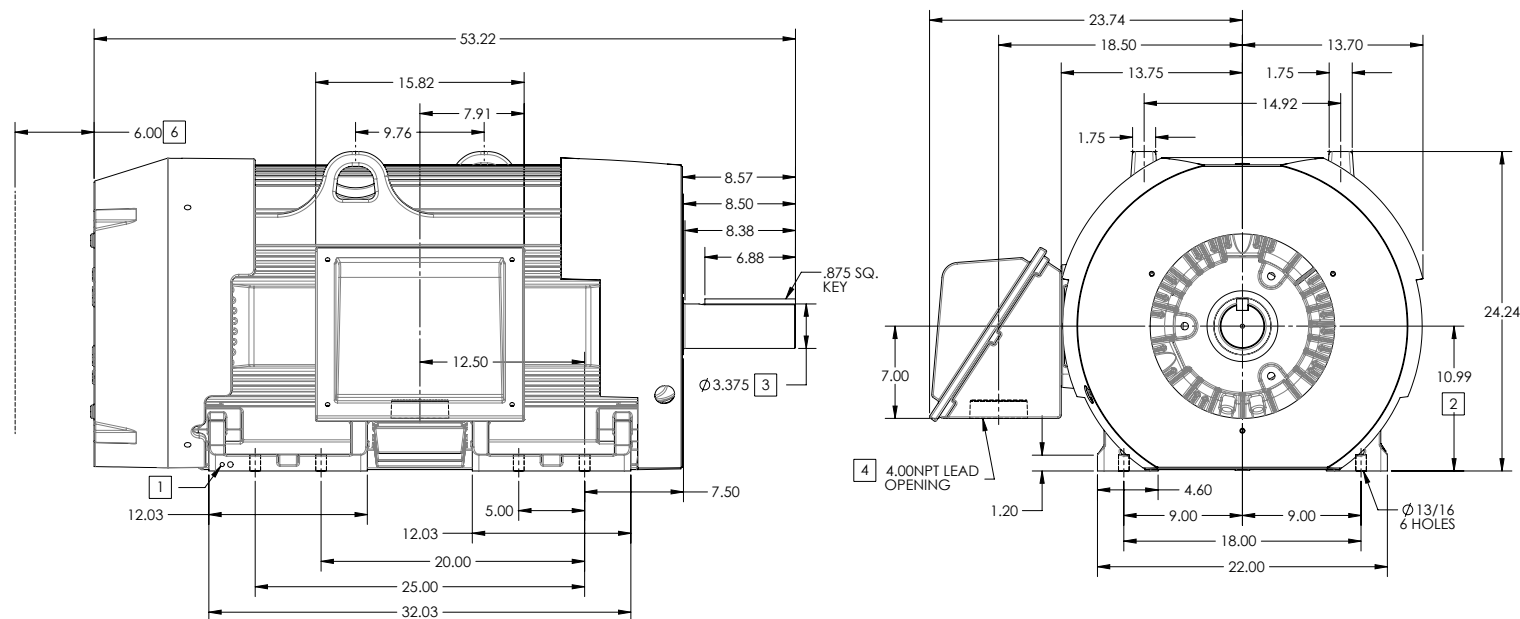
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 449T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.01, -.05
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 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.

[5] WEIGHT (LBS): 3080

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN INCHES

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

SHEET NUMBER
1 OF 2

1607-27-091

REV. DESC: ADD C DIMENSION
REV: B VERSION: 02 REVISED: 02-45-42 09/29/2015 TDR: 000000942902
MODEL NO. 617427-091
BY: USBRCHA2

BALDOR

G449/447T SIDE MOUNT C-BOX, TEFC

617427-091

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

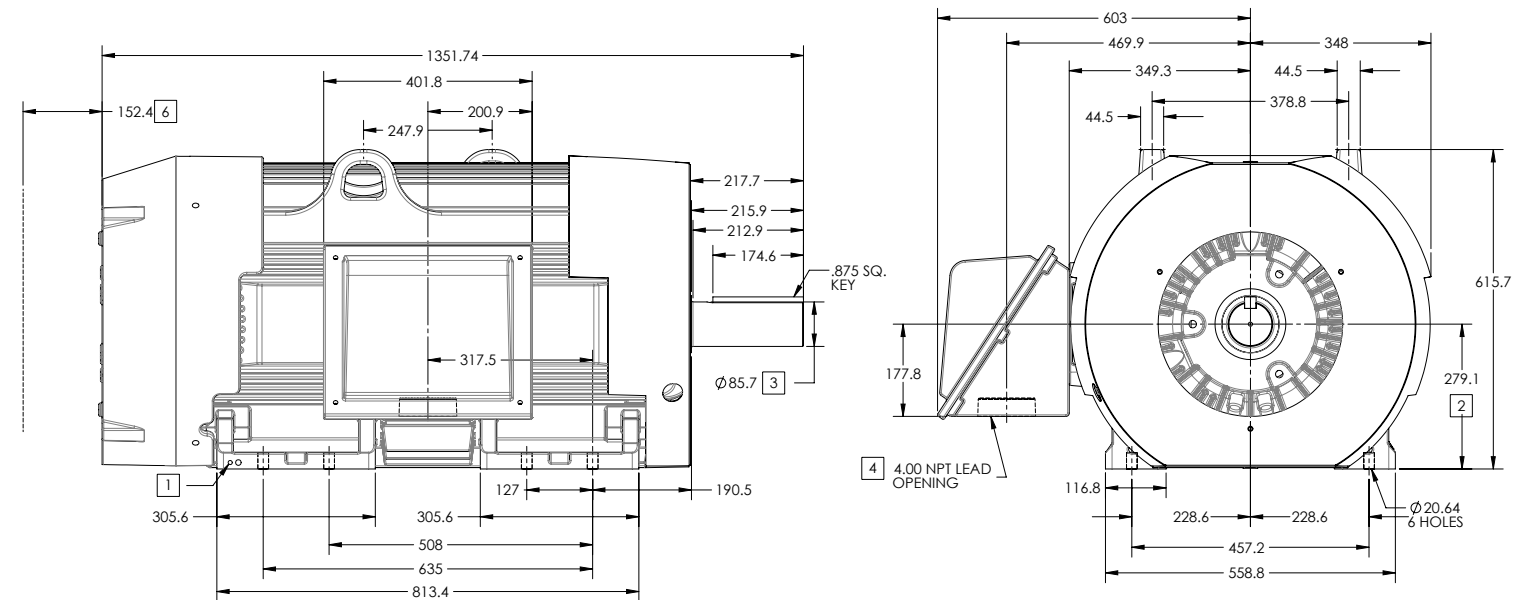
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 449T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-1.524
3. VARIES +.000,-.0254
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 .0762 T.I.R. TO 127 MM DIA.

5 MASS (KGS): 1395

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

1607-27-091

REV. DESC: ADD C DIMENSION	REV. B	VERSION: 02	REVISED: 02-45-42 09/29/2015	TDR: 000000942902
MODEL NO. 617427-091	BY: USBRCHA2			

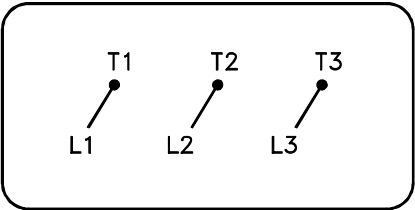
BALDOR

G449/447T SIDE MOUNT C-BOX, TEFC

617427-091

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