

ABB BALDOR RELIANCE III

Customer information packet

ECR93504T-4

350HP, 1785RPM, 3PH, 60HZ, 449T, A44160M, 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	350.000 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	390.000 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	390.0 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.	A44WG5144
Layout	617427-091
Eff. date	04-08-2021
CD Diagram	416820-036
Poles	04
Leads	3#1 (04 per group)
Proprietary	False
Created date	01-26-2015

Motor Type	A44160M
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	ECR93504T-4				SPEC NO.		P44G1821									
HP	350	AMPS		390		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.				96.3		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	

REL. S.O.	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	ENCL.
390	CONT	40/F	1.15	A	H	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
-	418143050AE	---	---	.00794		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	97.8	1800	5.22	0	
1/4	87.6	135	1796	64.7	93.6	
2/4	175	207	1792	82.5	95.9	
3/4	262	294	1788	86.6	96.3	
4/4	350	390	1784	87.5	96.2	
5/4	437	487	1779	87.7	95.8	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	265	2736	2848	
PULL UP		1450	193	1991	1971	
BREAKDOWN		1729	243	2501	1286	
FULL LOAD		1784	100	1030	390	
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE						
REMARKS: CALCULATED DATA XE MOTOR-NEMA NOM. EFF. 96.2 PCT.						
		DR. BY CD		A-C MOTOR PERFORMANCE DATA A44WG5144-R001 ISSUE DATE 02/05/20		
		CK. BY T. KELATI				
		APP. BY T. KELATI				
		DATE 02/05/2015				
		Page 6 of 1				

REL S.O.

RPM 1785

S.F. 1.15

ROTOR 418143050AE

FRAME 449T

VOLTS 460

NEMA DESIGN A

TEST S.O. CALCULATED DATA

HP 350

AMPS 390

CODE LETTER H

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

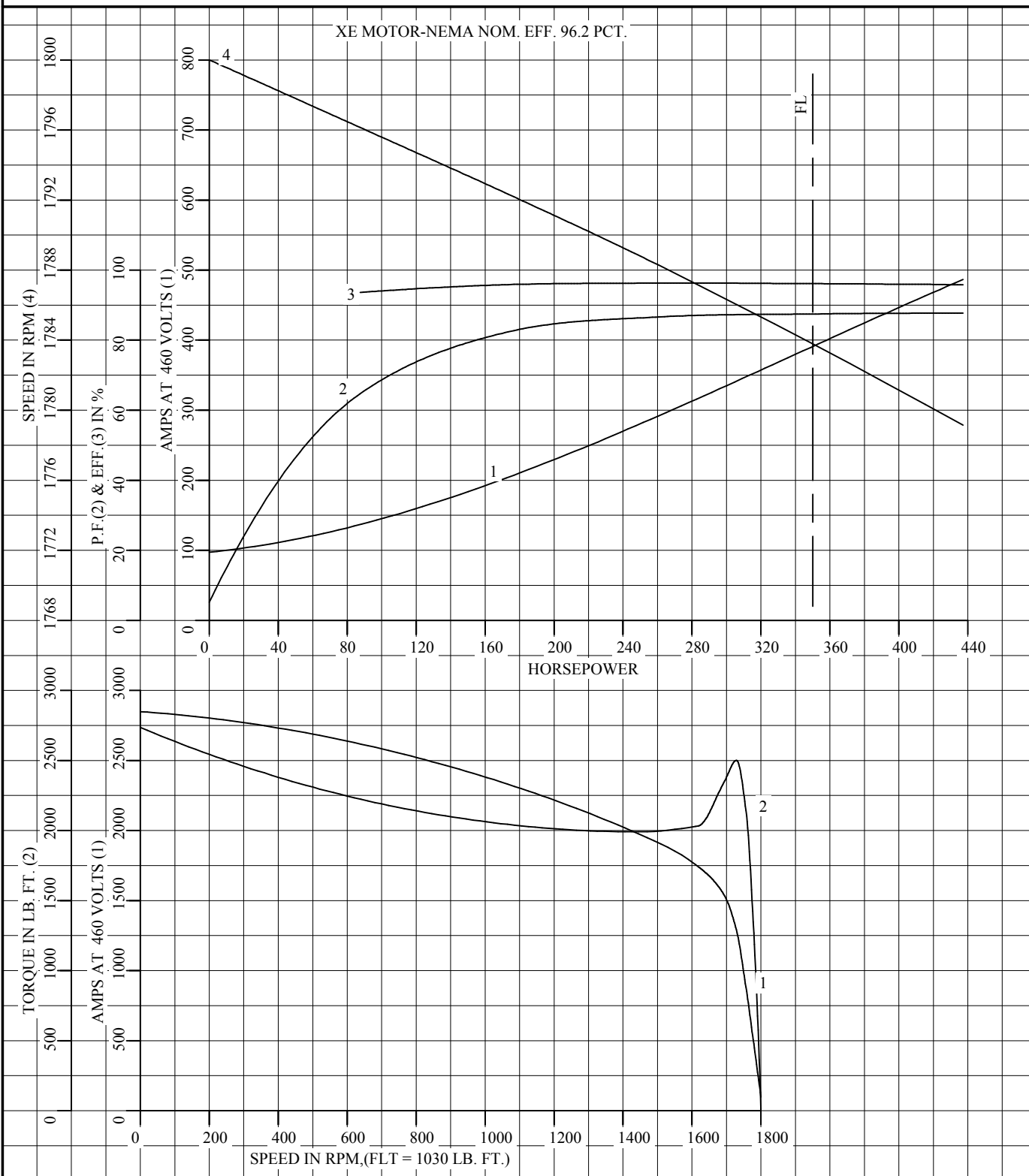
STATOR RES. @ 25 °C .00794

PHASE/HERTZ 3/60

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

DR. BY CD
CK. BY T. KELATI
APP. BY T. KELATI
DATE 02/05/2015

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG5144-R001
ISSUE DATE 02/05/2015

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

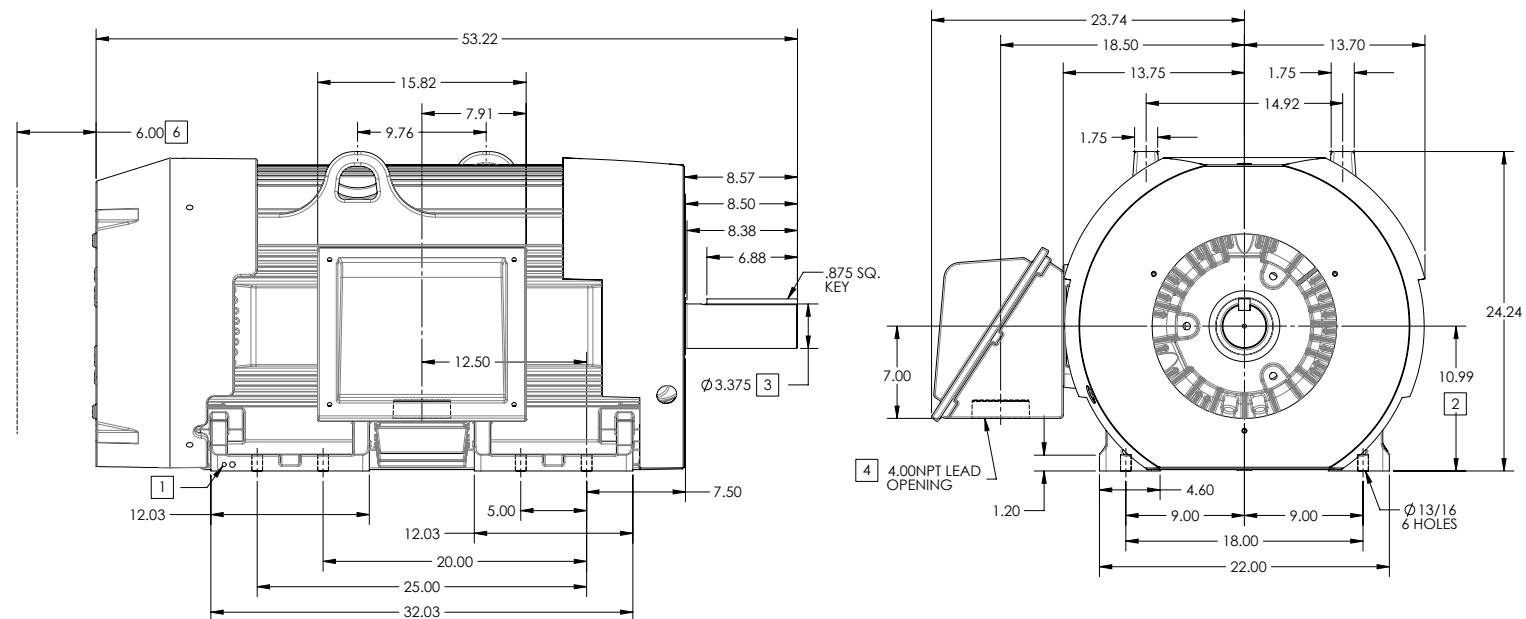
ENCLOSURE: TOTALLY ENCLOSED

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

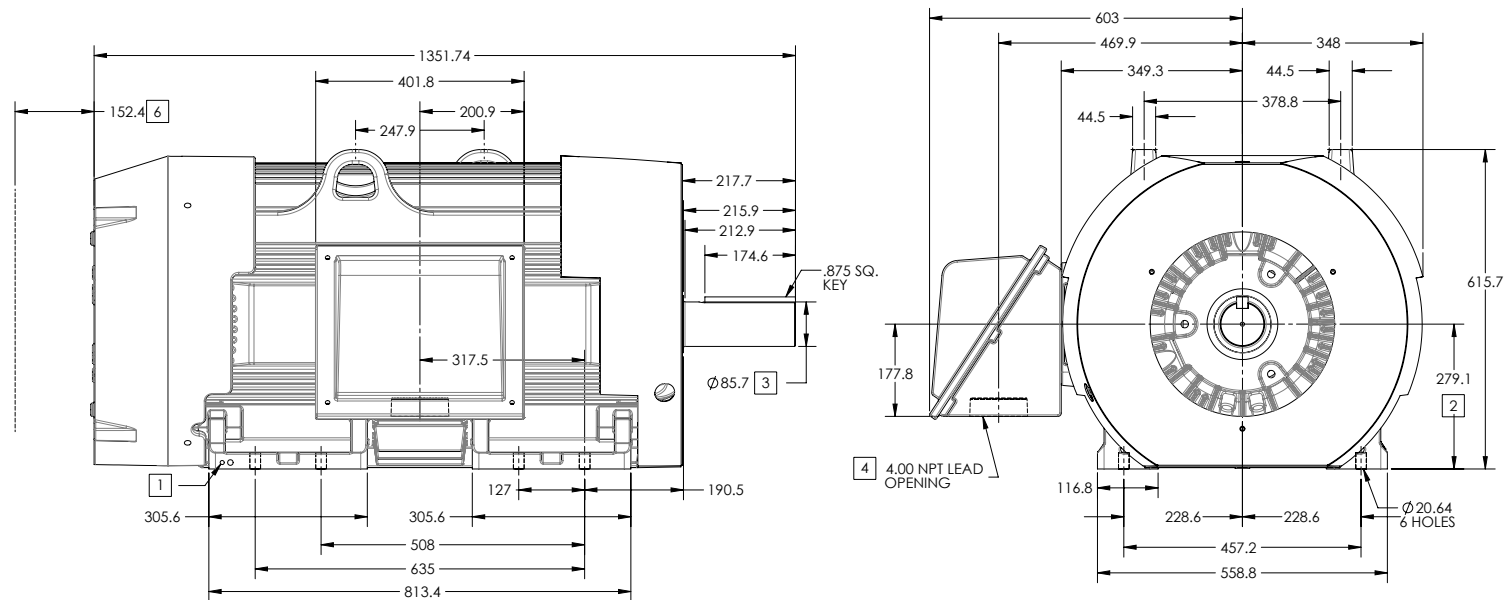
ENCLOSURE: TOTALLY ENCLOSED

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

1607-27-119

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

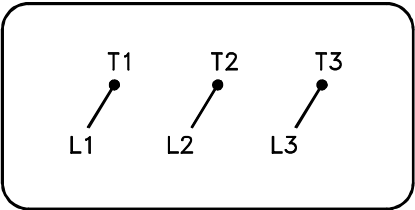
BALDOR

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