ABB BALDOR RELIANCE

Customer information packet

EM251452T-4

450HP, 3570RPM, 3PH, 60HZ, 449TS, A44112M, DP
Class - None
Division - Not Applicable

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Specifications

Enclosure	DP
Frame	449TS
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	450.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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	494.000 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	494.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	12 @ 1 AWG
Motor Standards	NEMA
Motor Type	A44112M

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG2693
Layout	604989-664
Eff. date	09-25-2025
CD Diagram	416820-008
Poles	02
Leads	6#1 (02 per group)
Proprietary	False
Created date	02-09-2015

Mounting Arrangement	F1
Number of Poles	2
Overall Length	44.31 IN
Power Factor	88
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3570 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.	A44-6799-2693	**CAT.NO.**	EM251452T-4							**FRAME**	449TS	
HP	450	**VOLTS**	460	**PHASE**	3	**DESIGN**	B	**TYPE**	P			
RPM	3570	**AMPS**	494	**HZ**	60	**AMB**	40	**SF**	1.15			
DRIVE END BEARING	65BC03J30X	**DUTY**	CONT	**INSUL.CLASS**	F							
OPP D.E. BEARING	65BC03J30X	**ENCL**	DP	**CODE**	F							
SER.NO.		**POWER FACTOR**	88					**NEMA-NOM-EFFICIENCY**	96.2			
						MAX CORR KVAR	75	**GUARANTEED EFFICIENCY**	95.4			
						NEMA NOM/CSA QUOTED EFF						
								MOTOR WEIGHT	2080			

Parts List

Part number	Description	Quantity
SA293487	SA A44-6799-2693	1.000 ea
RA279583	RA A44-6799-2693	1.000 ea
421948044	LABEL, MYLAR	1.000 ea
NP2496L	MOTOR LUBE NAMEPLATE	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
000692000FF	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP2349L	SUPER-E ,SS, CURUS EEV, CC, LASER	1.000 ea
702611001A	BAFFL 440 SUB PAINT	1.000 ea
089438082A	BRKT 440 089438081WCB	1.000 ea
004824015A	GREASE POLYREX EM	0.540 lb
032018028EK	HHCS 5/8-11X3-1/2L PLTD	4.000 ea
032018028CK	HHCS 3/8-16X3-1/2 PLTD.	3.000 ea
410700004F	WSHR	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
405851012AB	SPACE	4.000 ea
032018006AK	HHCS 1/4-20X3/4L PLATED	4.000 ea
034000012AB	WSHR 1/4 STD. PLATED	4.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
405851012AB	SPACE	4.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034000012AB	WSHR 1/4 STD. PLATED	4.000 ea
032018006AK	HHCS 1/4-20X3/4L PLATED	4.000 ea
089438082A	BRKT 440 089438081WCB	1.000 ea
702611001A	BAFFL 440 SUB PAINT	1.000 ea
032018028EK	HHCS 5/8-11X3-1/2L PLTD	4.000 ea
032018028CK	HHCS 3/8-16X3-1/2 PLTD.	3.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
702658001B	+C/BOX, PAINTED 440	1.000 ea

702658002A	+C/BOX CVR, PAINTED 440	1.000 ea
406056008A	GASKET, TERBD 440	1.000 ea
418153001A	GASK 440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025Y17	WILKOFAST, 789.701, SUPER E PEARL GOLD	0.500 ga
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
048897010DG	PLUG,ODE BRKT - 360	1.000 ea
406055001E	GRFTG - 440	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
033512006LB	HHTTS 1/4-20X3/4 PLTD.	8.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180024HA	KEY 5/8X5/8X3 L	1.000 ea
604797056	400-447 FRAME 60 X 42	1.000 ea
032510026D	CARRIAGE BOLT - 440	2.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	2.000 ea
034001016AB	WSHR .562ID 1.375OD .109	2.000 ea
033300014AC	HEX NUT, SHIPPING - 400	2.000 ea
604799003C	PLASTIC BAG 42X32X46	1.000 ea

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	449T	450	P	3/60	3570	460

AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
494	CONT	40/F	1.15	B	F	PRXE

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C OHMS (BETWEEN LINES)
433499	418143013KE	---	---	.00760

PERFORMANCE

LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY
NO LOAD	0	124	3600	4.41	0
1/4	113	170	3593	65.6	94.5
2/4	225	263	3586	83.2	96.3
3/4	337	374	3578	87.4	96.5
4/4	450	494	3570	88.4	96.3
5/4	562	618	3561	88.8	95.9

SPEED TORQUE

	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	198	1310	2870
PULL UP	2550	161	1064	2300
BREAKDOWN	3472	213	1409	1539
FULL LOAD	3570	100	661	494

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%

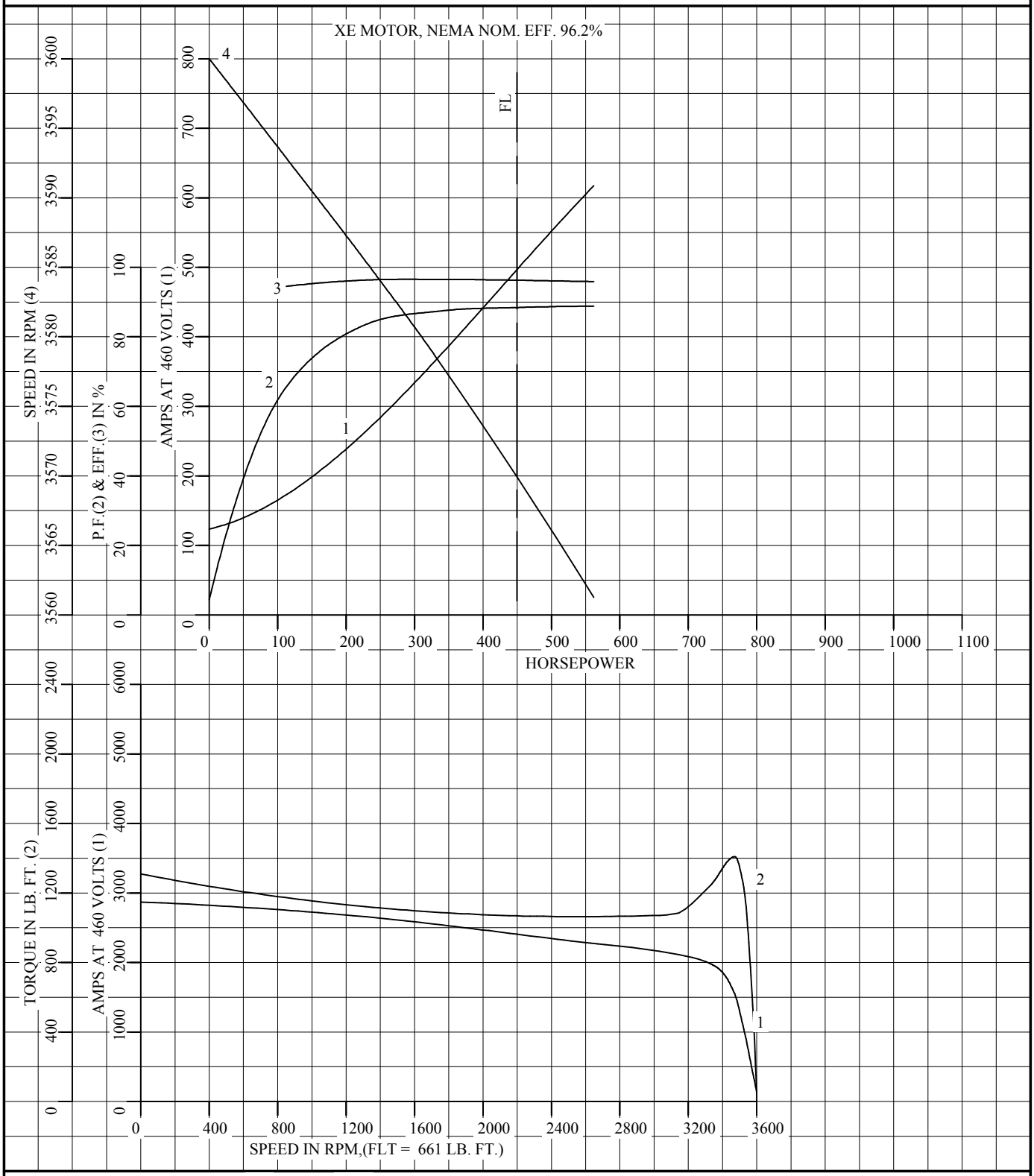
BALDOR
A MEMBER OF THE ABB GROUP

DR. BY J.J.HARRISON
CK. BY W. L. SMITH
APP. BY W.L.SMITH
DATE 01/21/2010

A-C MOTOR PERFORMANCE DATA

A44WG2693-R001
ISSUE DATE 01/21/20

REL S.O.	RPM 3570	S.F. 1.15	ROTOR 418143013KE
FRAME 449T	VOLTS 460	NEMA DESIGN B	TEST S.O. CALCULATED DATA
HP 450	AMPS 494	CODE LETTER F	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE PRXE	STATOR RES.@ 25 °C .00760
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 433499	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	J.J.HARRISON
CK. BY	W. L. SMITH
APP. BY	W.L.SMITH
DATE	01/21/2010

A-C MOTOR PERFORMANCE CURVES A44WG2693-R001 ISSUE DATE 01/21/2010

DUTY MASTER ALTERNATING CURRENT MOTORS

604989-664

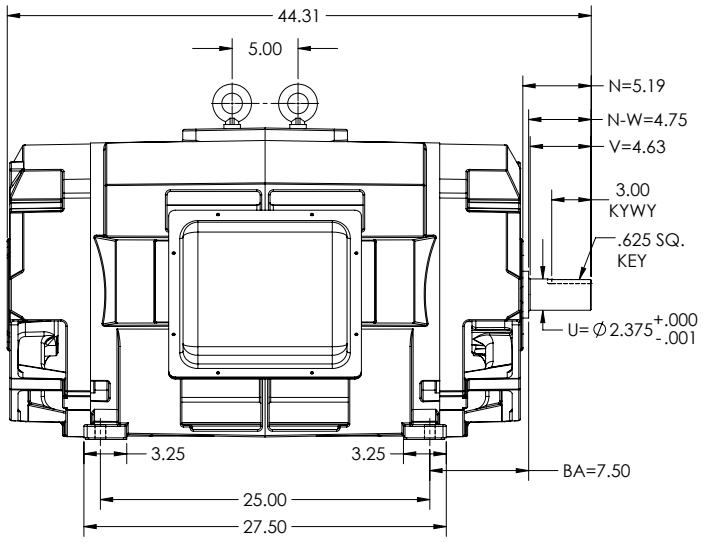
ENCLOSURE: OPEN DRIP-PROOF

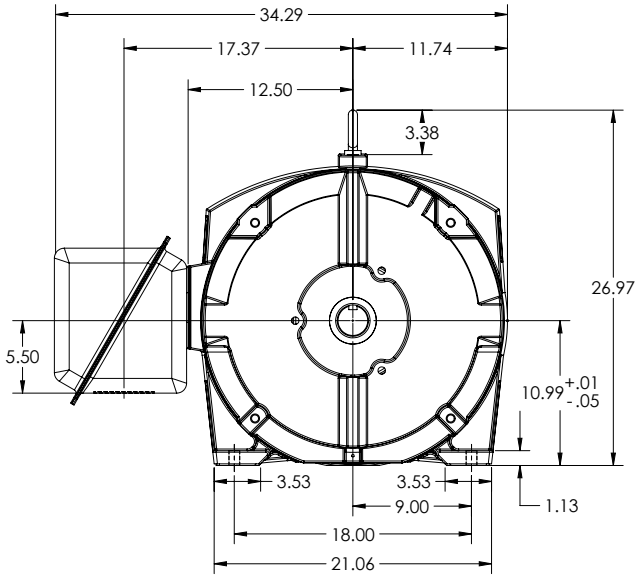
SQUIRREL-CAGE INDUCTION

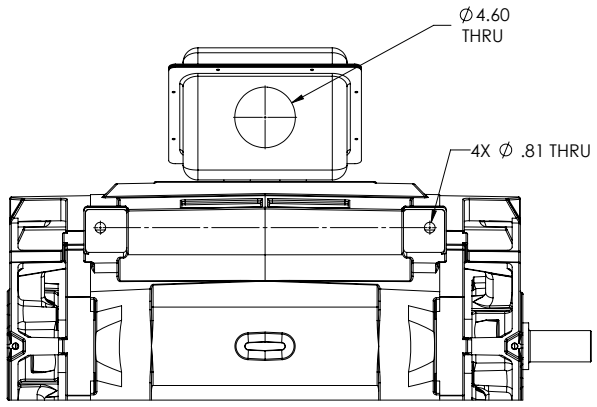
MOUNTING: FOOT, F-1

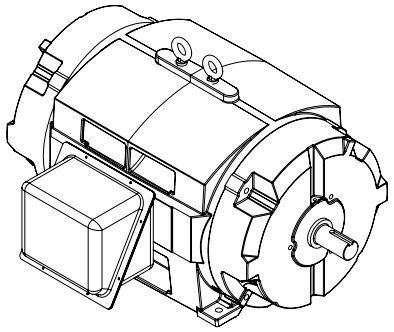
E449TS FRAME MOUNTING

COOLING: NON-VENTILATED









DIMENSIONS ARE IN INCHES.
WEIGHT (LBS) 2100, MAY VARY 15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER 1 OF 1

604989-664

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003 T.I.R.

REV. DESC: NEW			
REV: -	VERSION: 00	REVISED: 10:26:10 10/22/2020	TDR: 000001151313
MODEL NO. 604989-664			
BY: USJOSUL		C	

BALDOR

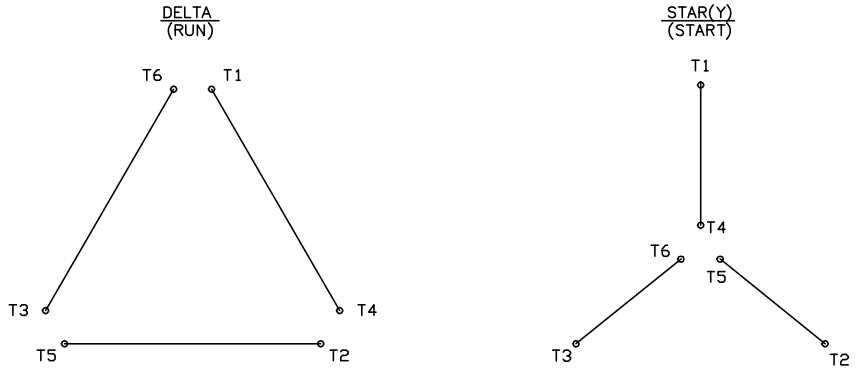
449TS ODP F1 FT S -

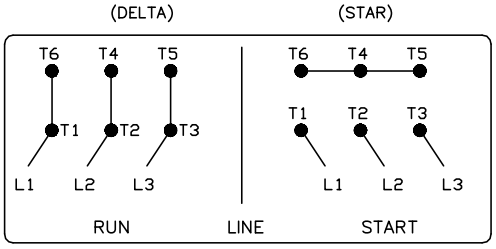
604989-664

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

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