



Customer information packet

EM251502T-4

500HP, 3565RPM, 3PH, 60HZ, 449TS, A44128M, DP

Class - None

Division - Not Applicable

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	500.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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)
Current @ Voltage	544.000 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	544.0 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	A44128M

Part detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG2745
Layout	604989-501
Eff. date	03-21-2018
CD Diagram	416820-008
Poles	02
Leads	6#1 (02 per group)
Proprietary	False
Created date	02-12-2015

Mounting Arrangement	F1
Number of Poles	2
Overall Length	39.37 IN
Power Factor	89
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	3565 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

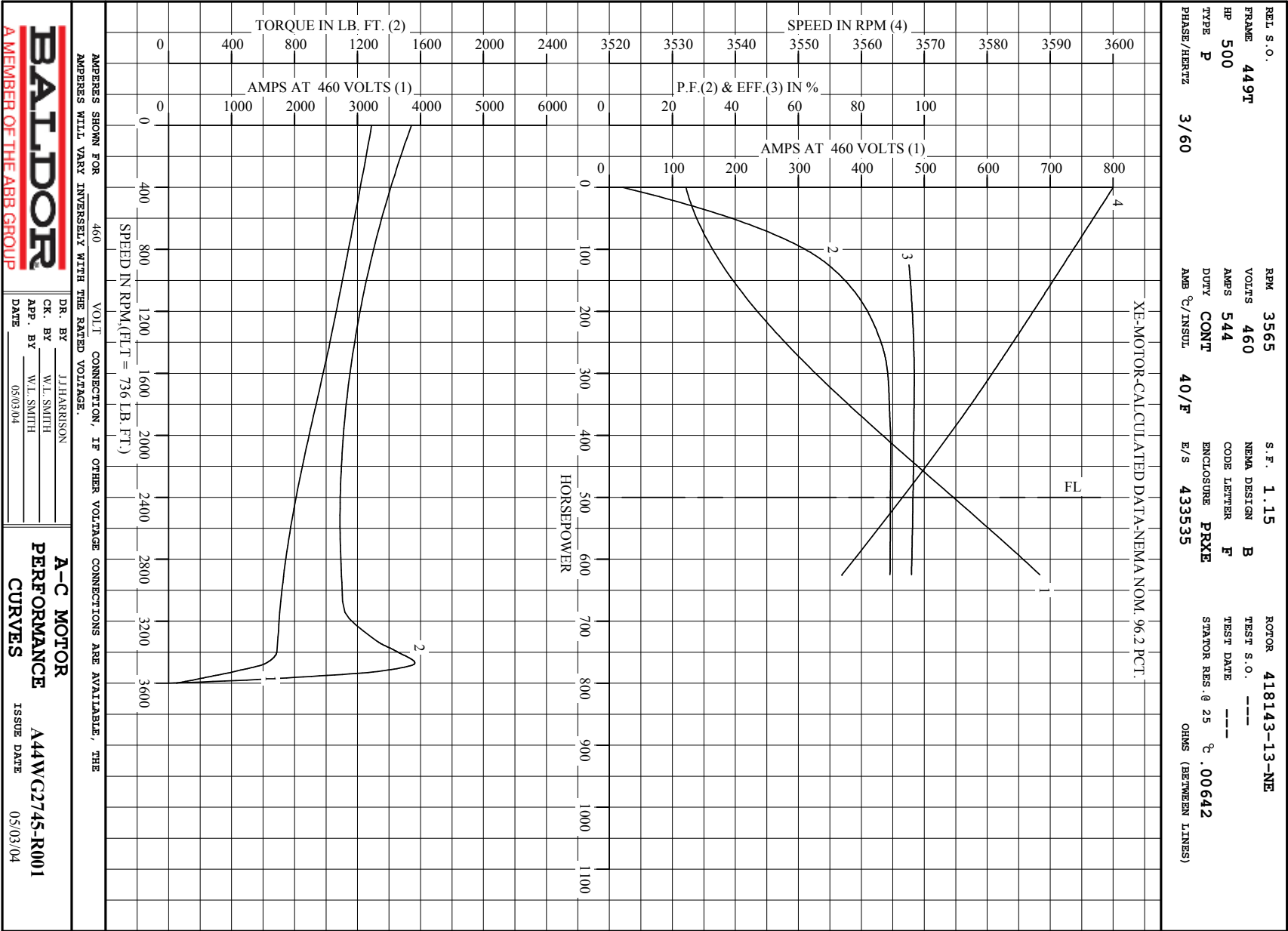
Nameplate

NP2496L	
MOBIL POLYREX EM	

NP2349L

SPEC NO.	A44-6890-2745			CAT.NO.	EM251502T-4					FRAME	449TS	
HP	500	VOLTS	460		PHASE	3	DESIGN	B	TYPE	P		
RPM	3565	AMPS	544		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		89	NEMA-NOM-EFFICIENCY				96.2	
						MAX CORR KVAR		60	GUARANTEED EFFICIENCY		95.4	
						NEMA NOM/CSA QUOTED EFF						
						MOTOR WEIGHT						

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	449T	500	P	3/60	3565	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
544	CONT	40/F	1.15	B	F	PRXE
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
433535	418143-13-NE	---	---	.00642		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	122	3600	4.29	0	
1/4	125	177	3592	69.6	95.2	
2/4	250	281	3584	86.3	96.6	
3/4	375	407	3576	89.1	96.7	
4/4	500	544	3567	89.3	96.4	
5/4	625	684	3557	89.1	96.0	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	210	1543	3225	
PULL UP		2550	148	1089	1957	
BREAKDOWN		3470	213	1565	1550	
FULL LOAD		3567	100	736	544	
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE						
REMARKS: XE-MOTOR-CALCULATED DATA-NEMA NOM. 96.2 PCT.						
 A MEMBER OF THE ABB GROUP		DR. BY <u>J. J. HARRISON</u> CK. BY <u>W. L. SMITH</u> APP. BY <u>W. L. SMITH</u> DATE <u>05/03/04</u>		A-C MOTOR PERFORMANCE DATA A44WG2745-R001 ISSUE DATE 05/03/04		



DUTY MASTER ALTERNATING CURRENT MOTORS

604989-501

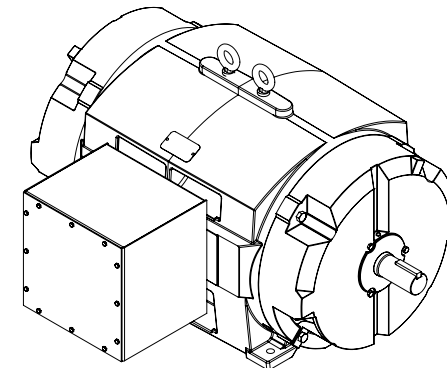
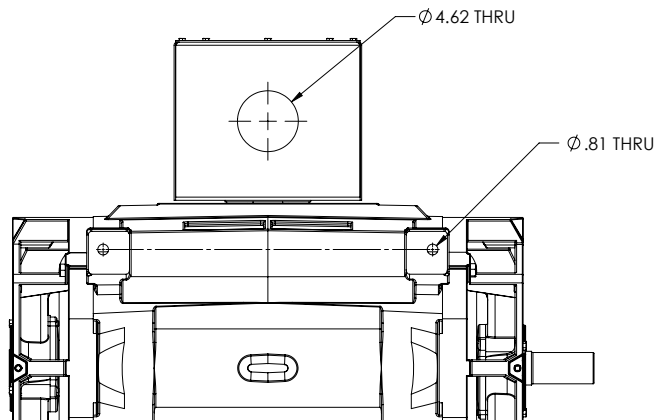
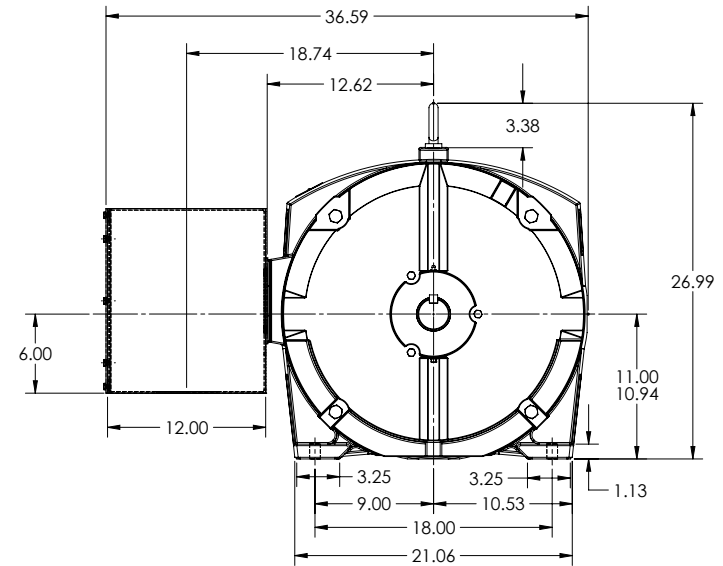
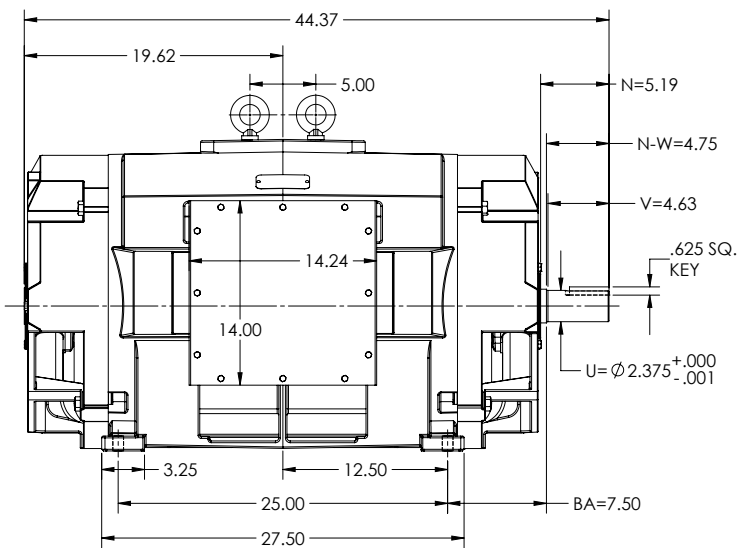
ENCLOSURE: OPEN DRIP-PROOF (PROTECTED)

FRAME E449TS

COOLING: SELF-VENTILATED

MOUNTING: FOOT, F-1

SPECIAL FABRICATED 14 X 14 X 12 STEEL C/BOX



SHEET NUMBER
1 OF 1

604989-501

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

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

WEIGHT (LBS) 2100/ MAY VARY 15% DEPENDING ON RATING
DIMENSIONS ARE IN INCHES

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

REV. DESC: UPDATE MODEL TO ADD EXTERNAL HARDWARE PER PROD MGM

REV: C	VERSION: 03
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MODEL NO. 604989-501

BY:USBUFRA

REVISED: 07:47:31 07/14/2022	TDR: 000001193529
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BALDOR

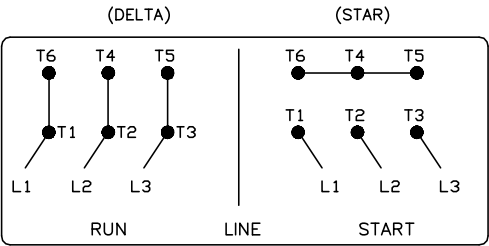
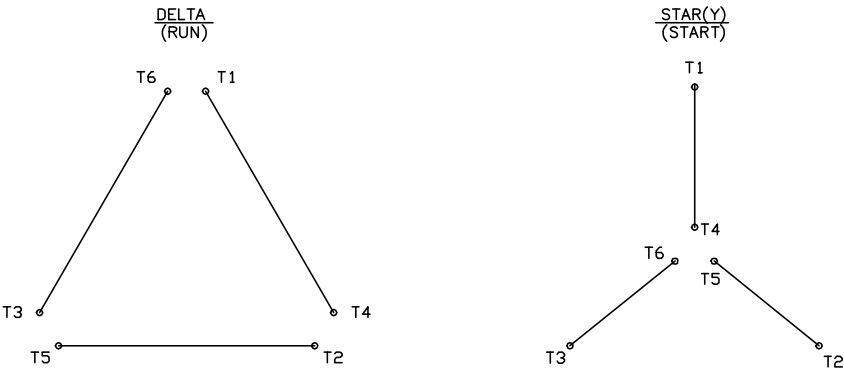
E449TS PROT F-1 FT MTG - 24 X 20 X 12 FABRICATED STEEL BOX

604989-501

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