

ABB BALDOR RELIANCE III

Customer information packet

EM25402T-4

400HP, 3570RPM, 3PH, 60HZ, 449TS, DP, F1

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	400.000 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	431.000 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	431.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 2/0 AWG
Motor Standards	NEMA
Motor Type	A44112M

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG2659
Layout	604989-595
Eff. date	07-18-2022
CD Diagram	416820-008
Poles	02
Leads	6#2/0
Proprietary	False
Created date	11-23-2015

Mounting Arrangement	F1
Number of Poles	2
Overall Length	44.31 IN
Power Factor	90
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

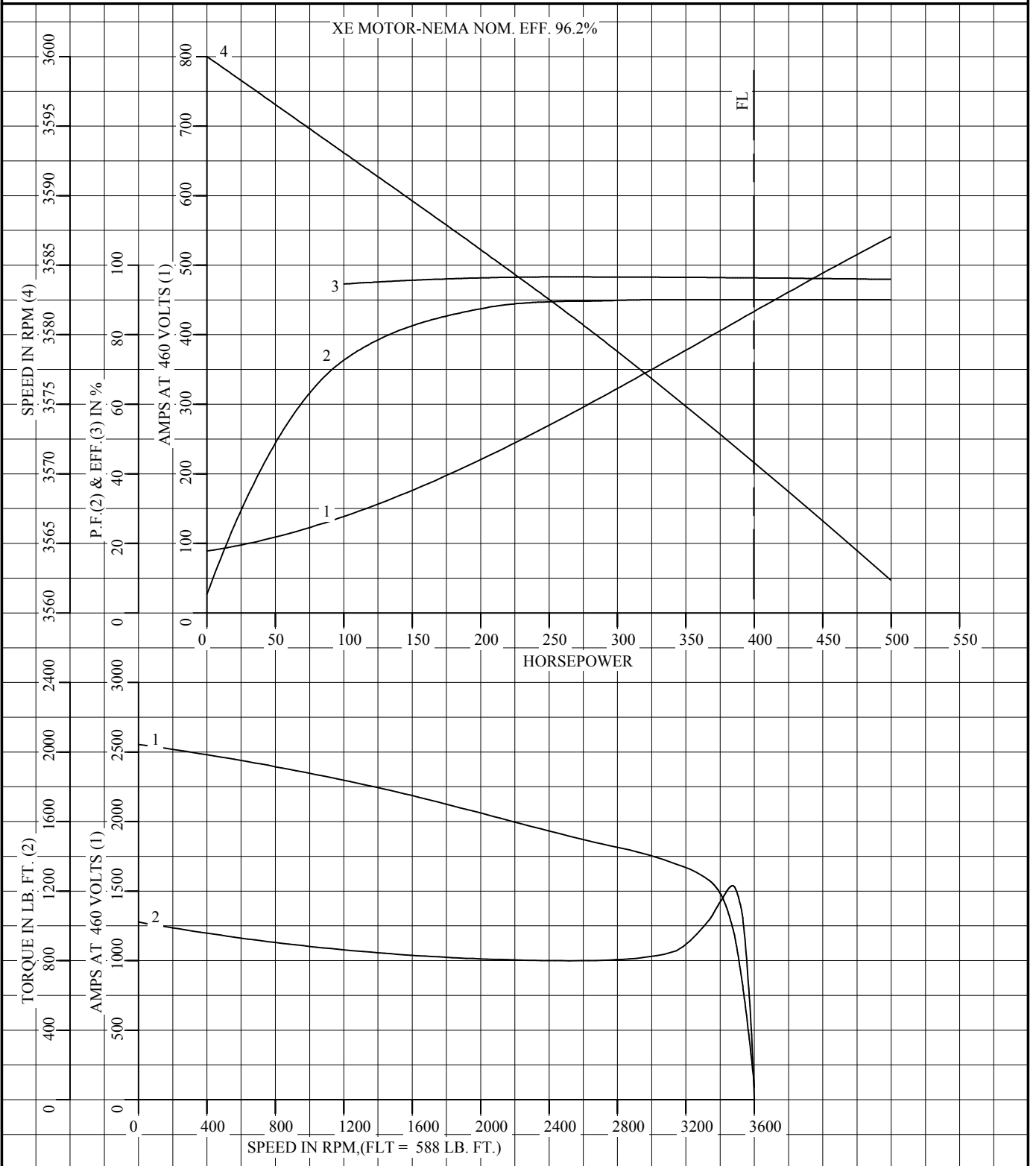
NP2496L	
MOBIL POLYREX EM	

NP2349L

SPEC NO.	A44-8053-2659			CAT.NO.	EM25402T-4				FRAME	449TS			
HP	400	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P				
RPM	3570	AMPS	431	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	90	NEMA-NOM-EFFICIENCY				96.2			
					MAX CORR KVAR	50	GUARANTEED EFFICIENCY	95.4					
					NEMA NOM/CSA QUOTED EFF								
										MOTOR WEIGHT	2415		

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS		
	449T	400	P	3/60	3570	460		
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.		
431	CONT	40/F	1.15	B	F	PRXE		
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)				
433472	418143013KE	---	---	.00865				
PERFORMANCE								
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY			
NO LOAD	0	89.7	3600	5.37	0			
1/4	100	136	3593	72.7	94.6			
2/4	200	222	3586	87.5	96.4			
3/4	300	324	3579	89.9	96.6			
4/4	400	431	3571	90.0	96.4			
5/4	500	541	3562	90.1	95.9			
SPEED TORQUE								
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES			
LOCKED ROTOR		0	174	1022	2555			
PULL UP		2550	136	800	1885			
BREAKDOWN		3474	209	1231	1235			
FULL LOAD		3571	100	588	431			
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA XE MOTOR-NEMA NOM. EFF. 96.2%								
		DR. BY	D. M. BYRD	A-C MOTOR PERFORMANCE DATA				
		CK. BY	C.E. JAMISON					
		APP. BY	D. M. BYRD					
		DATE	05/14/02					
				A44WG2659-R002 ISSUE DATE 05/14/02				

REL S.O.	RPM 3570	S.F. 1.15	ROTOR 418143013KE
FRAME 449T	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 400	AMPS 431	CODE LETTER F	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE PRXE	STATOR RES. @ 25 °C .00865
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 433472	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 D. M. BYRD
CK. BY C. E. JAMISON
APP. BY D. M. BYRD
DATE 05/14/02

**A-C MOTOR
PERFORMANCE
CURVES**

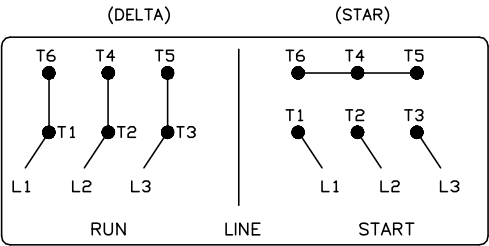
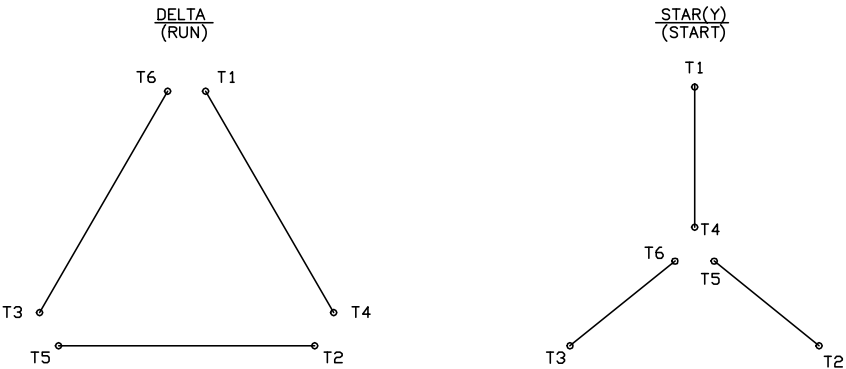
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A-C MOTOR
CONNECTION DIAGRAM

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
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