

ABB BALDOR RELIANCE III

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	CURUSEEV
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					

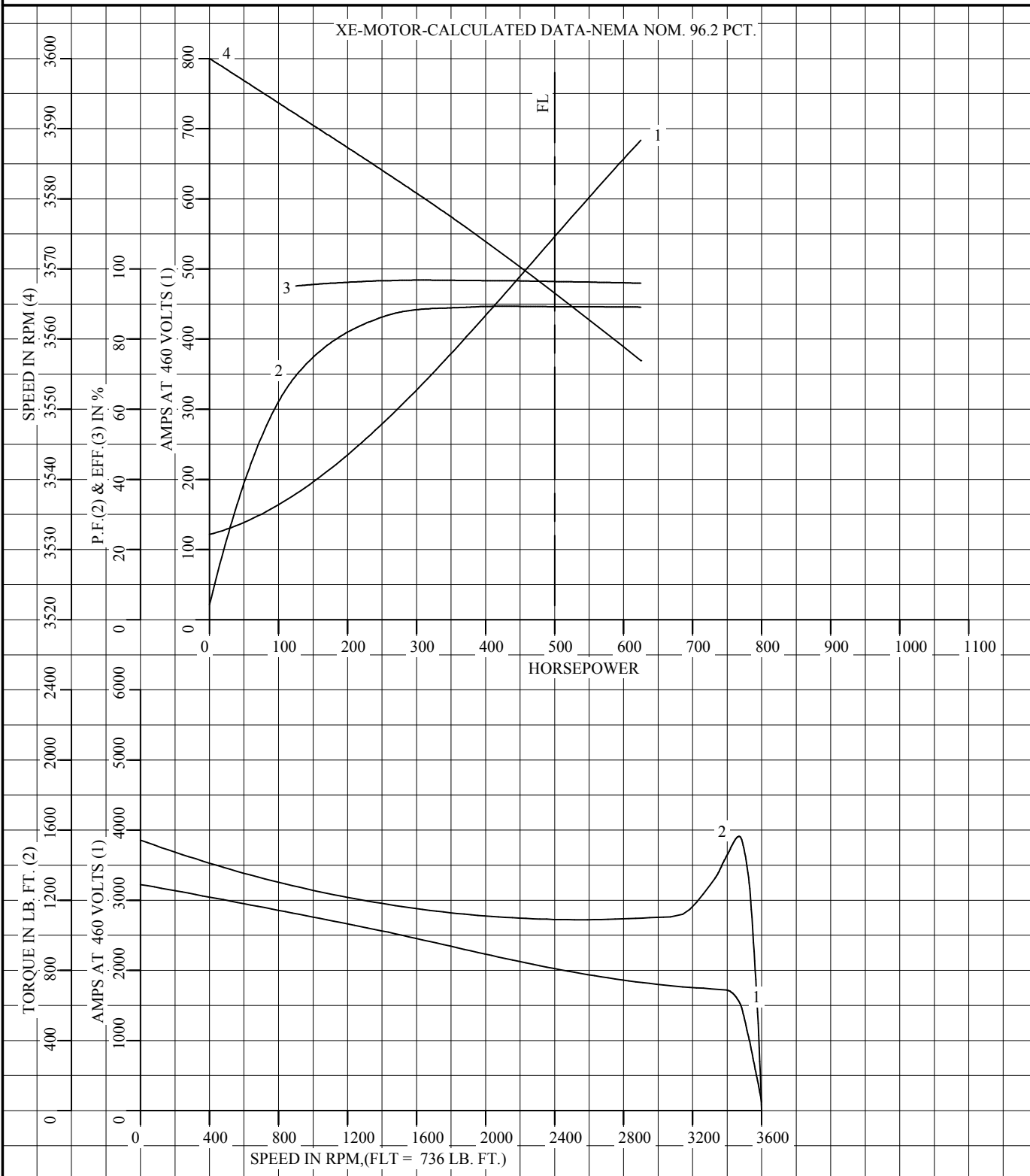
Parts List

Part number	Description	Quantity
SA293632	SA A44-6890-2745	1.000 ea
RA279725	RA A44-6890-2745	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
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
032018010AK	HHCS 1/4-20X1-1/4L PLTD.	4.000 ea
034000012AB	WSHR 1/4 STD. PLATED	4.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
034000012AB	WSHR 1/4 STD. PLATED	4.000 ea
032018010AK	HHCS 1/4-20X1-1/4L PLTD.	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
406056008A	GASKET, TERBD 440	1.000 ea
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
702616012T	CONDUIT BOX	1.000 ea

MG1025Y17	WILKOFAST, 789.701, SUPER E PEARL GOLD	0.500 ga
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
048897010DG	PLUG,ODE BRKT - 360	1.000 ea
405851012AD	SPACE	4.000 ea
405851012AD	SPACE	4.000 ea

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.								
		DR. BY	J. J. HARRISON	A-C MOTOR PERFORMANCE DATA				
		CK. BY	W. L. SMITH					
		APP. BY	W. L. SMITH					
		DATE	05/03/04					
			A44WG2745-R001 ISSUE DATE 05/03/04					

REL S.O.	RPM 3565	S.F. 1.15	ROTOR 418143-13-NE
FRAME 449T	VOLTS 460	NEMA DESIGN B	TEST S.O. ---
HP 500	AMPS 544	CODE LETTER F	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE PRXE	STATOR RES. @ 25 °C .00642
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 433535	OHMS (BETWEEN LINES)



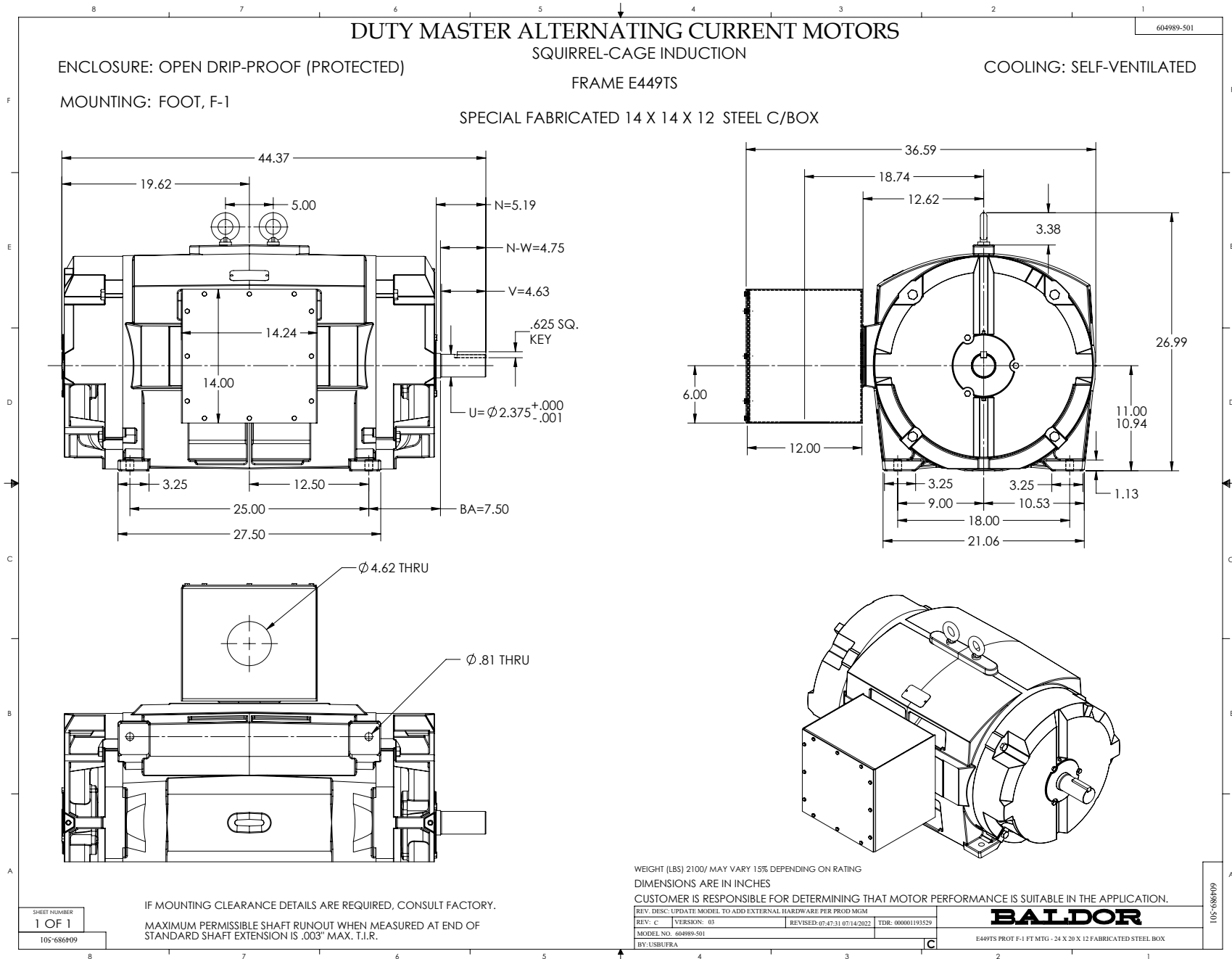
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BALDOR
A MEMBER OF THE ABB GROUP

DR. BY J.J. HARRISON
CK. BY W.L. SMITH
APP. BY W.L. SMITH
DATE 05/03/04

**A-C MOTOR
PERFORMANCE
CURVES**

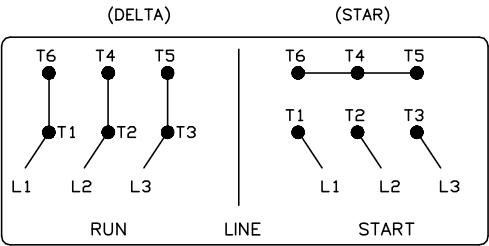
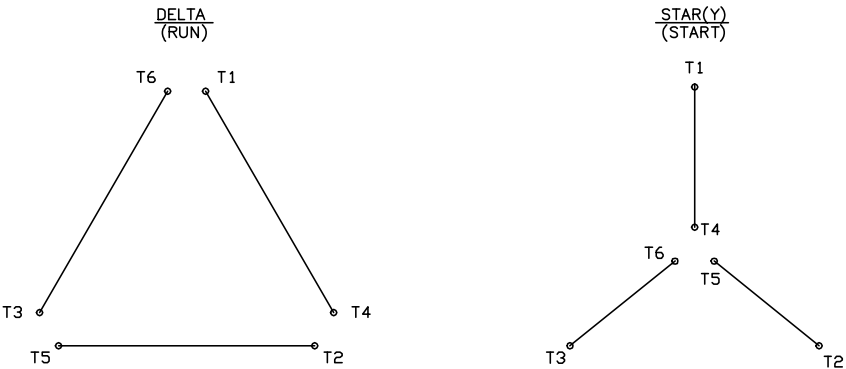
A44WG2745-R001
ISSUE DATE 05/03/04



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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