

ABB BALDOR RELIANCE III

Customer information packet

SPM4409T-4

100HP, 1195RPM, 3PH, 60HZ, 447T, A44112M, TEFC

Class - CLI GP A,B,C,D; CLII GP F,G

Division - Division II

Specifications

Enclosure	TEFC
Frame	447T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D; CLII GP F,G
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV CURUSEEV NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	125.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.8 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	125.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Max Speed	1800 rpm
Motor Lead Quantity/Wire Size	6 @ 2 AWG

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG0698
Layout	617439-175
Eff. date	01-22-2025
CD Diagram	416820-036
Poles	06
Leads	3#2 (02 per group)
Proprietary	False
Created date	08-27-2024

Motor Standards	NEMA
Motor Type	A44112M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	48.46 IN
Power Factor	78
Product Family	General Industrial
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	1195 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

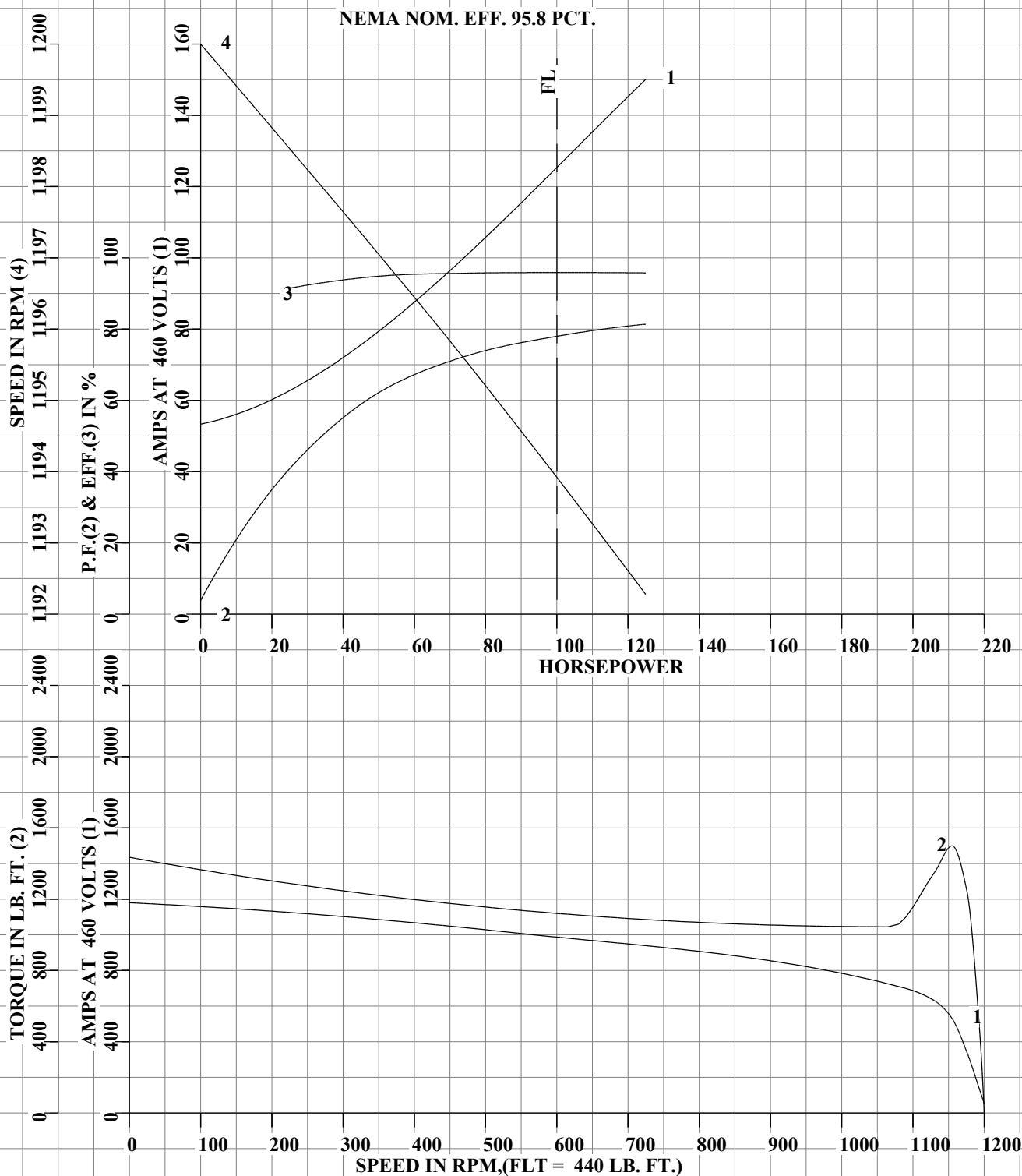
Nameplate

NP2496L	
MOBIL POLYREX EM	

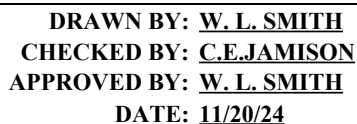
NP4562L

CAT NO	SPM4409T-4		SPEC NO.		A44-5011-0698			I.P.		55				
HP	100	AMPS	125		VOLTS		460		DESIGN	B				
FRAME SIZE	447T	RPM	1195		MAX RPM		1800	HZ	60	AMB	40			
D.E. BRG.	90BC03J30X		PH.3	3	DUTY	CONT		INSUL.CLASS		H				
O.D.E. BRG.	90BC03J30X		TYPE P		P	ENCL	TEFC	SF	1.15	CODE	K			
POWER FACTOR	78	MAX CORR KVAR		36	NEMA NOM EFFICIENCY					95.8	MOTOR WEIGHT	LBS		
CL.I,DIV 2,GRP:	A,B,C,D	T.CODE	T3C		CL.1,ZONE 2,GRP:				IIA,IIB,IIC		T=	160	INVERTER T.CODE	T3
CL.II,DIV 2,GRP:	F,G	T.CODE	T3C		CL II ZONE 22 GRPS IIIB				T=		160	INVERTER T.CODE		T3C
ID LOGO	INV TYPE:	VPWM	CT	6	TO	60	VT	3	TO	60	CHP	60	TO	90
ID LOGO	1.0 SF VPWM		WK2	101.55	LBFT2		SL HZ		0.41	MAG CUR		53.4		
SER.NO.			MEETS INTENT OF IEEE-45						FOR WEATHER PROTECTION					

ABB BALDOR RELIANCE III S/O		CUSTOMER INFORMATION PACKET					SPM4409T-4 - 100HP, 1195RPM, 3PH, 60HZ, 447T, A44112M, TEFC				
		FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS				
		445T	100	P	3/60	1195	460				
AMPS		DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE				
125		CONT	40/F	1.15	A	K	TEFC				
E/S		ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)						
-		418143080NE	---	---	.0282						
PERFORMANCE											
LOAD		HP	AMPERES	RPM	% POWER FACTOR		% EFFICIENCY				
NO LOAD		0	53.4	1200	3.86		0				
1/4		25.0	62.7	1199	40.8		91.5				
2/4		50.0	79.4	1197	62.2		94.8				
3/4		75.0	101	1196	72.6		95.7				
4/4		100	125	1194	78.0		95.9				
5/4		125	150	1192	81.4		95.8				
SPEED TORQUE											
			RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.		AMPERES				
LOCKED ROTOR			0	326	1435		1180				
PULL UP			1070	238	1045		720				
BREAKDOWN			1155	341	1500		530				
FULL LOAD			1194	100	440		125				
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.											
CALCULATED DATA NEMA NOM. EFF. 95.8 PCT.											
			DRAWN BY: <u>W. L. SMITH</u> CHECKED BY: <u>C.E.JAMISON</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>11/20/24</u>		AC MOTOR PERFORMANCE DATA		A44WG0698-R002 DATE ISSUED 11/20/24				



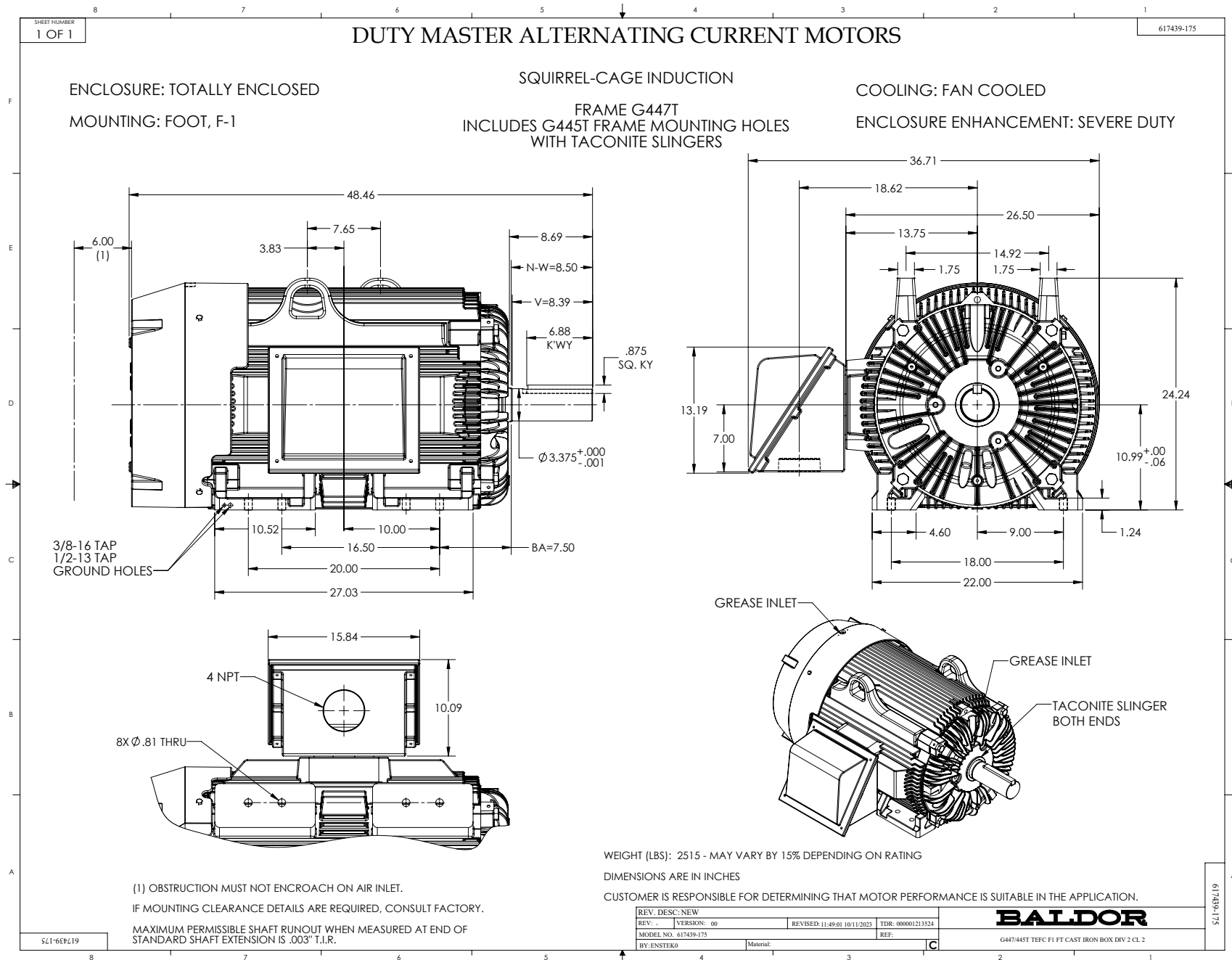
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AC MOTOR PERFORMANCE DATA

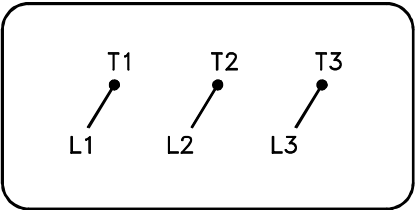
A44WG0698-R002

ISSUE DATE 11/20/24



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