

ABB BALDOR RELIANCE III

Customer information packet

SPM4410TR-4

125HP, 1790RPM, 3PH, 60HZ, 444T, A4480M, TEFC

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

Division - Division II

Specifications

Enclosure	TEFC
Frame	444T
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	125.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Mobil SHC 220 (Athens Only)
Current @ Voltage	142.000 A @ 460.0 V
Design Code	A
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	142.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Max Speed	2700 rpm

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG6731
Layout	617439-171
Eff. date	08-06-2026
CD Diagram	416820-036
Poles	04
Leads	3#2 Y
Proprietary	False
Created date	09-15-2023

Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA
Motor Type	A4480M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	44.97 IN
Power Factor	86
Product Family	General Industrial
Pulley End Bearing Type	Roller
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	1790 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBIL SHC -220 GREASE	

NP4562L

CAT NO	SPM4410TR-4	SPEC NO.	A44-5000-6731	I.P.	55				
HP	125	AMPS	142	VOLTS	460	DESIGN	A		
FRAME SIZE	444T	RPM	1790	MAX RPM	2700	HZ	60	AMB	40 C
D.E. BRG.	110RU02M30X	PH.3	3	DUTY	CONT	INSUL.CLASS	F		
O.D.E. BRG.	90BC03J30X	TYPE P	P	ENCL	TEFC	SF	1.15	CODE	H
POWER FACTOR	86	MAX CORR KVAR	25.8	NEMA NOM EFFICIENCY	96.2	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	C	INVERTER T.CODE T3
CL.II,DIV 2,GRP:	F,G	T.CODE	T3C	CL II ZONE 22 GRPS IIB		T=	160	C	INVERTER T.CODE T3C
ID LOGO	INV TYPE:	VPWM	CT 30	TO 60	VT 3	TO 60	CHP 60	TO 90	
ID LOGO	1.0 SF VPWM	WK2	52.8	LBFT2	SL HZ	0.41	MAG CUR	44.3	
SER.NO.		MEETS INTENT OF IEEE-45				FOR WEATHER PROTECTION			

ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET							SPM4410TR-4 - 125HP, 1790RPM, 3PH, 60HZ, 444T, A4480M, TEFC						
S/O			FRAME			HP			TYPE			PHASE/ HERTZ			RPM			VOLTS		
			445T			125			P			3/60			1790			460		
AMPS			DUTY			AMB °C/ INSUL			S.F.			NEMA DESIGN			CODE LETTER			ENCLOSURE		
142			CONT			40/F			1.15			A			H			TEFC		
E/S			ROTOR			TEST S.O.			TEST DATE			STATOR RES. @25 °C OHMS (BETWEEN LINES)								
-			A44RC4080A00			---			---			.0321								
PERFORMANCE																				
LOAD			HP			AMPERES			RPM			% POWER FACTOR			% EFFICIENCY					
NO LOAD			0			44.3			1800			4.39			0					
1/4			31.3			56.5			1797			55.6			93.2					
2/4			62.5			80.5			1794			75.9			95.7					
3/4			93.7			109			1791			83.3			96.3					
4/4			125			142			1788			85.8			96.2					
5/4			156			175			1784			87.3			96.0					
SPEED TORQUE																				
						RPM			TORQUE % FULL LOAD			TORQUE LB.-FT.			AMPERES					
LOCKED ROTOR						0			172			630			1040					
PULL UP						1200			159			585			875					
BREAKDOWN						1731			305			1120			560					
FULL LOAD						1788			100			367			142					
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. 96.2 PCT.																				
						DRAWN BY: <u>W. L. SMITH</u> CHECKED BY: <u>C.E.JAMISON</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>11/19/24</u>						AC MOTOR PERFORMANCE DATA			A44WG6731-R002 DATE ISSUED 11/19/24					

FRAME 445T

VOLTS 460

NEMA DESIGN A

TEST S.O. CALCULATED DATA

HP 125

AMPS 142

CODE LETTER H

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

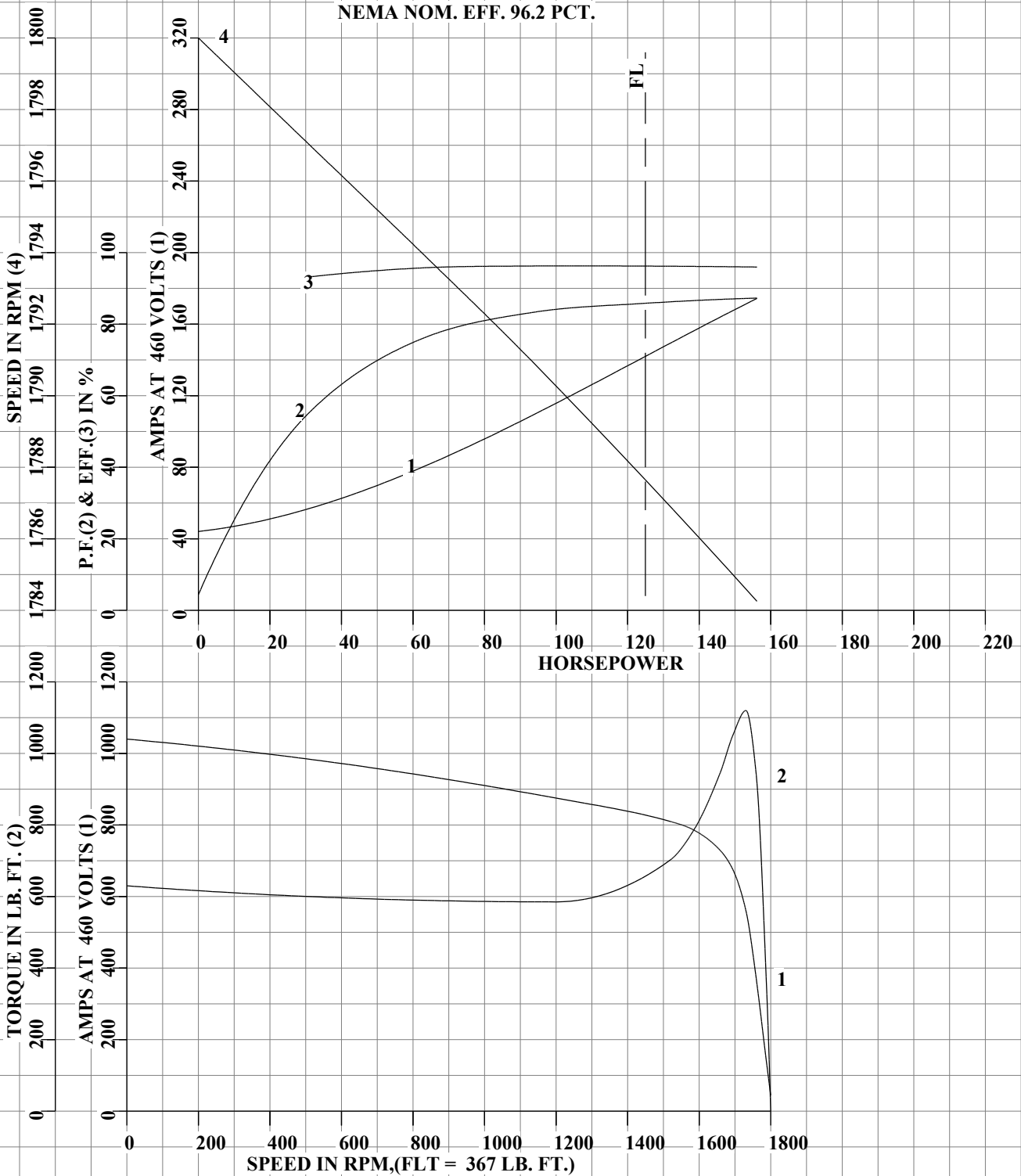
STATOR RES. @ 25°C .0321

PHASE / HERTZ 3/60

AMB °C / INSUL 40/F

E/S -

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

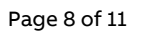


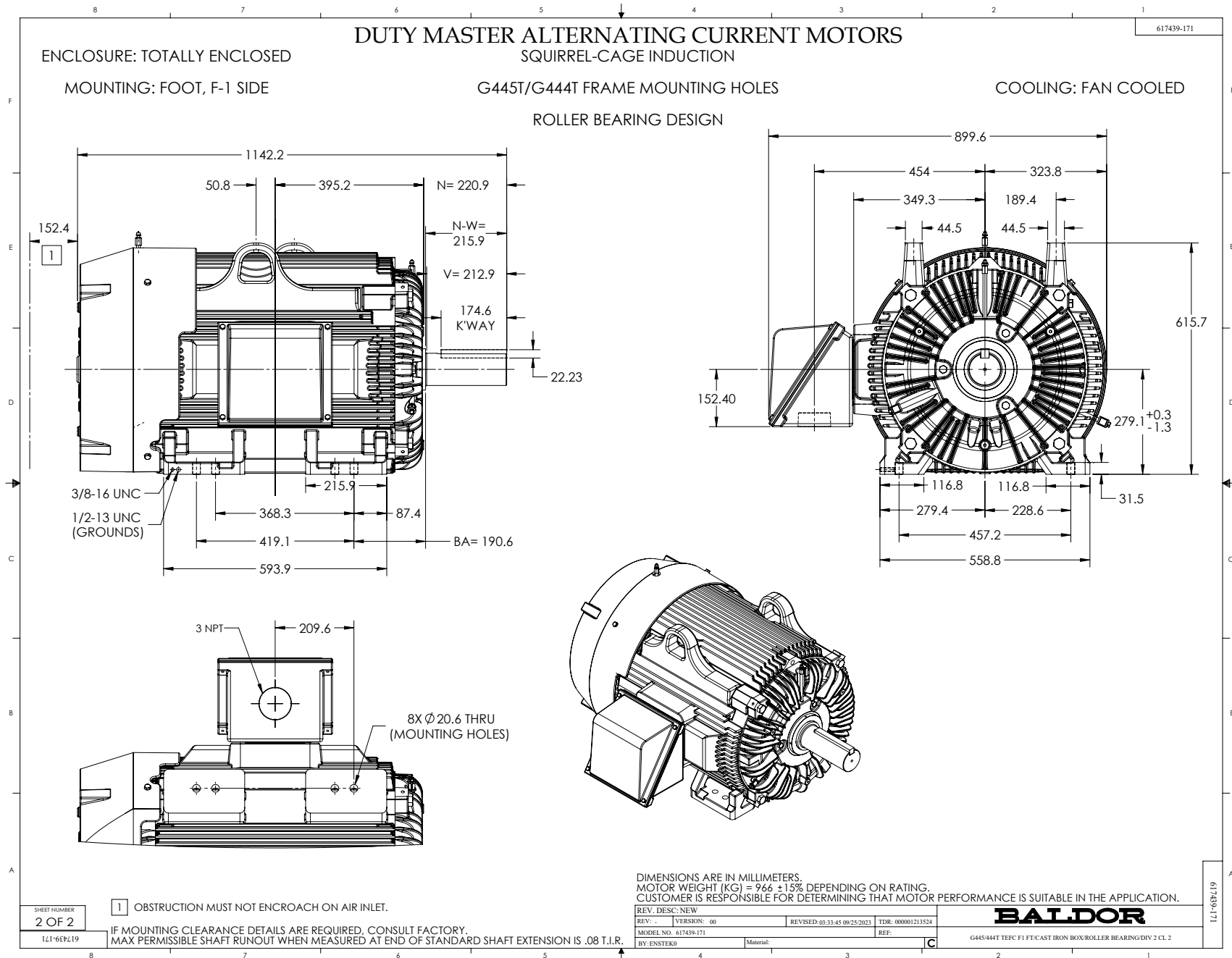
DRAWN BY: W. L. SMITH
CHECKED BY: C.E. JAMISON
APPROVED BY: W. L. SMITH
DATE: 11/19/24

AC MOTOR
PERFORMANCE
DATA

A44WG6731-R002

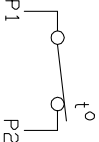
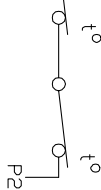
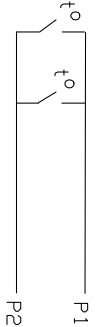
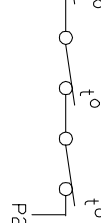
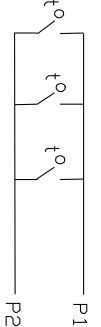
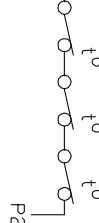
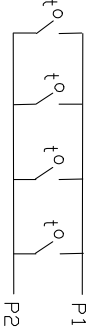
ISSUE DATE 11/19/24





CONNECTION DIAGRAM
ACCESSORIES

MOTOR WINDING THERMOSTATS		
CONTACTS _____ @ _____ °C		
FIGURE NUMBER _____		
CONTACT RATING		
VOLTS	CONTINUOUS AMPERES	INRUSH AMPERES
110-120	3.0	30
220-240	1.5	15
440-480	0.75	7.5
550-600	0.60	6.0

THERMOSTATS	
NORMALLY CLOSED	NORMALLY OPEN
FIGURE 1 	FIGURE 4 
FIGURE 2 	FIGURE 5 
FIGURE 3 	FIGURE 6 
FIGURE 7 	FIGURE 8 

CUSTOMER _____ CUSTOMER ORDER NO. _____ S.O. NO. _____

418174-006

418174-006

REV. DESC: LOADED TO BUS		
REV. LTR: A	VERSION: 01	TDR: 000000570390
FILE: \RAG\00013\849	REVISED: 10:16:21 12/07/2010	BY: RAGDRF
MTL: -		

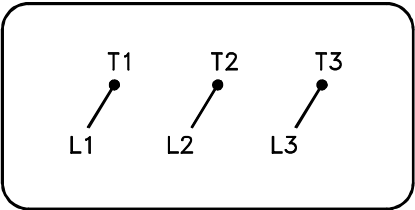
BALDOR

A-C MOTOR CONNECTION ACCESSORIES

SH 1 of 1

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