

ABB BALDOR RELIANCE III

Customer information packet

CPX442546T

250HP, 1785RPM, 3PH, 60HZ, 449T, TEFC, F1

Class - CLI GP C,D; CLII GP E,F,G

Division - Division I

Specifications

Enclosure	TEFC
Frame	449T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D; CLII GP E,F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	250.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV CSA UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	10-60
Current @ Voltage	271.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	271.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	IP55

Part Detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG3311
Layout	617426-329
Eff. date	05-01-2019
CD Diagram	416820-036
Poles	04
Leads	3#2/0 (02 per group)
Proprietary	False
Created date	04-29-2019

KVA Code	G
Max Speed	3600 rpm
Motor Lead Quantity/Wire Size	6 @ 2/0 AWG
Motor Standards	NEMA
Motor Type	A44160M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	53.47 IN
Power Factor	90
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.00
Shaft Diameter	3.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

NP2496L	
MOBIL POLYREX EM	

000613006PC		
CLASS I GROUP	C D X	NO.
CLASS II GROUP	E F G	
OPERATING TEMP CODE	T3C	

000901002AAA	
SUITABLE FOR 55C AMB AT 1.00 S	F AT SINEWAVE

NP3140L

SPEC NO.	A44-8829-3311			CAT.NO.	CPX442546T					FRAME	449T
HP	250	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P		
RPM	1785	AMPS	271	HZ	60	AMB	40	SF	1.00		
DRIVE END BEARING	90BC03J30X		DUTY	CONT	INSUL.CLASS		F				
OPP D.E. BEARING	90BC03J30X		ENCL	TEFC	CODE	G					
SF	1.15	WK2	90.8	MAG CUR	54.9	RPM MAX	3600				
CT HZ	10-60	VT HZ	0-60	CHP HZ	60-90	NEMA-NOM-EFF	96.2				
	IP66										
SER.NO.				MOTOR WEIGHT							

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	449T	250	P	3/60	1785	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
271	CONT	40/B	1.00	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
833106	418143-50-BE	---	---	.0128		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	54.9	1800	5.79	0	
1/4	62.6	83.8	1796	74.1	94.3	
2/4	125	138	1792	88.0	96.2	
3/4	187	202	1789	90.0	96.4	
4/4	250	271	1784	89.9	96.2	
5/4	312	341	1780	89.6	95.8	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	144	1059	1846	
PULL UP		1080	126	924	1361	
BREAKDOWN		1729	245	1805	919	
FULL LOAD		1784	100	735	271	
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 PCT.						
		DR. BY	G. R. WEBB	A-C MOTOR PERFORMANCE DATA A44WG3311-R012 ISSUE DATE 07/02/19		
		CK. BY	E. J. CHRISTIAN			
		APP. BY	E. J. CHRISTIAN			
		DATE	07/29/13			

REL S.O.

 RPM **1785**

 S.F. **1.00**

 ROTOR **418143-50-BE**

 FRAME **449T**

 VOLTS **460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **250**

 AMPS **271**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

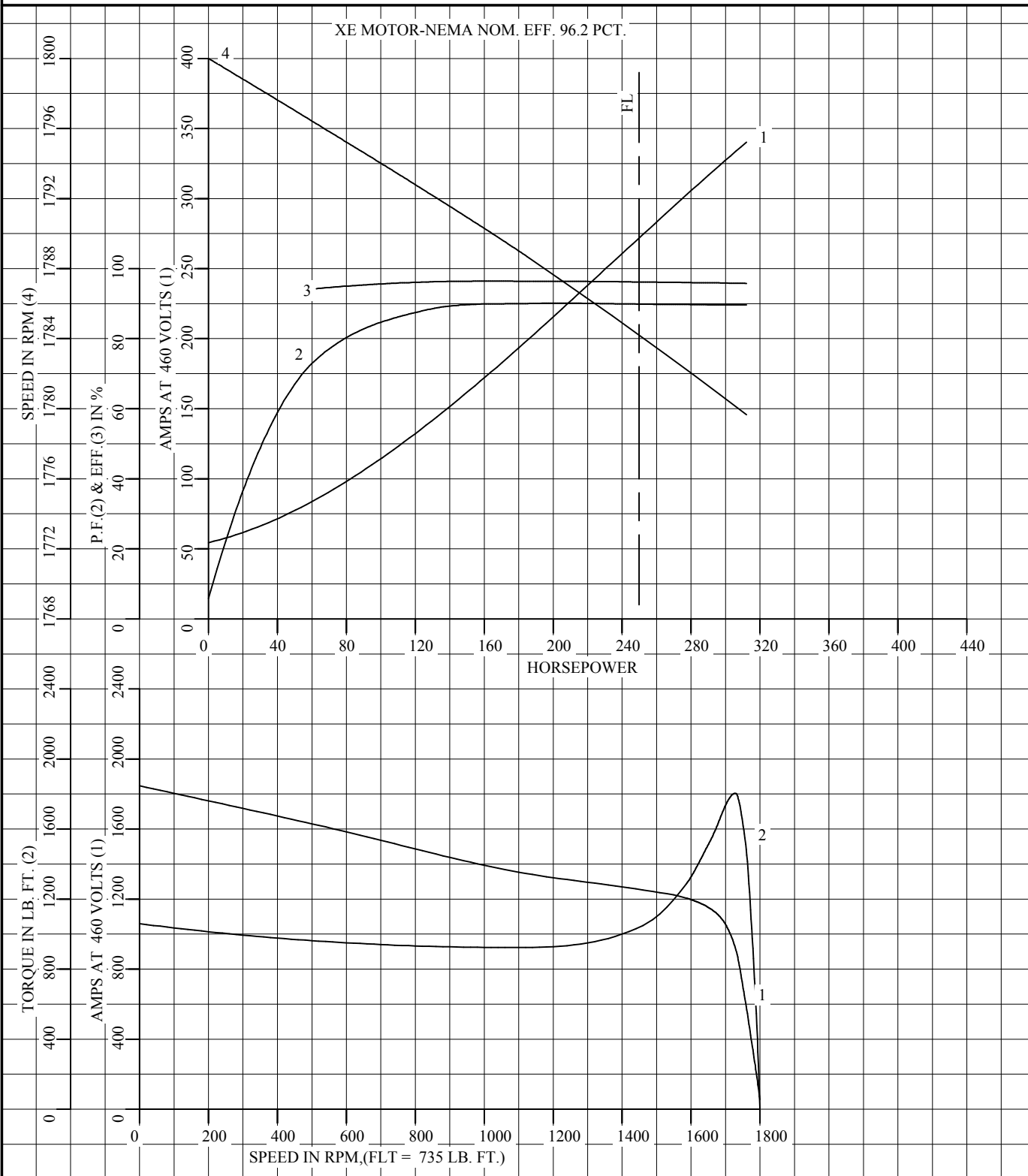
 STATOR RES. @ 25 °C **.0128**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/B**

 E/S **833106**

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 G. R. WEBB
CK. BY E.J. CHRISTIAN
APP. BY E.J. CHRISTIAN
DATE 07/29/13

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG3311-R012

ISSUE DATE 07/02/19

Page 9 of 14

REL. S.O.

 RPM **1785**

 S.F. **1.00**

 ROTOR **418143-50-BE**

 FRAME **449T**

 VOLTS **460**

 NEMA DESIGN **B**

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 HP **250**

 AMPS **271**

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 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

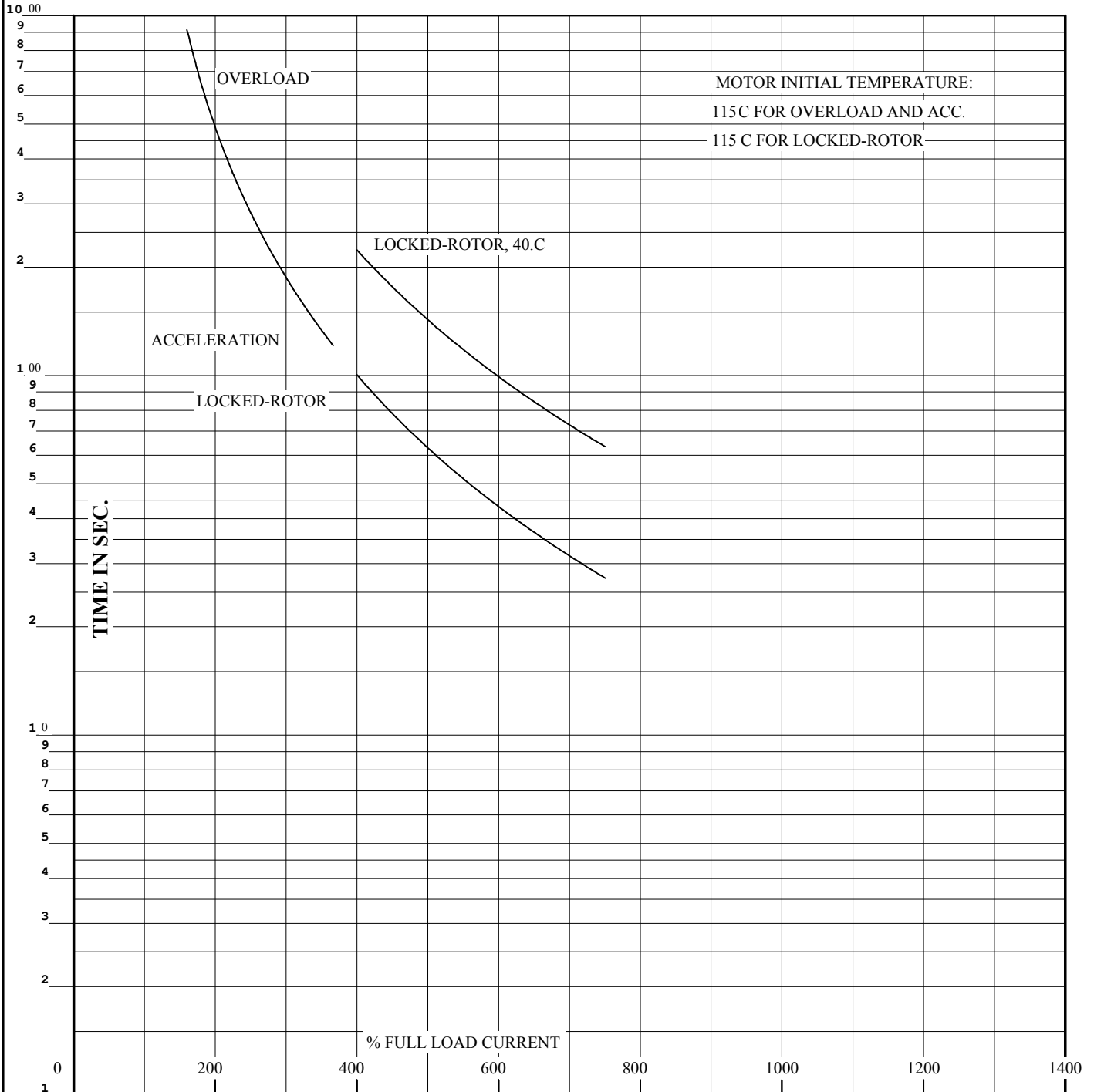
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 PHASE/HERTZ **3/60**

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OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

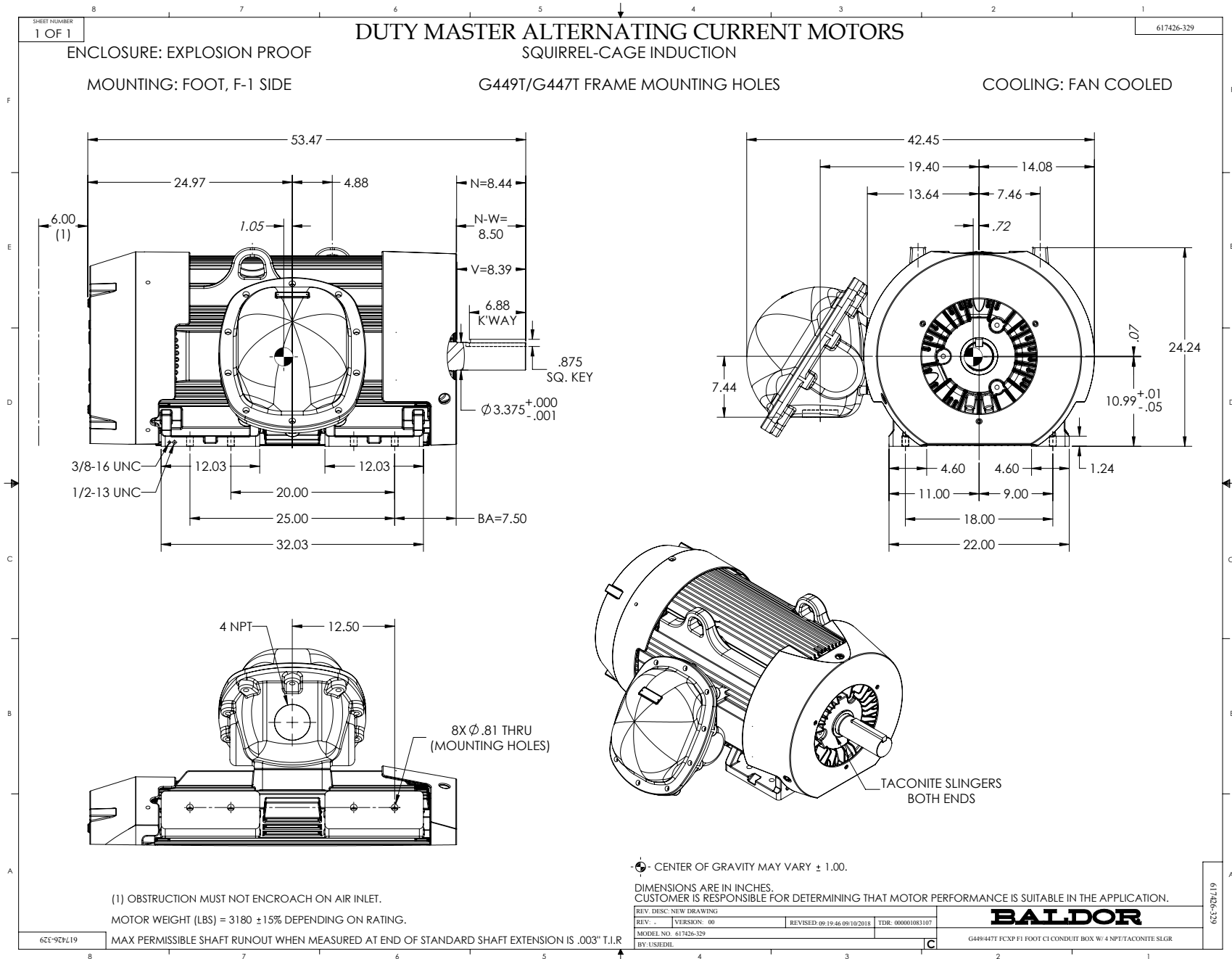
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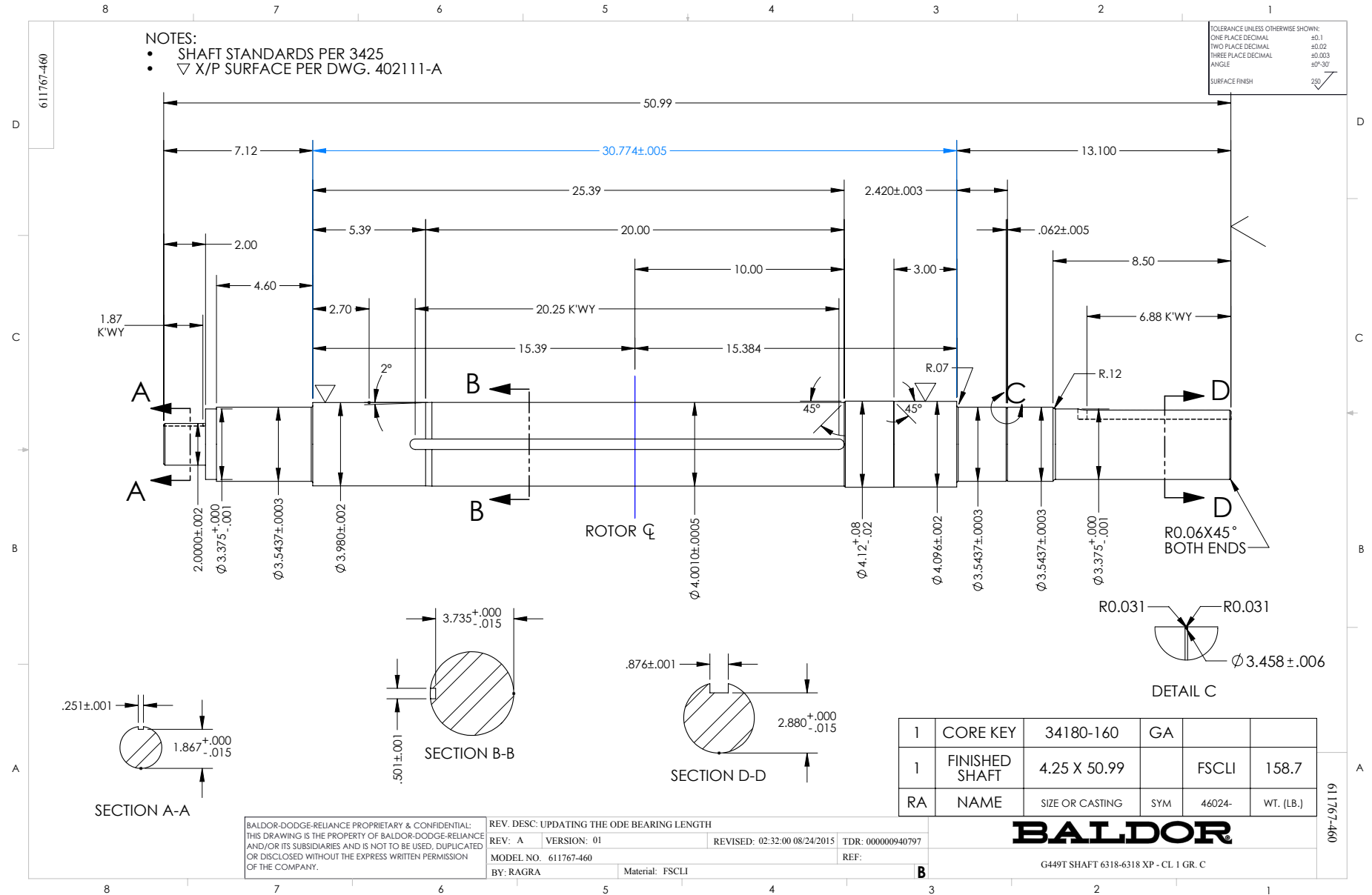
XE MOTOR-NEMA NOM. EFF. 96.2 PCT.

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 DR. BY G. R. WEBB
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 DATE 07/29/13
**A-C MOTOR
PERFORMANCE
CURVES**
A44WG3311-R012

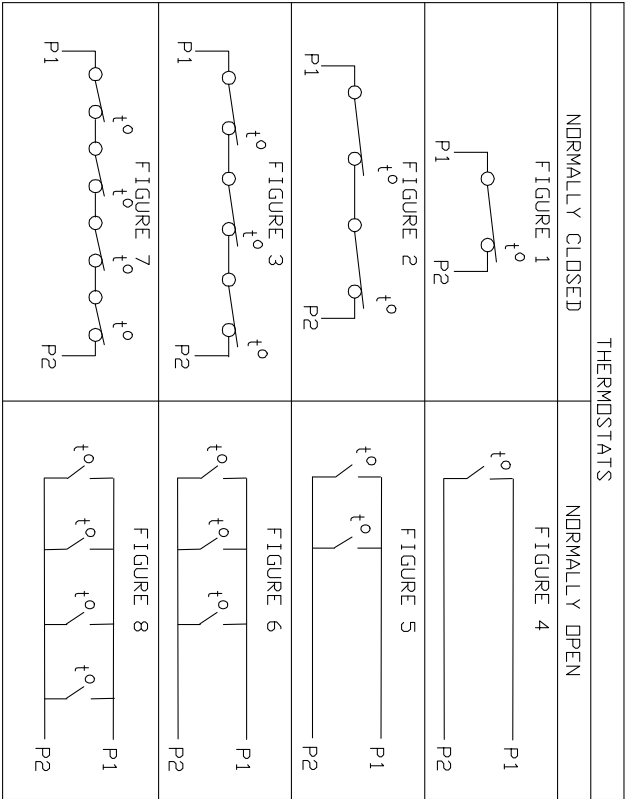
 ISSUE DATE 07/02/19 Page 10 of 14





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



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: -		

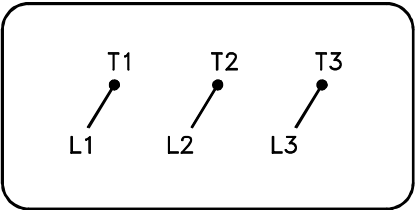
BALDOR

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