

ABB BALDOR RELIANCE III

Customer information packet

EM74254T-4

250//200HP, 1780//1480RPM, 3PH, 60//50HZ, 44

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

Division - Division I

Specifications

Enclosure	TEFC
Frame	449T
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	250.000 HP @ 60 HZ 200.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	380.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CCSA US CSA CSA EEV UL
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	263.000 A @ 380.0 V 270.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T4
Heater Indicator	No Heater
High Voltage Full Load Amps	263.0 a

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	INA/A
Elec. spec.	A44WG3311
Layout	617426-166
Eff. date	03-10-2021
CD Diagram	416820-036
Poles	04
Leads	3#2/0 (02 per group)
Proprietary	False
Created date	11-18-2015

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1480 rpm 1780 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	F G X	
OPERATING TEMP CODE	T4	

NP2475L

CAT.NO.		SPEC NO.	A44-8034-3311				FRAME	449T
HP	250//200	PHASE	3	DESIGN	B	TYPE	P	
RPM	1780//1480	HZ	60//50	AMB	40	SF	1.00	
VOLTS	460//380	DUTY	CONT	INSUL.CLASS	F			
AMPS	270//263	ENCL	TEFC	CODE	G			
DRIVE END BEARING	90BC03J30X	NEMA-NOM-EFFICIENCY	96.2					
OPP D.E. BEARING	90BC03J30X							
SER.NO.								
	CL I,ZONE 1,GR IIA IIB,T4				MOTOR WEIGHT			

ABB BALDOR RELIANCE III S/O		CUSTOMER INFORMATION PACKET					EM74254T-4 - 250HP, 1780//1480RPM, 3PH, 60//50HZ, 44	
		FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS	
		449T	250	P	3/60	1780	460	
AMPS		DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE	
270		CONT	40/F	1.00	B	G	TEFC	
E/S		ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)			
833106		418143-50BE	---	---	.0128			
PERFORMANCE								
LOAD		HP	AMPERES	RPM	% POWER FACTOR		% EFFICIENCY	
NO LOAD		0	55.2	1800	5.87		0	
1/4		62.6	83.9	1796	74.1		94.2	
2/4		125	138	1792	88.3		96.2	
3/4		187	201	1788	90.4		96.4	
4/4		250	269	1783	90.2		96.2	
5/4		312	340	1778	89.8		95.8	
SPEED TORQUE								
			RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.		AMPERES	
LOCKED ROTOR			0	171	1256		1825	
PULL UP			920	145	1069		1631	
BREAKDOWN			1729	267	1967		966	
FULL LOAD			1783	100	736		269	
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.								
TYPICAL DATA XE MOTOR-NEMA NOM. EFF. 96.2 PCT.								
			DRAWN BY: <u>G. R. WEBB</u> CHECKED BY: <u>W. L. SMITH</u> APPROVED BY: <u>E.J. CHRISTIAN</u> DATE: <u>10/26/15</u>		AC MOTOR PERFORMANCE DATA		A44WG3311-R011 DATE ISSUED 02/11/19	

FRAME 449T

RPM 1780

S.F. 1.00

ROTOR 418143-50BE

HP 250

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 270

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

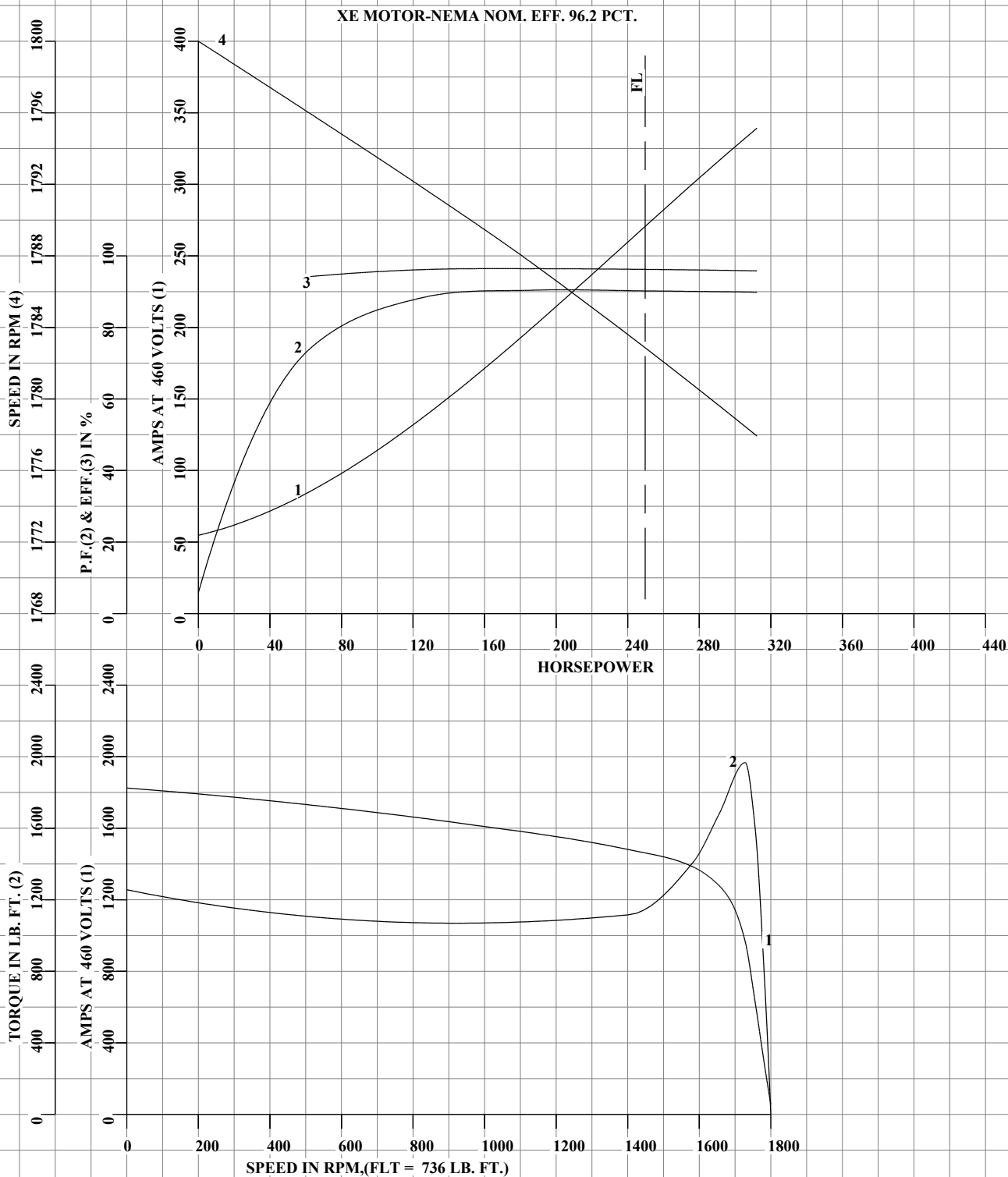
ENCLOSURE TEFC

STATOR RES. @ 25°C .0128

AMB °C / INSUL 40/F

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.



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 DATE: 10/26/15

AC MOTOR
 PERFORMANCE
 DATA

A44WG3311-R011

ISSUE DATE 02/11/19

FRAME 449T

RPM 1780

S.F. 1.00

ROTOR 418143-50BE

HP 250

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 270

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

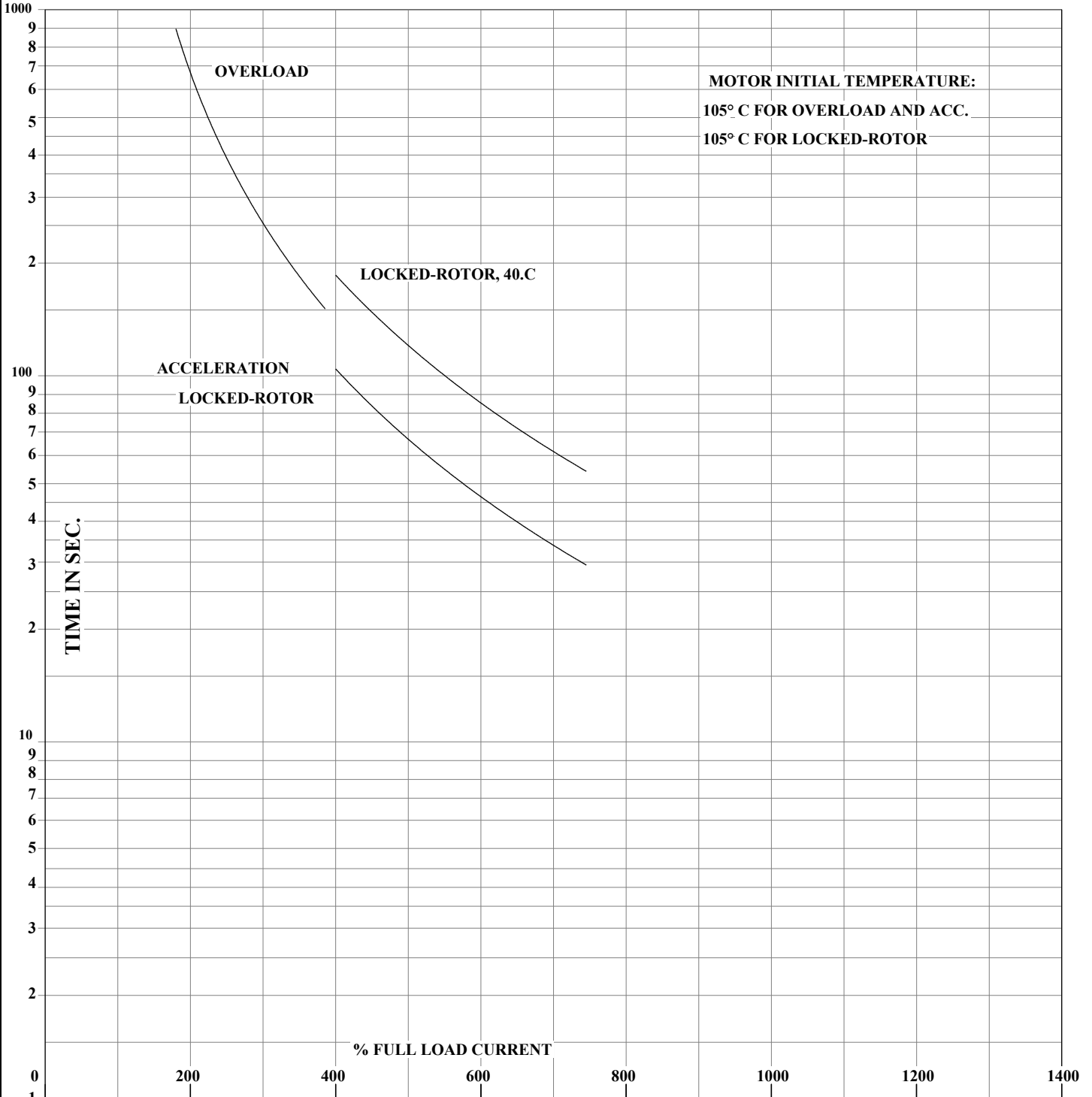
ENCLOSURE TEFC

STATOR RES. @ 25°C .0128

AMB °C / INSUL 40/F

E/S 833106

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

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



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DATE: 10/26/15

AC MOTOR
PERFORMANCE
DATA

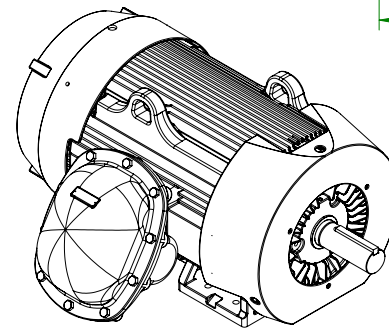
A44WG3311-R011

ISSUE DATE 02/11/19

COOLING: FAN COOLED

MOUNTING: FOOT, F-1

INCLUDES G449T FRAME MOUNTING HOLES



- 1 GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
 - 2 MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
 - 3 OBSTRUCTION MUST NO ENCROACH ON AIR INLET
- WARNING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

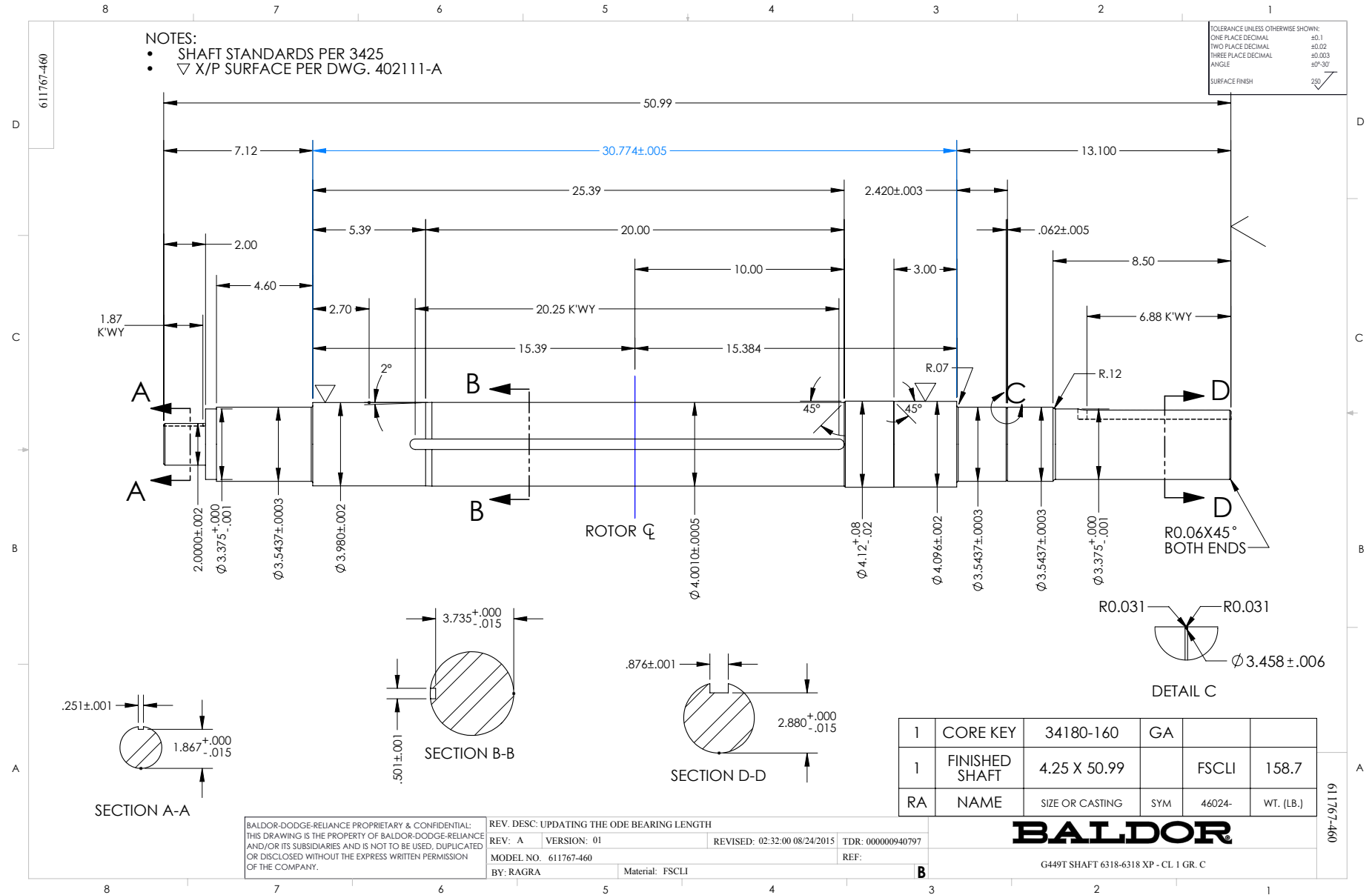
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

BY:RAGGDM

10	1000

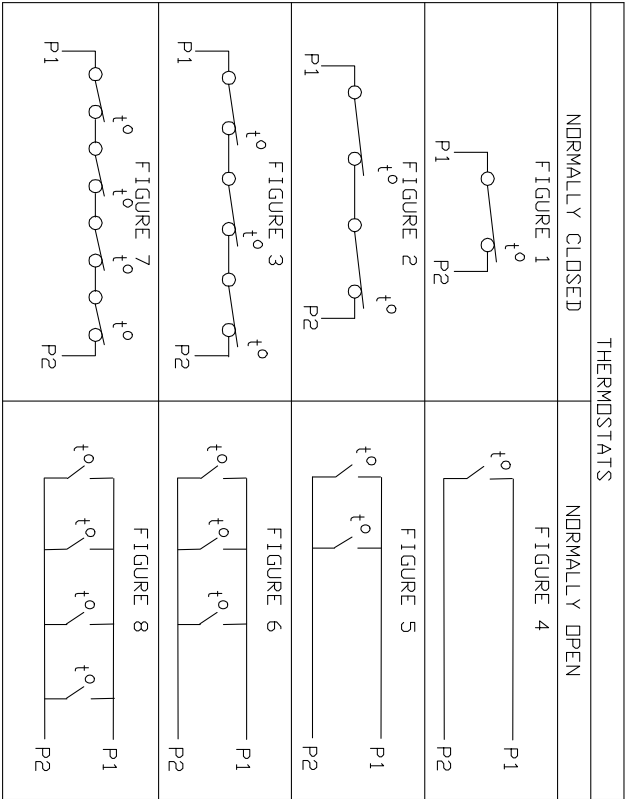
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

G449T/447T XP FT SIDE/CTR C/B - CL 1 C/CL 2 E,F & G 3"NPT



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

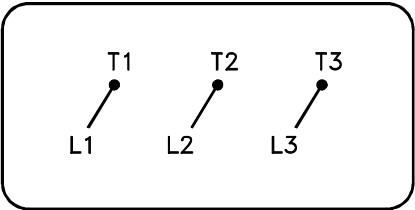


CUSTOMER _____ CUSTOMER ORDER NO. _____ S.O. NO. _____

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: -		

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