

ABB BALDOR RELIANCE III

Customer information packet

ECP4402T-4

100HP, 3565RPM, 3PH, 60HZ, 405TS, A40060M, TEF

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	405TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	6-60
Current @ Voltage	110.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	110.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA

Part Detail

Revision	N
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0061
Layout	617429-502
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	02
Leads	3#2
Proprietary	False
Created date	07-15-2013

Motor Type	A40060M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	35.04 IN
Power Factor	90
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3565 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3238													
CAT NO	ECP4402T-4			SPEC NO.		P40G3906							
HP	100	AMPS	110	VOLTS		460			DESIGN	B			
FRAME	405TS	RPM	3565	HZ	60	AMB	40	SF	1.15				
D.E. BRG.DATA	6313	O.D.E. BRG.DATA			6313	PH	3	DUTY	CONT	INSUL.CLASS	F		
D.E. BRG.	65BC03J30X			TYPE	P	ENCL	TEFC	CODE	F				
O.D.E. BRG.	65BC03J30X			POWER FACTOR			90	NEMA NOM EFFICIENCY			95		
3/4 LOAD EFF.	95.1	MAX CORR KVAR			10.0	GUARANTEED EFFICIENCY			94.1				
TEMP CODE	T3	TEMP =	200										
CHP HZ	60-75	CT HZ	6-60	VT HZ	0-60								
INVERTER-TEMP-CODE	T3												
SER.NO.				MOTOR WEIGHT									

REL. S.O.

RPM **3565**

S.F. **1.15**

ROTOR **418142005PE**

FRAME **405TS**

VOLTS **460**

NEMA DESIGN **B**

TEST S.O. **TYPICAL DATA**

HP **100**

AMPS **110**

CODE LETTER **F**

TEST DATE **---**

TYPE **P**

DUTY **CONT**

ENCLOSURE **TEFC**

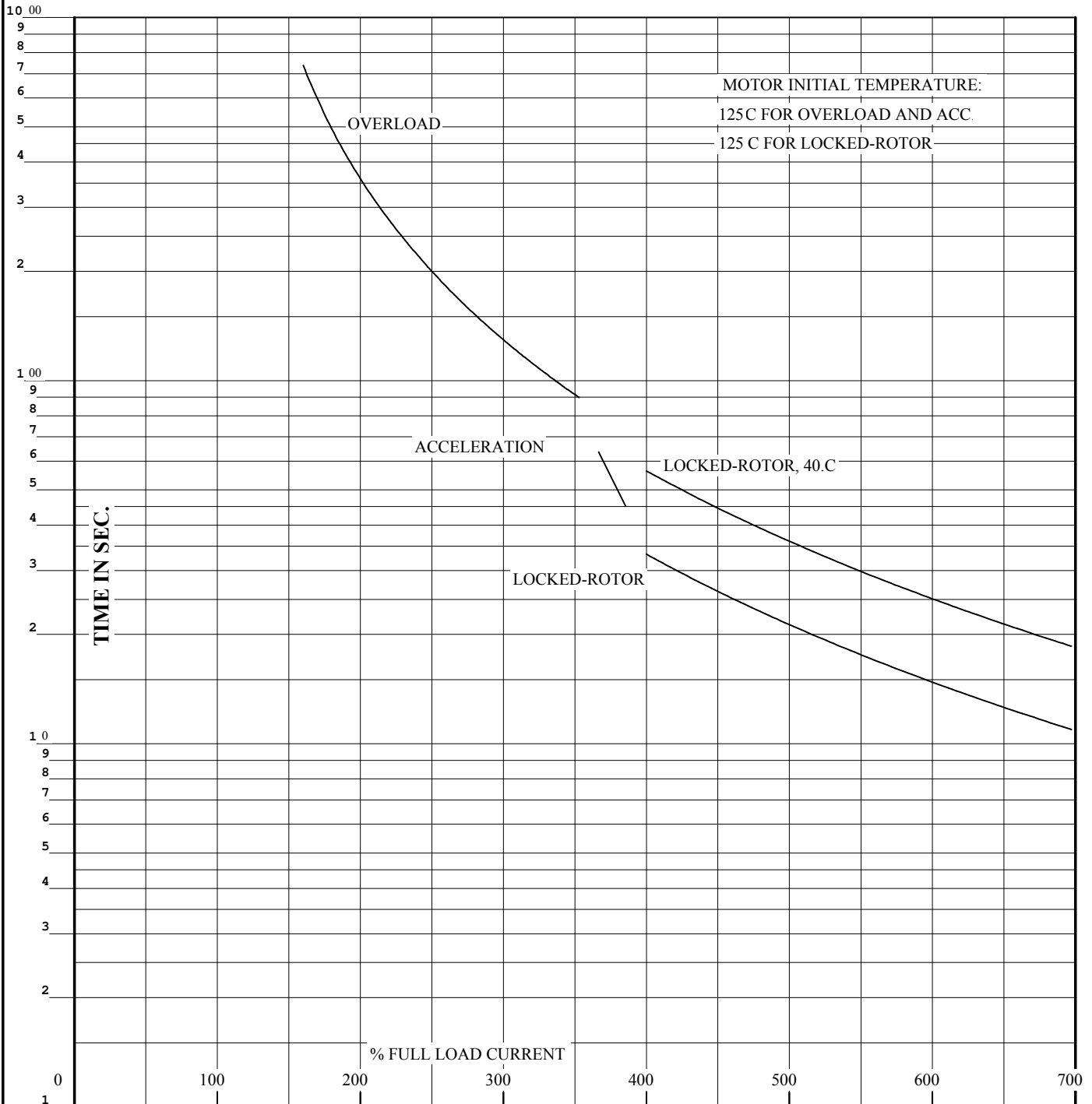
STATOR RES. @ 25 °C **.0526**

PHASE/HERTZ **3/60**

AMB °C/INSUL **40/F**

E/S **596930**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR-NEMA NOM. EFF. 95.0 %

GUARANTEED MIN. EFF. 94.5%

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 W. L. SMITH
CK. BY G. R. WEBB
APP. BY D. M. BYRD
DATE 01/23/02
**A-C MOTOR
PERFORMANCE
CURVES**
A40WG0061-R001

ISSUE DATE 03/04/2014 Page 5 of 10

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS		
	405TS	100	P	3/60	3565	460		
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.		
110	CONT	40/F	1.15	B	F	TEFC		
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)				
596930	418142005PE	---	---	.0526				
PERFORMANCE								
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY			
NO LOAD	0	25.6	3600	7.57	0			
1/4	25.0	36.7	3591	69.7	91.7			
2/4	50.0	57.7	3582	85.8	94.6			
3/4	75.1	82.7	3572	89.3	95.1			
4/4	100	110	3563	89.9	95.0			
5/4	125	137	3552	90.2	94.6			
SPEED TORQUE								
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES			
LOCKED ROTOR		0	203	299	695			
PULL UP		1545	182	269	632			
BREAKDOWN		3408	256	377	387			
FULL LOAD		3563	100	147	110			
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. 95.0 % GUARANTEED MIN. EFF. 94.5%								
		DR. BY	W. L. SMITH	A-C MOTOR PERFORMANCE DATA				
		CK. BY	G. R. WEBB					
		APP. BY	D. M. BYRD					
		DATE	01/23/02					
				A40WG0061-R001 ISSUE DATE 03/04/20				

REL S.O.

 RPM **3565**

 S.F. **1.15**

 ROTOR **418142005PE**

 FRAME **405TS**

 VOLTS **460**

 NEMA DESIGN **B**

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 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

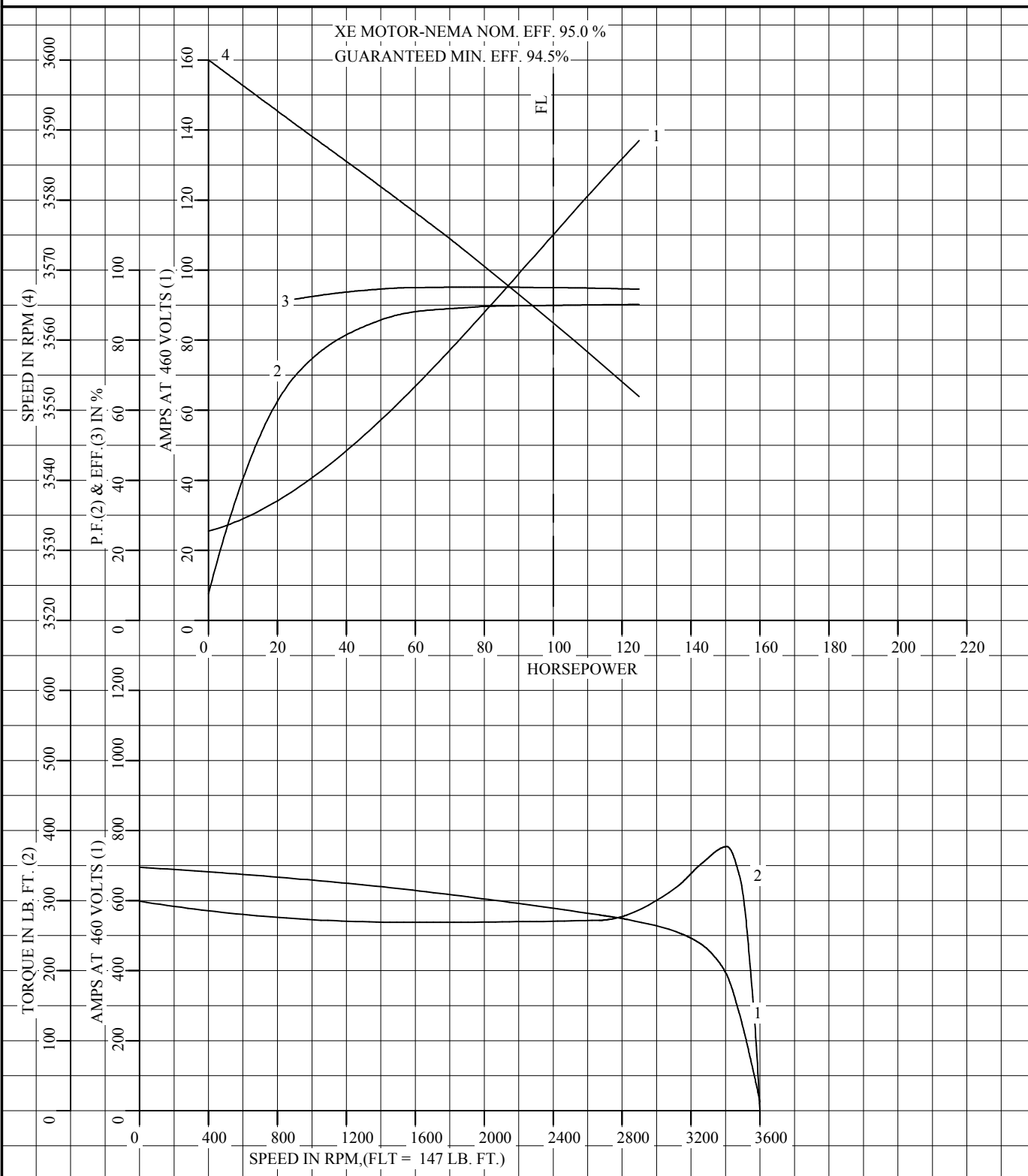
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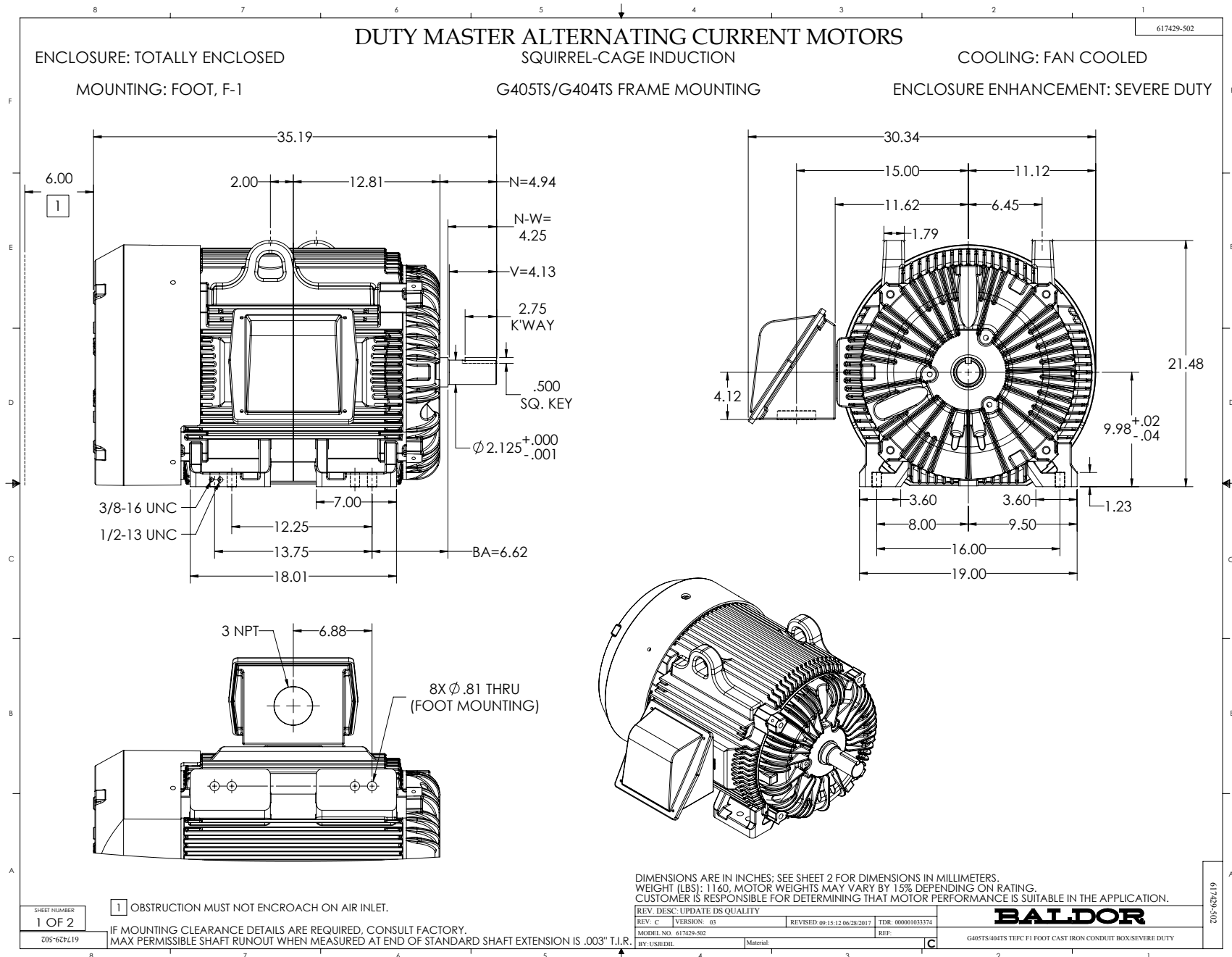
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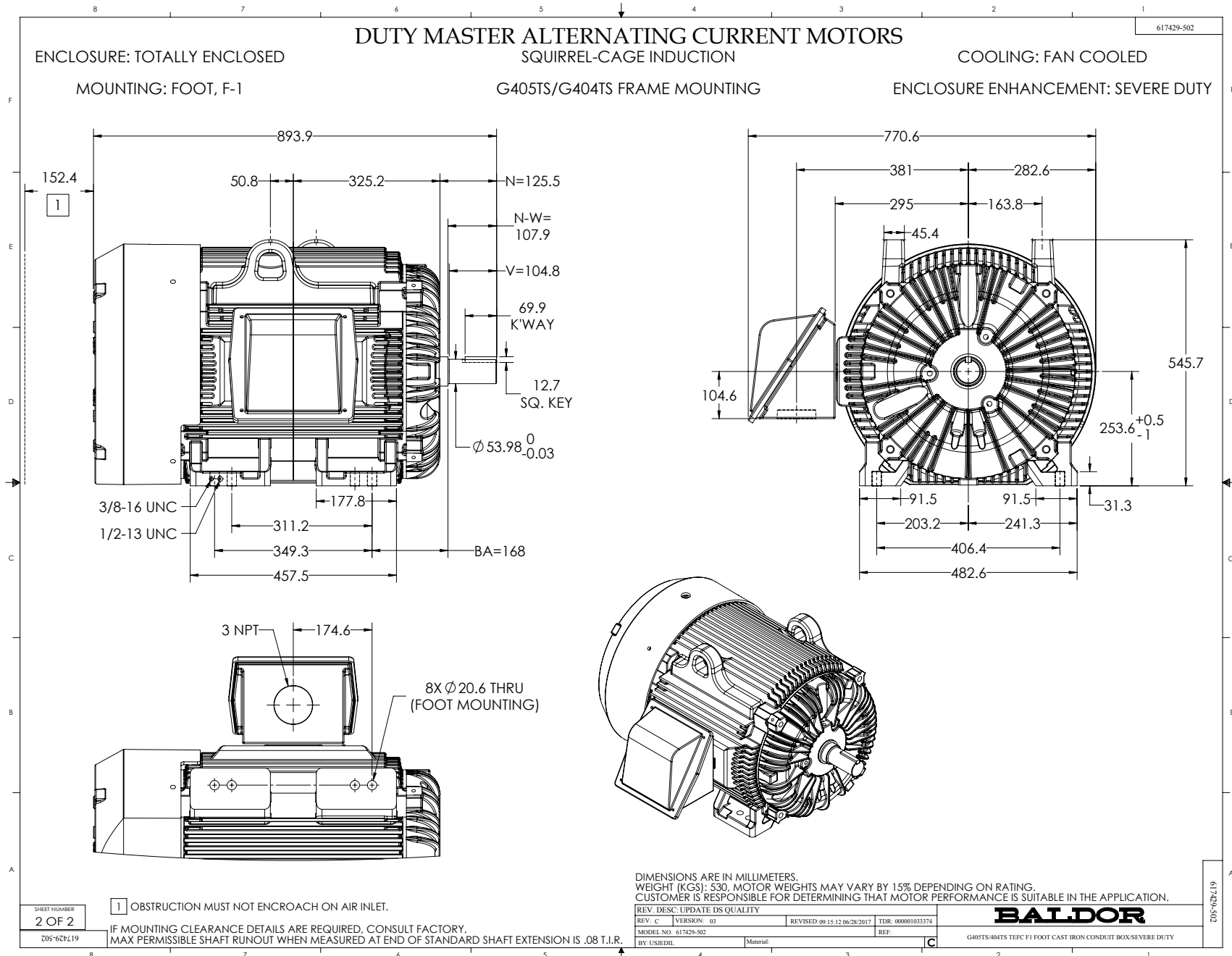
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**A-C MOTOR
PERFORMANCE
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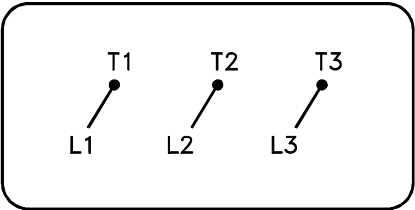
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416820-036

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