

ABB BALDOR RELIANCE III

Customer information packet

ECP4400TS-4

100HP, 1785RPM, 3PH, 60HZ, 405TS, A40064M, 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	1800 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	10-60
Current @ Voltage	112.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T2D
Heater Indicator	No Heater
High Voltage Full Load Amps	112.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA

Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0066
Layout	617429-502
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	07-15-2013

Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	35.04 IN
Power Factor	87
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	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP3238																
CAT NO	ECP4400TS-4				SPEC NO.		P40G3904									
HP	100	AMPS		112	VOLTS		460		DESIGN		B					
FRAME	405TS	RPM		1785	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	G					
O.D.E. BRG.	65BC03J30X				POWER FACTOR				87		NEMA NOM EFFICIENCY				95.4	
3/4 LOAD EFF.	95.7		MAX CORR KVAR				18.0		GUARANTEED EFFICIENCY				94.5			
TEMP CODE	T2D		TEMP =		215											
CHP HZ	60-90		CT HZ	10-60		VT HZ		0-60								
INVERTER-TEMP-CODE	T2D															
SER.NO.					MOTOR WEIGHT											

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405TS	100	P	3/60	1785	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
112	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C OHMS (BETWEEN LINES)		
596909	418142-33-RE	---	---	.0492		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	28.7	1800	5.48	0	
1/4	25.0	39.2	1796	64.3	93.0	
2/4	50.0	59.4	1792	82.6	95.4	
3/4	75.0	84.4	1788	86.9	95.7	
4/4	100	112	1783	87.6	95.4	
5/4	125	141	1778	87.4	94.9	
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	151	445	725		
PULL UP	360	136	400	706		
BREAKDOWN	1721	250	735	382		
FULL LOAD	1783	100	295	112		
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-DATA-NEMA NOM. EFF. 95.4 PCT GURANTEED MIN EFF. 95.0 PCT						
		DR. BY J.J.HARRISON CK. BY W.L.SMITH APP. BY W.L.SMITH DATE 02/05/09		A-C MOTOR PERFORMANCE A40WG0066-R002 DATA ISSUE DATE 12/15/10		

FRAME 405TS

RPM 1785 VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 100

AMPS 112

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

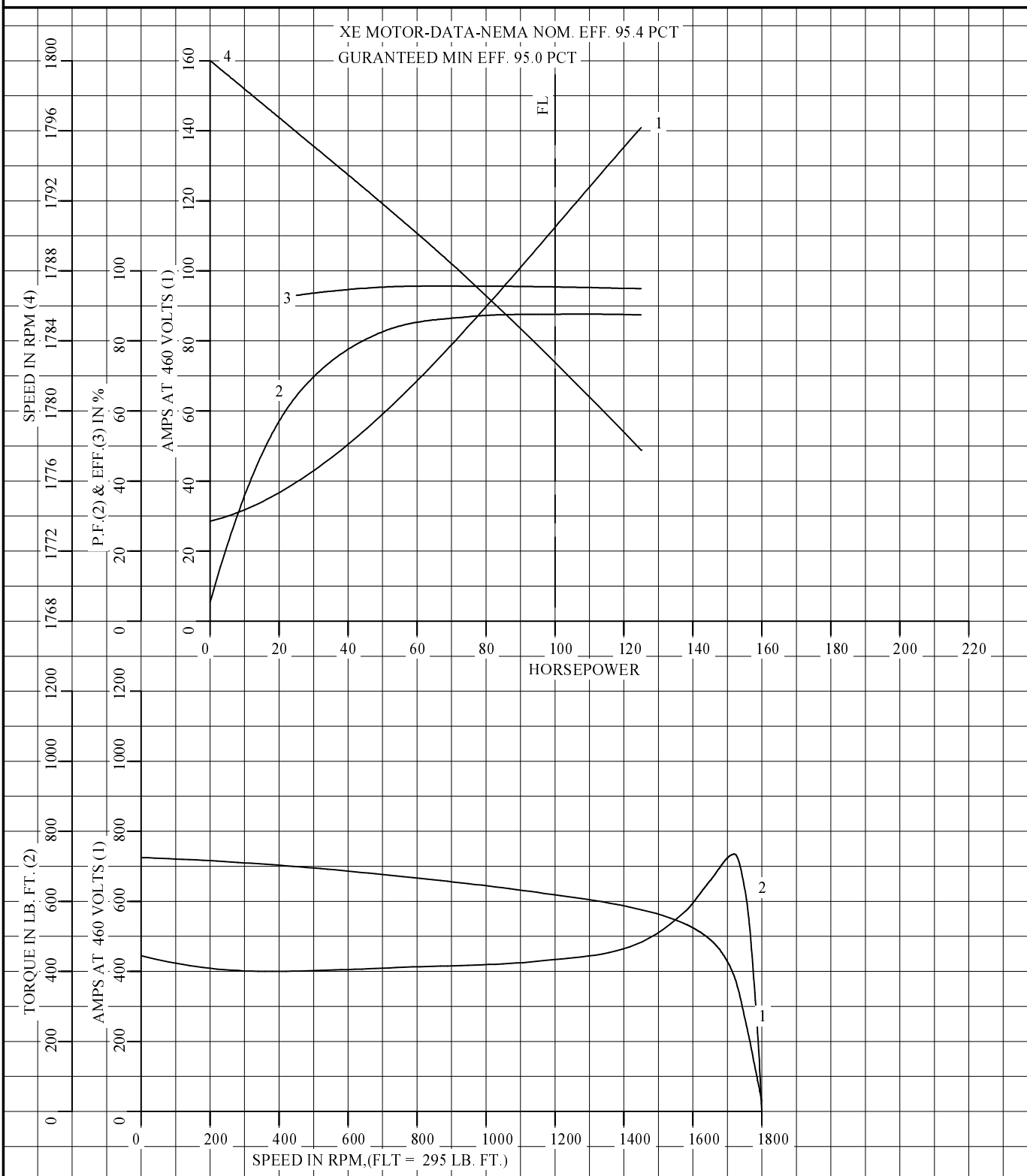
STATOR RES. @ 25 °C .0492

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 596909

OHMS (BETWEEN LINES)



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BALDOR

DR. BY J.J. HARRISON
CK. BY W.L. SMITH
APP. BY W.L. SMITH
DATE 02/05/09

**A-C MOTOR
PERFORMANCE
CURVES** A40WG0066-R002
ISSUE DATE 12/15/10

REL. S.O.

RPM 1785

S.F. 1.15

ROTOR 418142-33-RE

FRAME 405TS

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 100

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DUTY CONT

ENCLOSURE TEFC

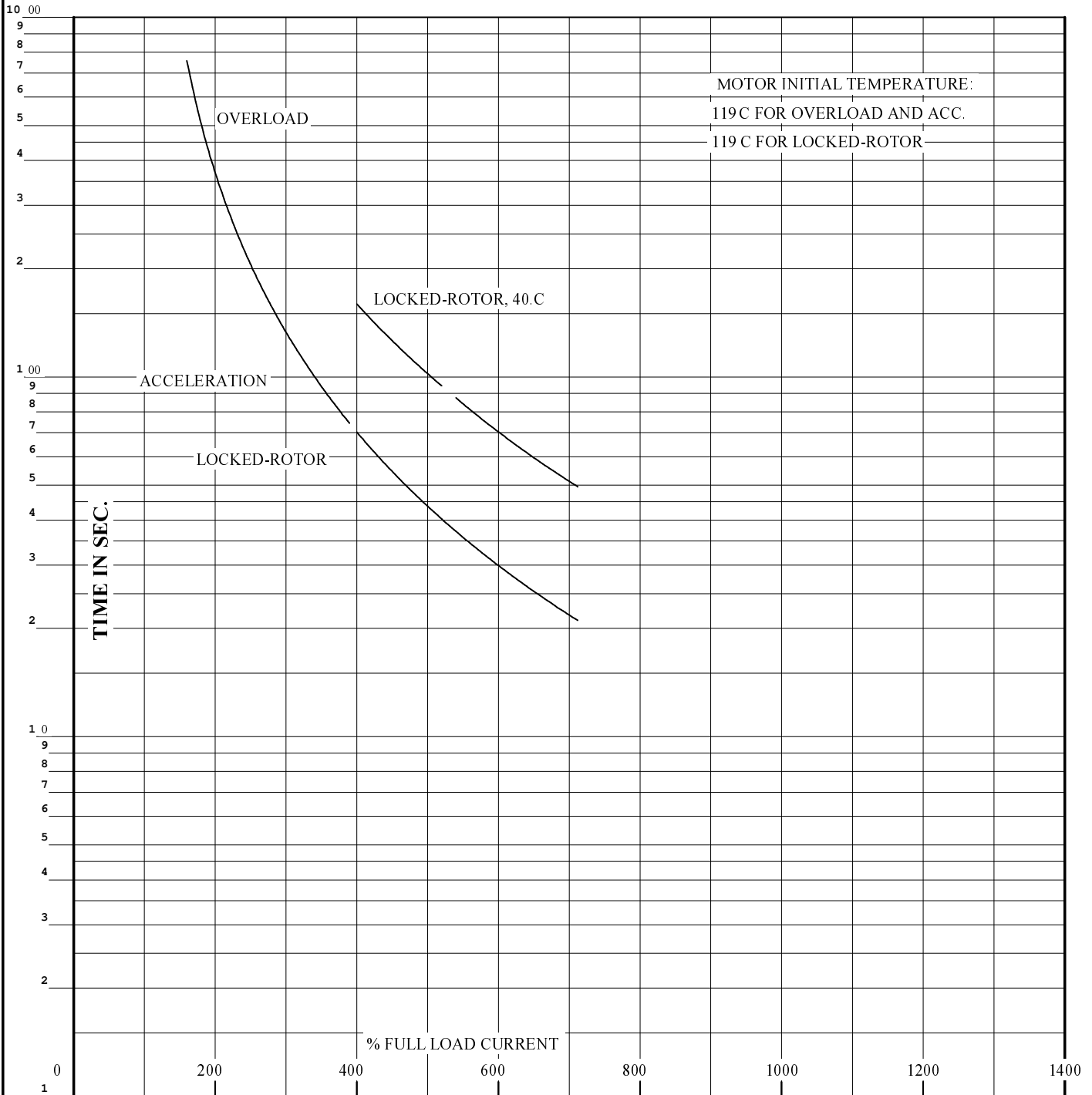
STATOR RES. @ 25 °C .0492

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 596909

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT

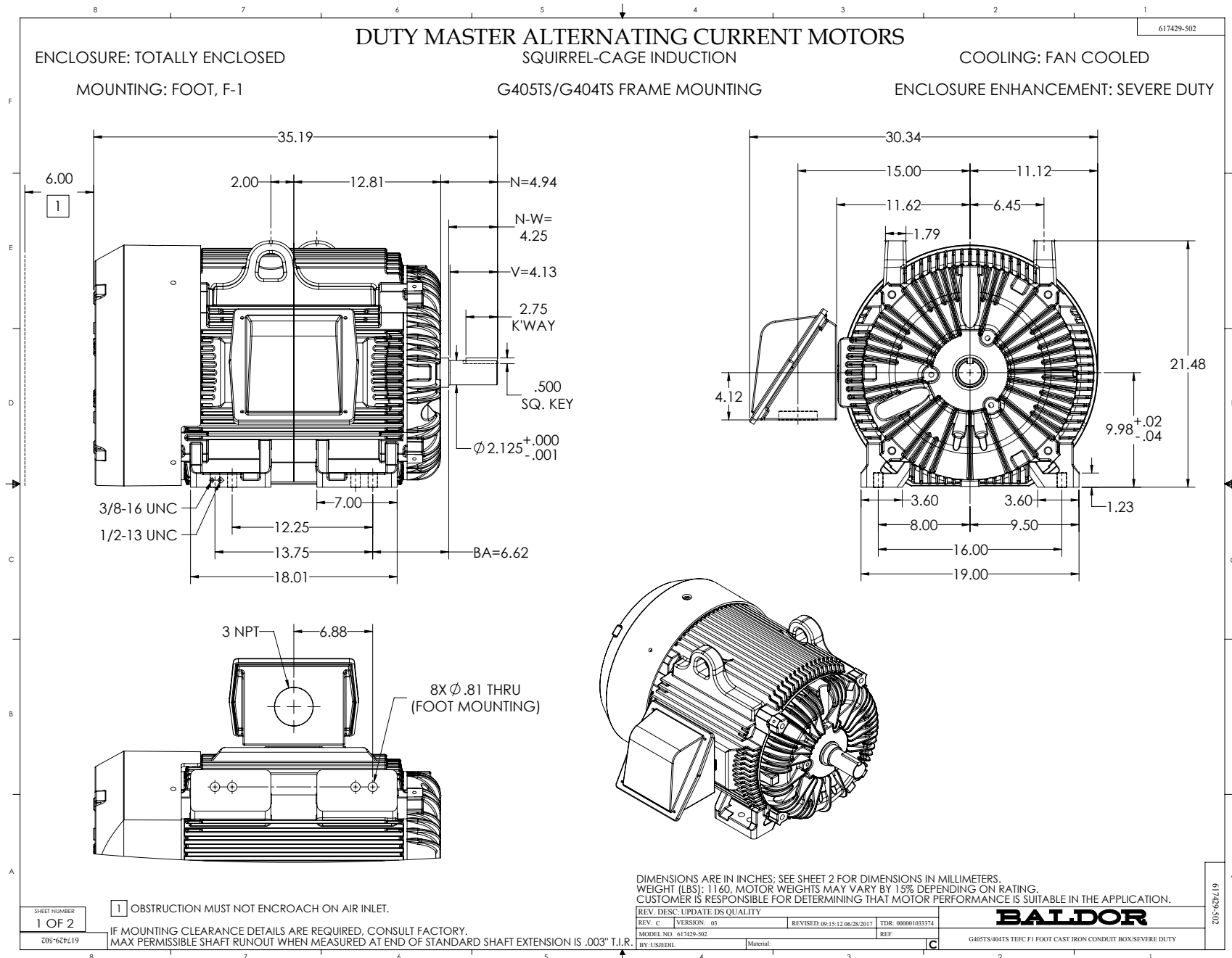
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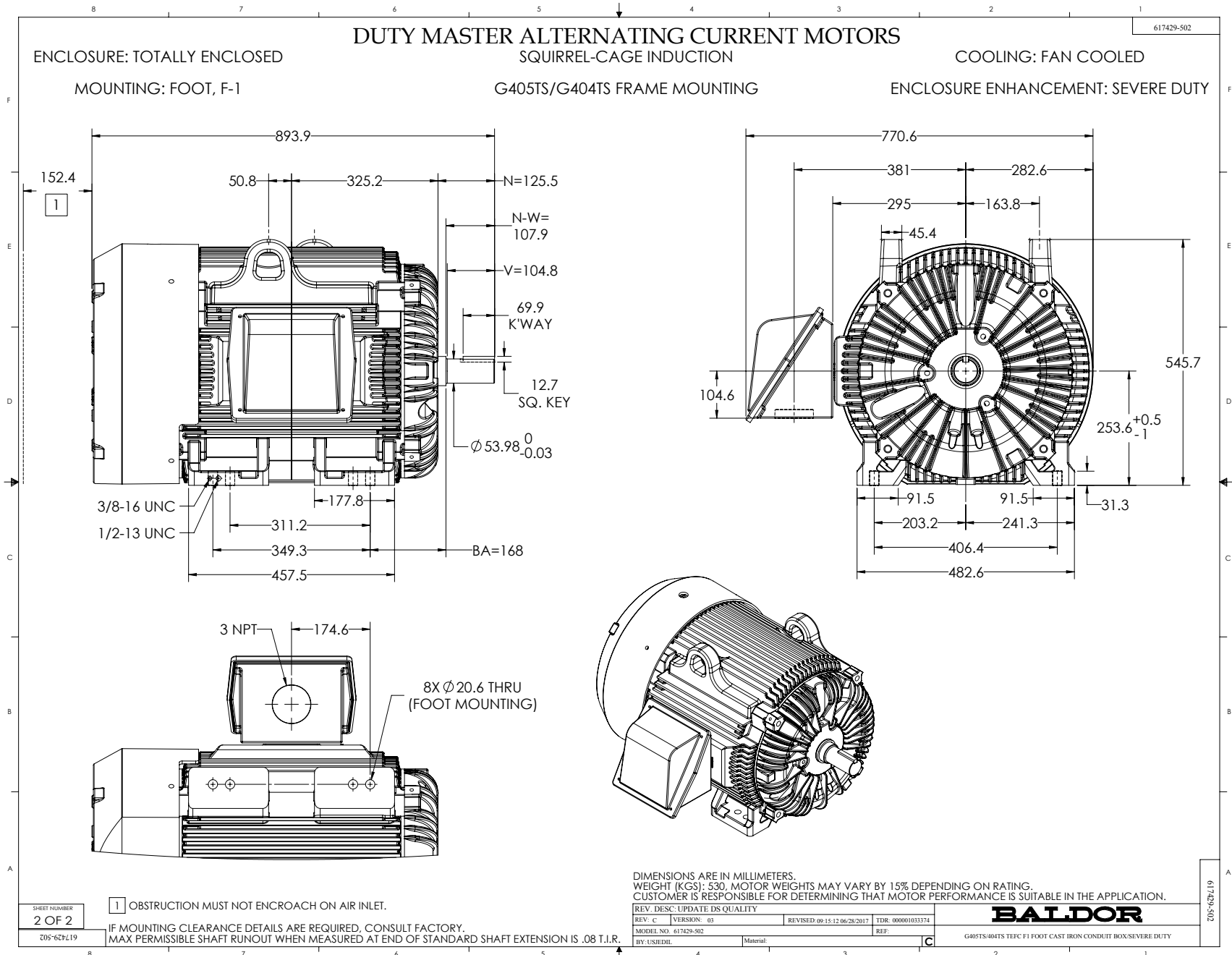
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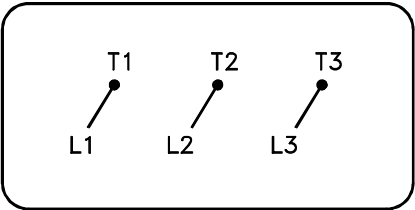
**A-C MOTOR
PERFORMANCE
CURVES** A40WG0066-R002
 ISSUE DATE 12/15/10





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