

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									

Parts List

Part number	Description	Quantity
SA267697	SA P40G3906	1.000 ea
RA254367	RA P40G3906	1.000 ea
NP3238	SS CP XEX SEVERE DUTY MAIN NP,CURUS EEV	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
000692000FF	N/P	1.000 ea
004824015A	GREASE POLYREX EM	0.544 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
034180008DA	KEY 1/4X1/4X1 L (shipping)	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
083198101A	G400 STD FAN COVER MACHINING	1.000 ea
034692005AA	P PLUG 3/4"BLK.	1.000 ea
089413501A	G400 FIN/MACH FT MTD BRKT 089413500WCA	1.000 ea
410700004F	WSHR	1.000 ea
415045002E	SLGR	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
702675001D	FAN 250-440	1.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034530040AB	P/NIP 1/8X5 GALV.	1.000 ea
034530040BB	P/NIP 1/4X5	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
089413501A	G400 FIN/MACH FT MTD BRKT 089413500WCA	1.000 ea
415045002E	SLGR	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea

032018010CK	HHCS 3/8-16X1-1/4 PLTD. 032018010CR	4.000 ea
033512008LB	HHTTS 1/4-20X1 PLATED	4.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
065776000C	GASKET,MAIN CBOX, 320-400	1.000 ea
067053000B	GASK 320-400	1.000 ea
076708000BB	CONDUIT BOX-360	1.000 ea
076709000A	C/B Cover - 360	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
415000115H	T/LUG #2AWG-4/OAWG	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
034180022GA	KEY 1/2X1/2X2-3/4 L	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.375 ga
004824003CBY	WILKO PAINT 060.02 - ACTIVATOR	0.063 ga
421948051	LABEL, MYLAR	1.000 ea
604797045	STD. 400 FRAME SKID	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
412118006A	DRAIN	2.000 ea

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**

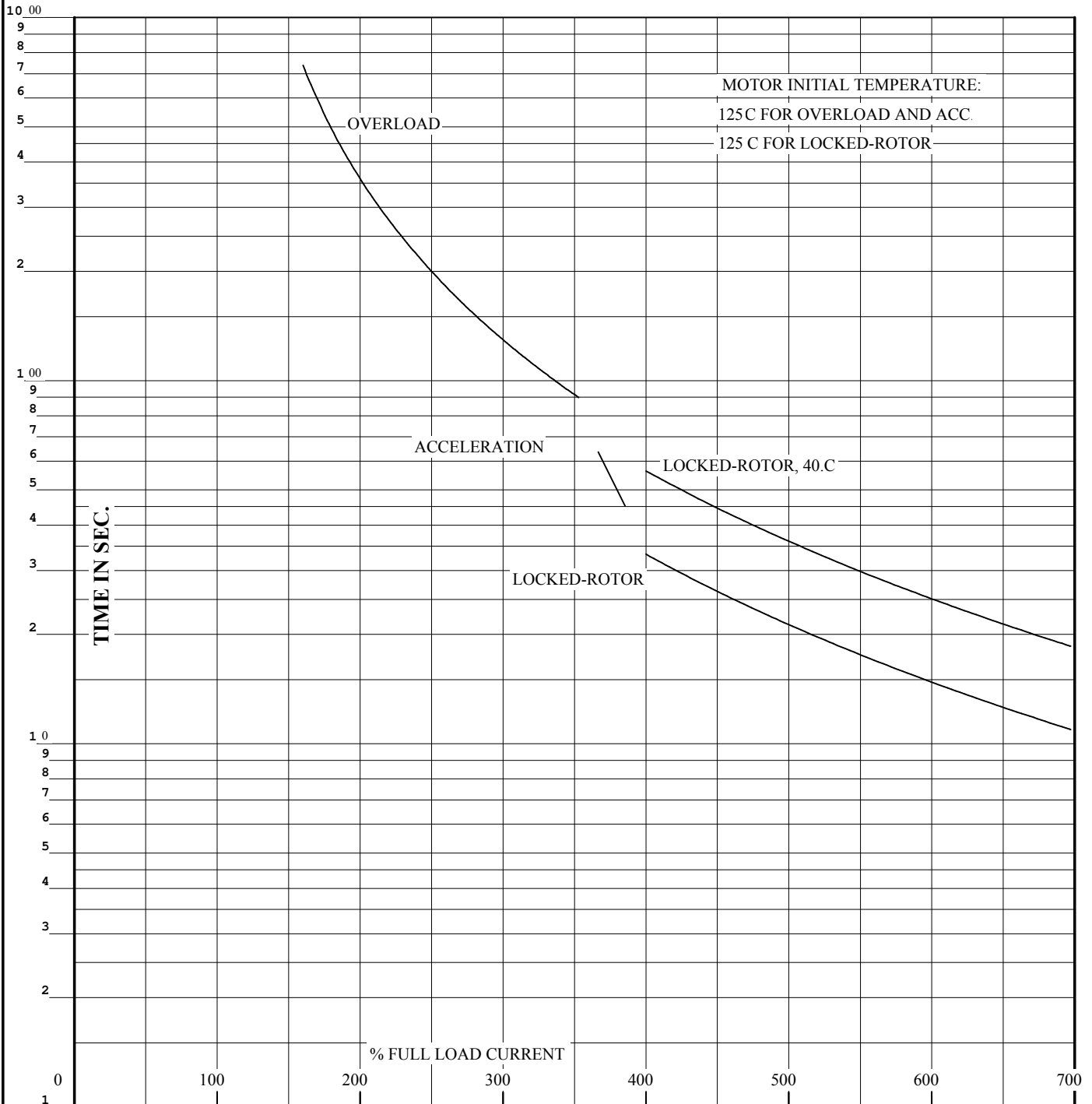
STATOR RES. @ 25 °C **.0526**

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 7 of 12

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 A40WG0061-R001 ISSUE DATE 03/04/20		
		CK. BY G. R. WEBB				
		APP. BY D. M. BYRD				
		DATE 01/23/02				
		Page 8 of 8				

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**

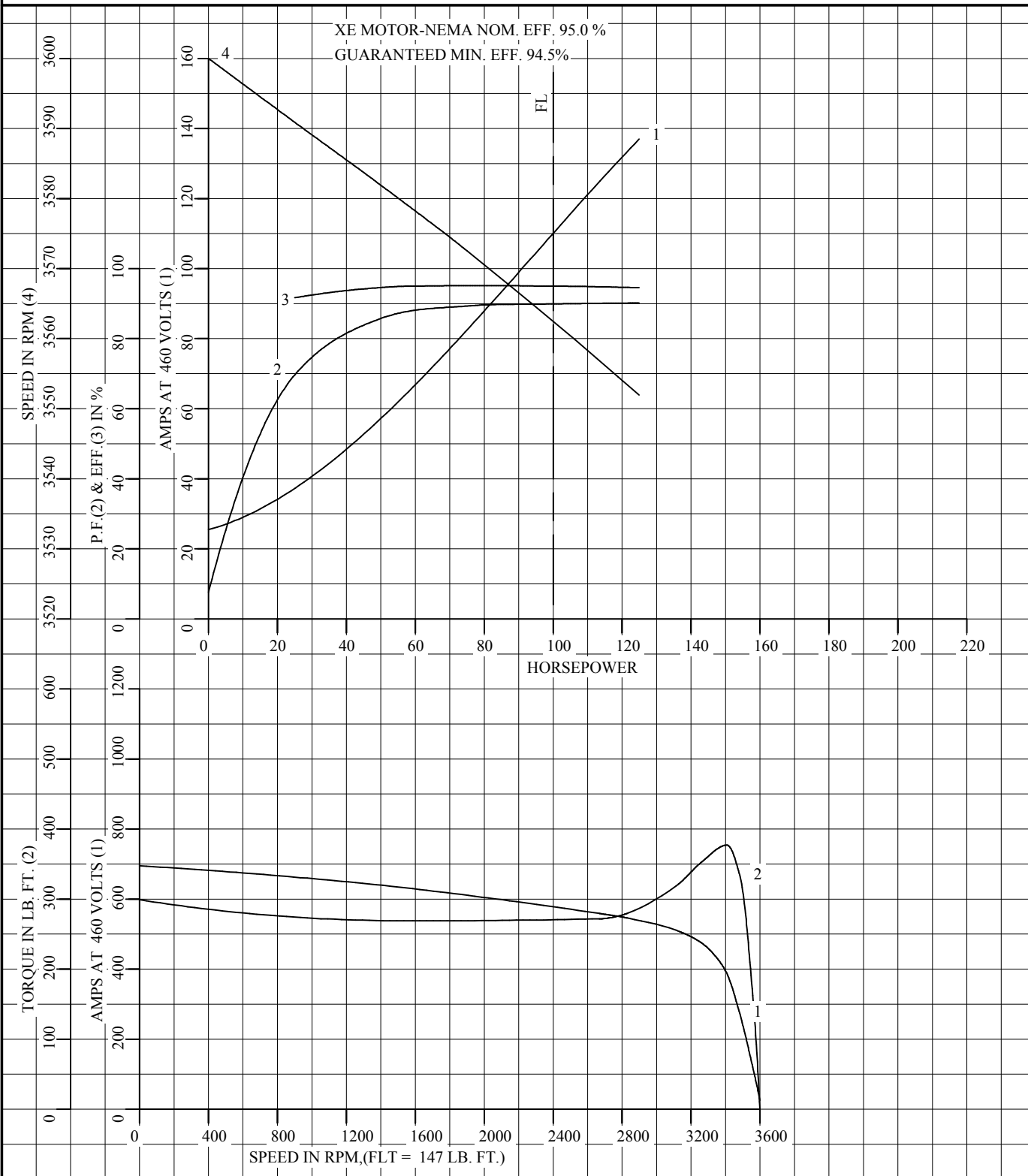
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OHMS (BETWEEN LINES)



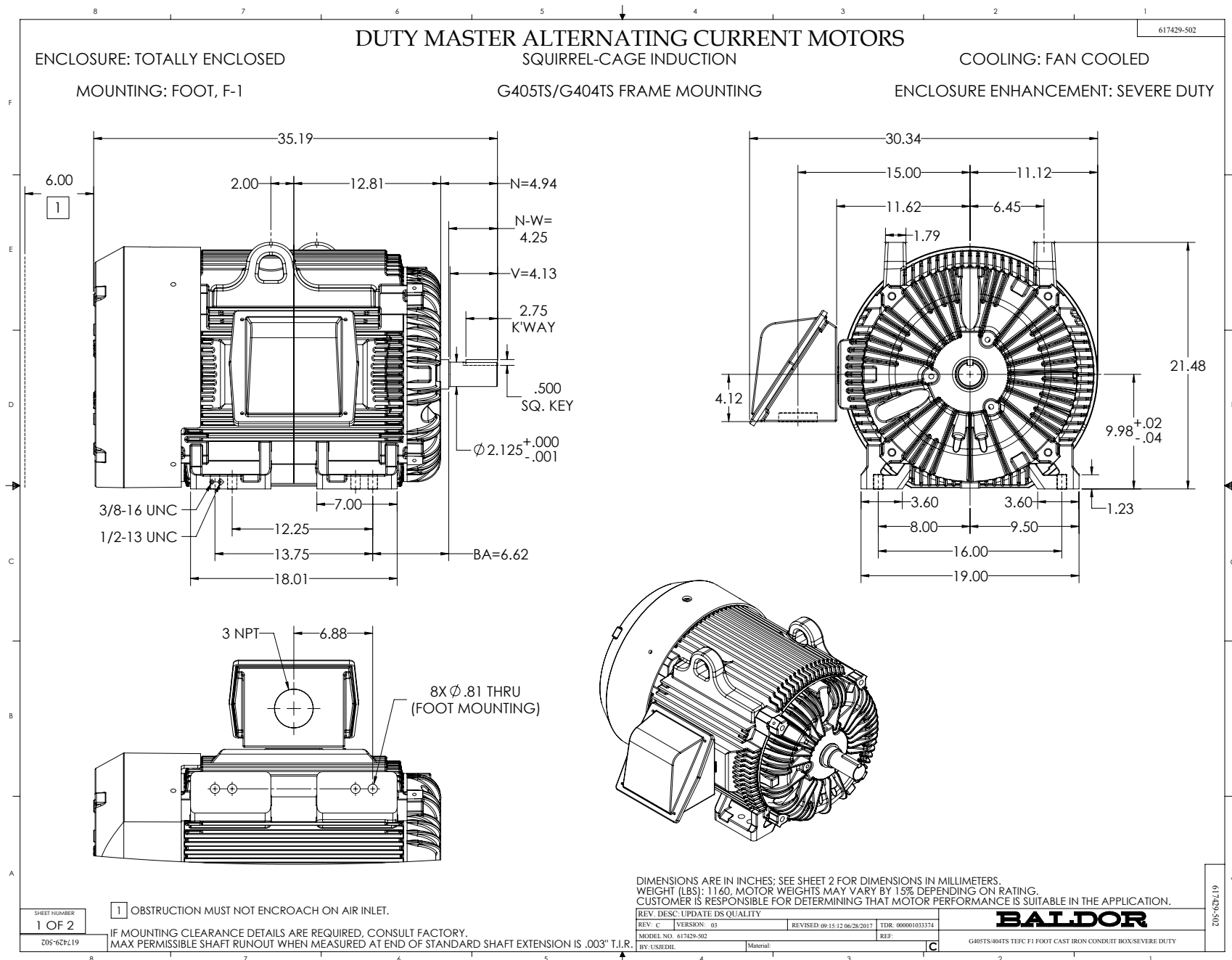
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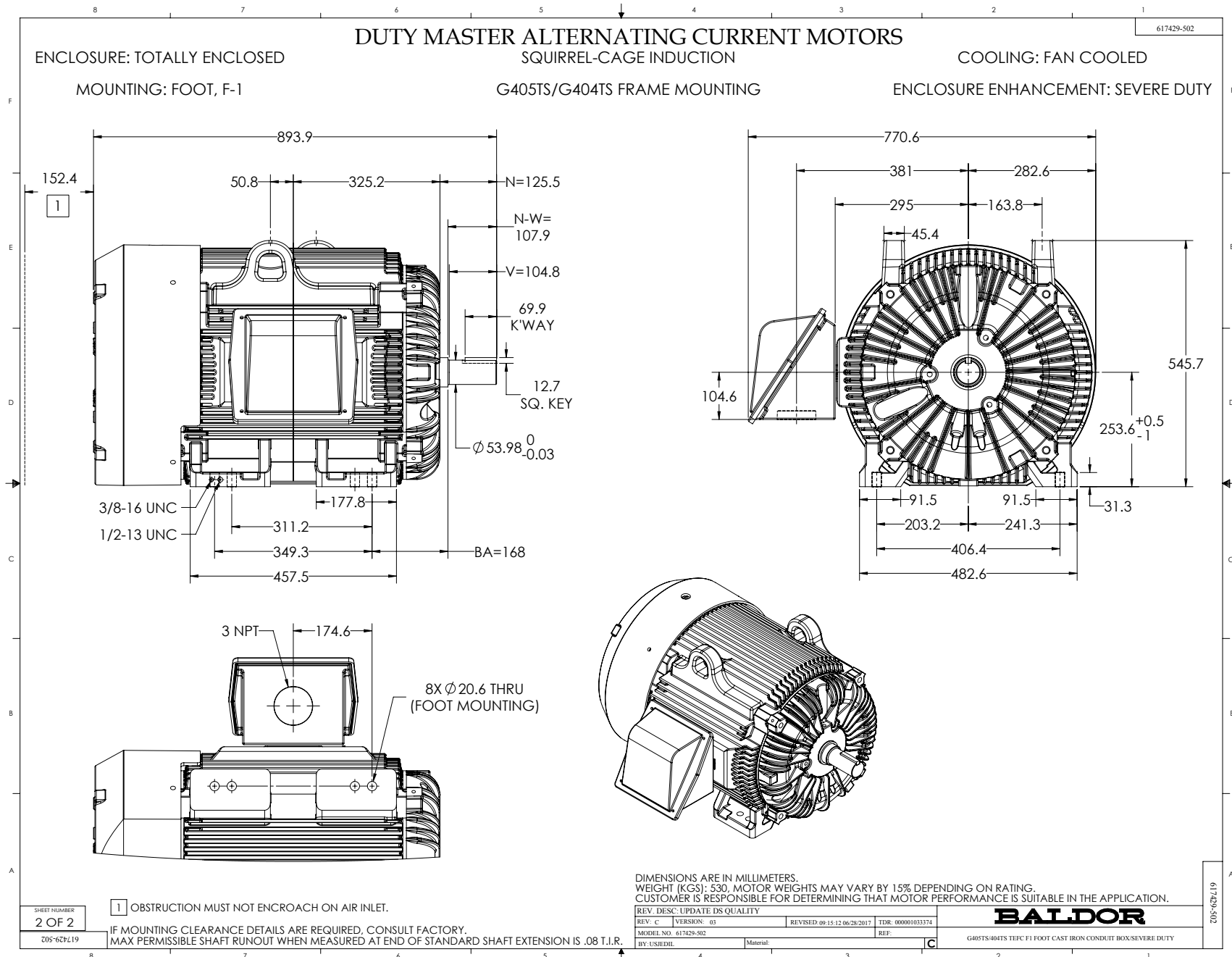
BALDOR
 A MEMBER OF THE ABB GROUP

DR. BY W. L. SMITH
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**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0061-R001
 ISSUE DATE 03/04/2014





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