

ABB BALDOR RELIANCE III

Customer information packet

EFM4400T

100HP, 1785RPM, 3PH, 60HZ, 405T, A40064M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	405T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	224.000 A @ 230.0 V 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
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

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0251
Layout	617429-011
Eff. date	09-04-2024
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	07-16-2013

Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F2
Number of Poles	4
Overall Length	38.18 IN
Power Factor	87
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2349L															
SPEC NO.	P40G3924			CAT.NO.		EFM4400T				FRAME		405T			
HP	100	VOLTS		230/460		PHASE		3	DESIGN		B	TYPE		P	
RPM	1785	AMPS		224/112		HZ		60	AMB		40	SF		1.15	
DRIVE END BEARING	80BC03J30X			DUTY		CONT		INSUL.CLASS			F				
OPP D.E. BEARING	80BC03J30X			ENCL		TEFC		CODE		G					
SER.NO.				POWER FACTOR				87		NEMA-NOM-EFFICIENCY				95.4	
								MAX CORR KVAR		18		GUARANTEED EFFICIENCY		94.5	
								NEMA NOM/CSA QUOTED EFF							
								MOTOR WEIGHT							

NP2496L	
MOBIL POLYREX EM	

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS			
	405T	100	P	3/60	1785	230/460			
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.			
224/112	CONT	40/F	1.15	B	G	TEFC			
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)					
596956	418142-33-RE	---	---	.0123/.0492					
PERFORMANCE									
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY				
NO LOAD	0	28.6	1800	5.49	0				
1/4	25.0	39.2	1796	64.3	93.0				
2/4	50.0	59.5	1792	82.5	95.4				
3/4	75.0	84.6	1788	86.7	95.7				
4/4	100	112	1783	87.4	95.4				
5/4	125	141	1778	87.3	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 GUARANTEED MIN EFF. 95.0 PCT									
		DR. BY J. J. HARRISON		A-C MOTOR PERFORMANCE A40WG0251-R001 DATA ISSUE DATE 12/15/10					
		CK. BY W. L. SMITH							
		APP. BY W. L. SMITH							
		DATE 07/26/04							

FRAME 405T

VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 100

AMPS 224/112

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

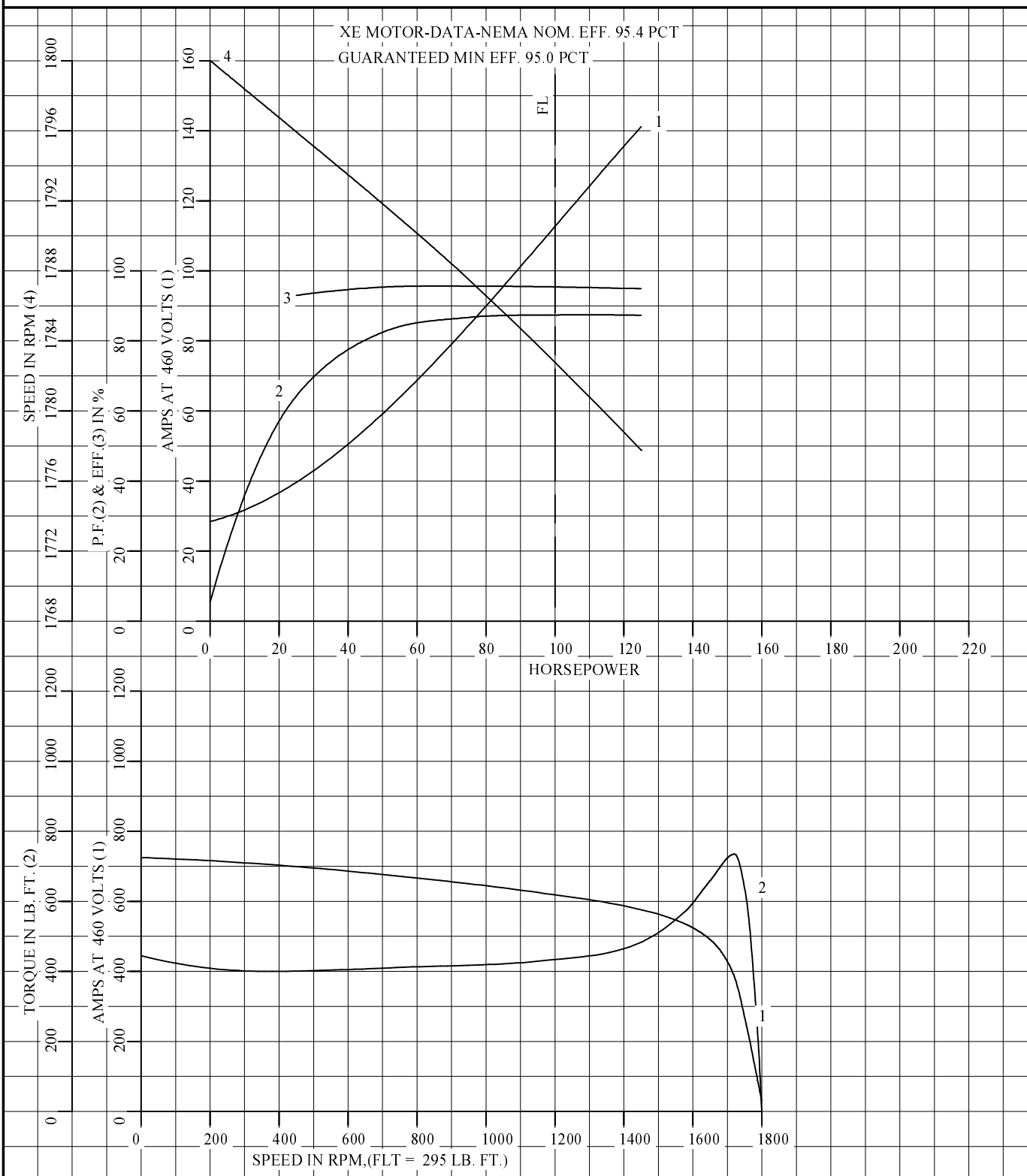
STATOR RES. @ 25 °C .0123/.0492

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 596956

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

DR. BY J.J. HARRISON
CK. BY W.L. SMITH
APP. BY W.L. SMITH
DATE 07/26/04

**A-C MOTOR
PERFORMANCE
CURVES** A40WG0251-R001
ISSUE DATE 12/15/10

REL. S.O.

RPM 1785

S.F. 1.15

ROTOR 418142-33-RE

FRAME 405T

VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 100

AMPS 224/112

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

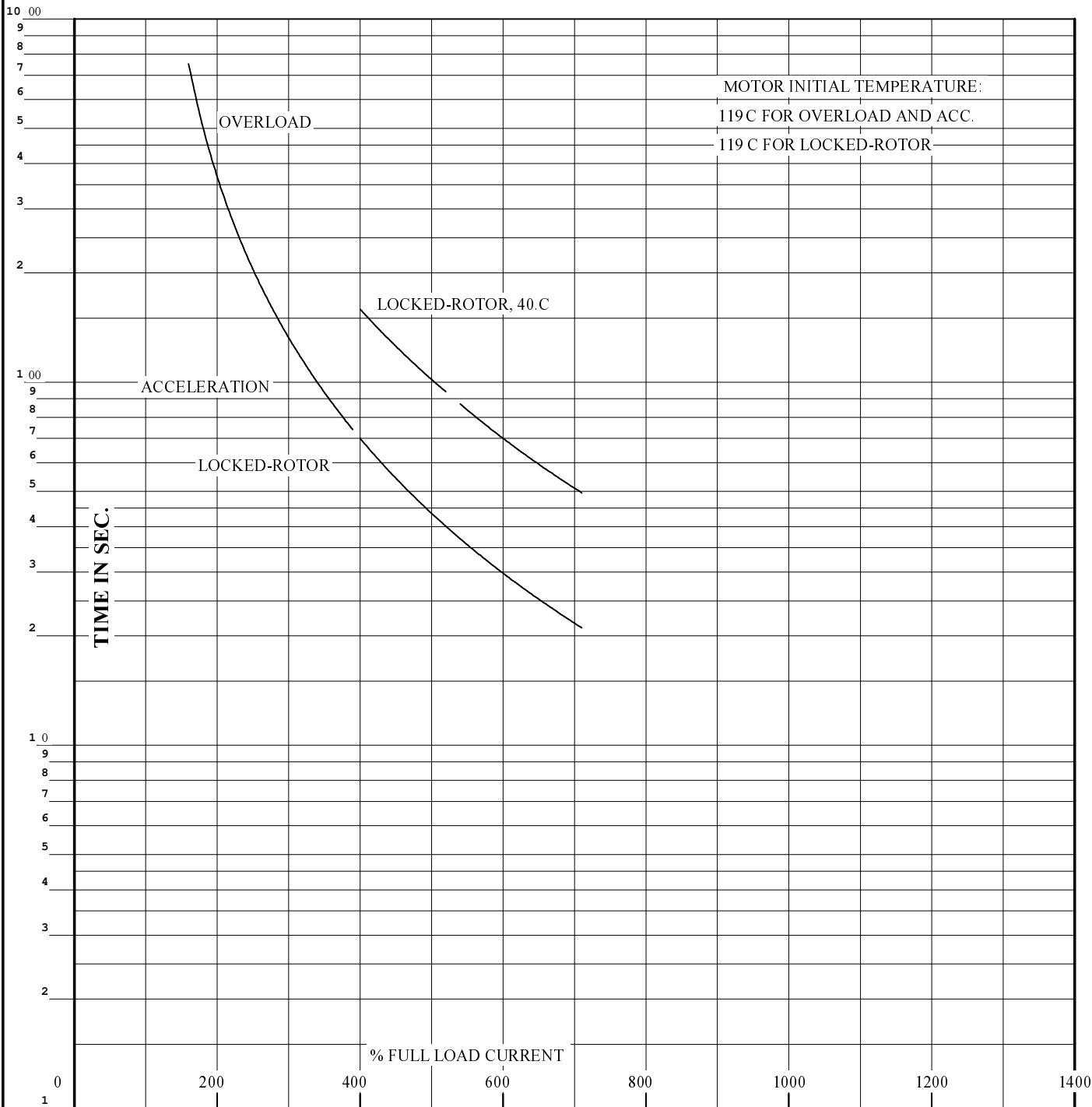
STATOR RES. @ 25 °C .0123/.0492

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 596956

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

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

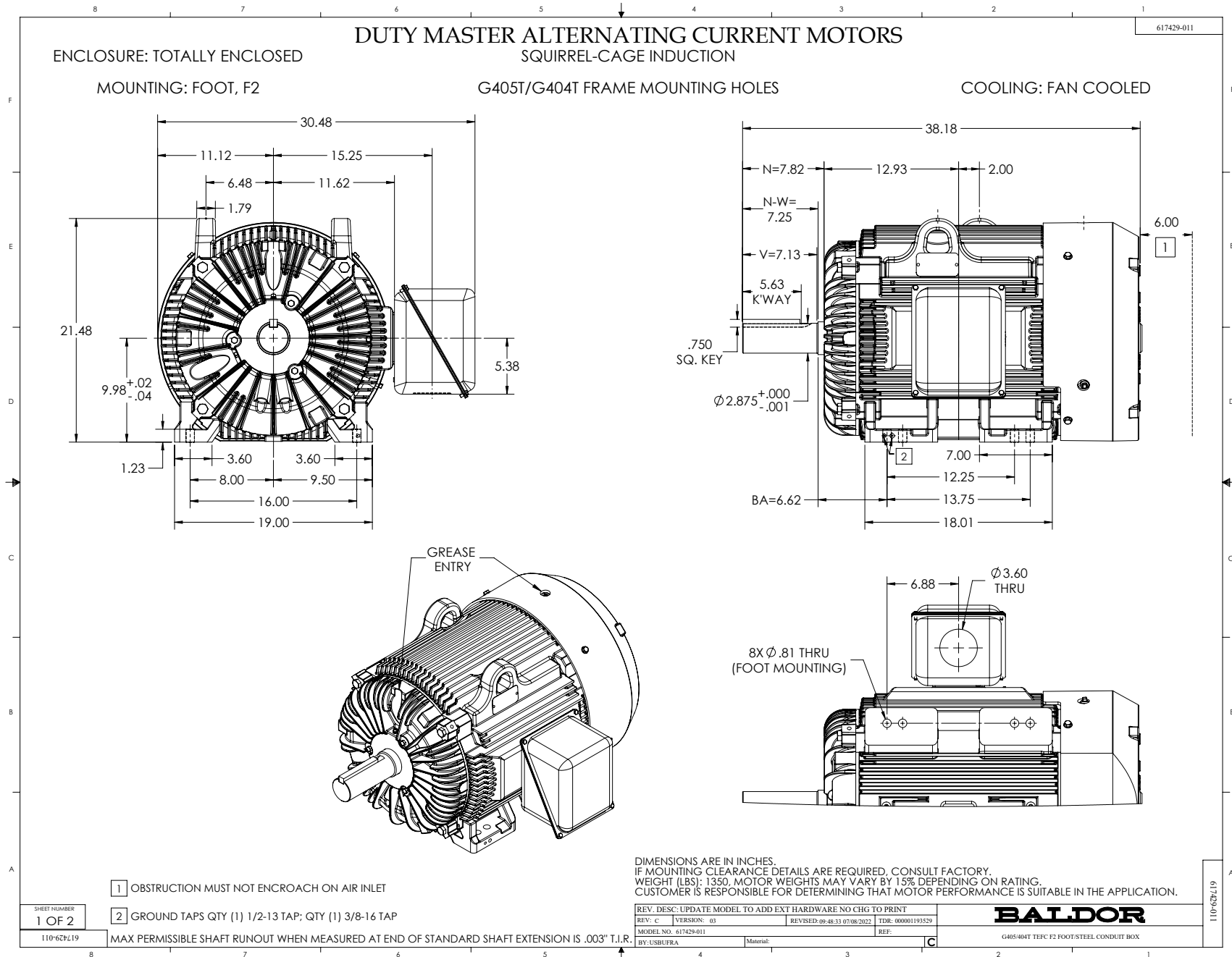
GUARANTEED MIN EFF. 95.0 PCT

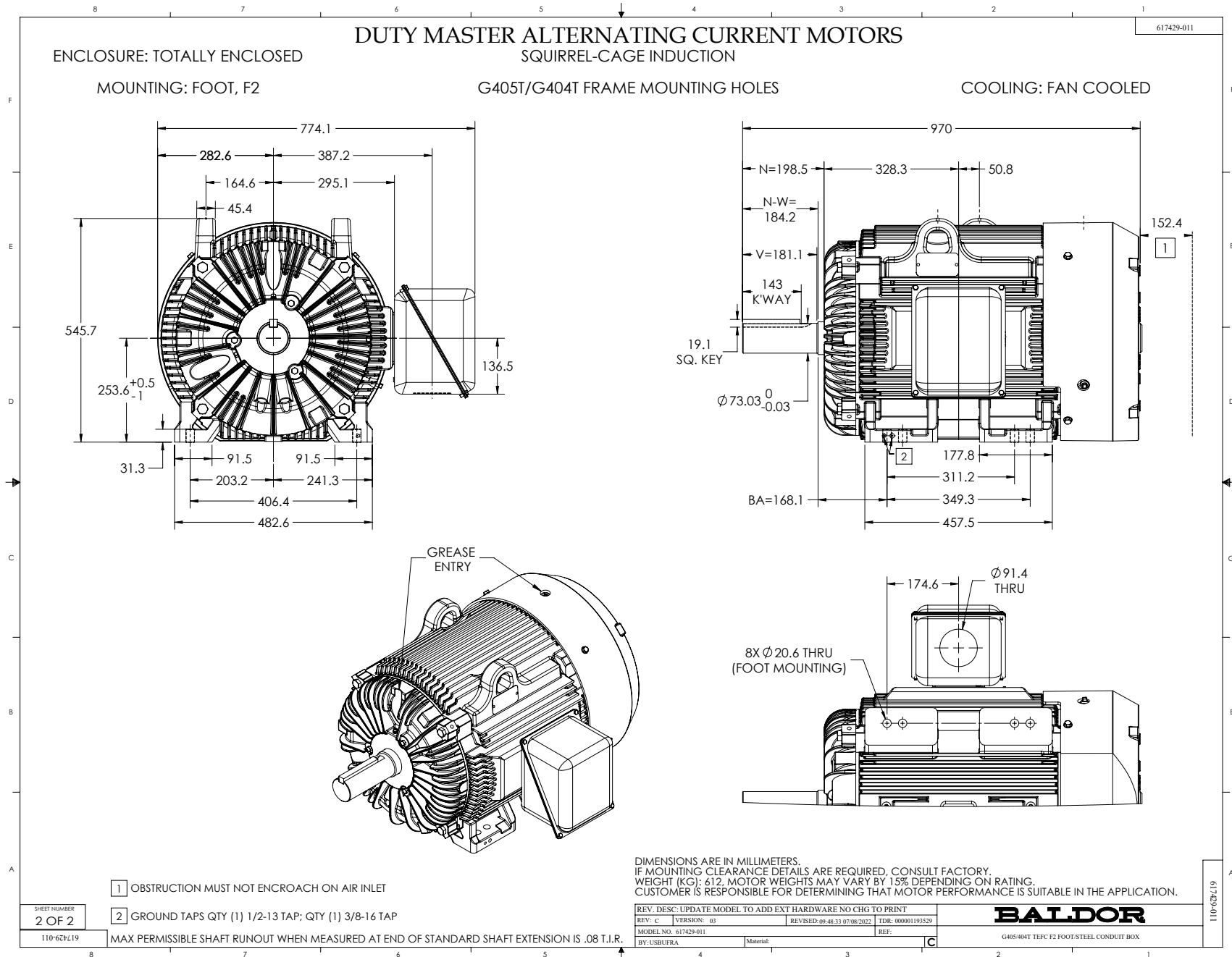
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR

DR. BY J.J. HARRISON
CK. BY W. L. SMITH
APP. BY W. L. SMITH
DATE 07/26/04

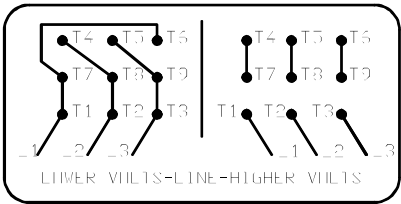
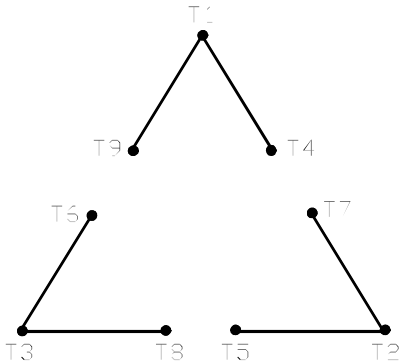
**A-C MOTOR
PERFORMANCE
CURVES** A40WG0251-R001
ISSUE DATE 12/15/10





416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: —	⊗ ◻	

BALDOR - RELIANCE®

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
SH 1 of 1

416820-002