

ABB BALDOR RELIANCE III

Customer information packet

EM4400T-5

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	575.0 V @ 60 HZ
Agency Approvals	CCSA US CCSAUSEEV CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	89.600 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	89.6 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	M
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0080
Layout	617429-001
Eff. date	09-04-2024
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	07-17-2013

Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.19 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.	P40G3926			CAT.NO.		EM4400T-5				FRAME	405T	
HP	100	VOLTS		575		PHASE	3	DESIGN	B	TYPE	P	
RPM	1785	AMPS	89.6		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						

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	100	P	3/60	1785	575
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
89.6	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C OHMS (BETWEEN LINES)		
496079	418142-33-RE	---	---	.0770		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	22.9	1800	5.48	0	
1/4	25.0	31.3	1796	64.3	93.0	
2/4	50.0	47.5	1792	82.6	95.4	
3/4	75.0	67.5	1788	86.9	95.7	
4/4	100	89.6	1783	87.6	95.4	
5/4	125	113	1778	87.4	94.9	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB. - FT.	AMPERES	
LOCKED ROTOR		0	151	445	580	
PULL UP		360	136	400	565	
BREAKDOWN		1721	250	735	306	
FULL LOAD		1783	100	295	89.6	
AMPERES SHOWN FOR 575. 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 P.B. GREENE		A-C MOTOR PERFORMANCE DATA A40WG0080-R003 ISSUE DATE 06/07/18 Page 5 of 10		
		CK. BY K.W. KANOUFF				
		APP. BY K.W. KANOUFF				
		DATE 12/02/94				

REL S.O.

 RPM **1785**

 S.F. **1.15**

 ROTOR **418142-33-RE**

 FRAME **405T**

 VOLTS **575**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **100**

 AMPS **89.6**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

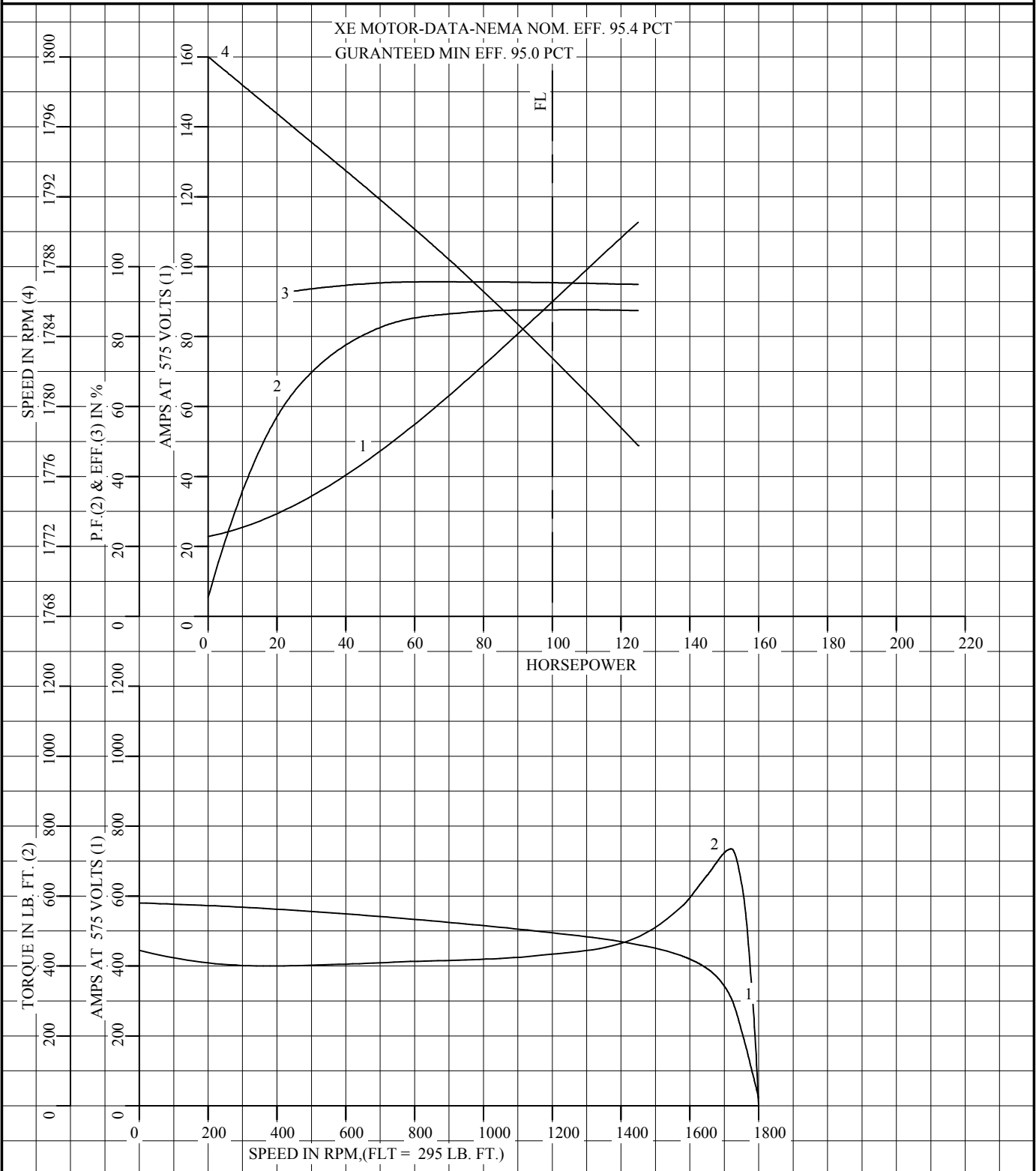
 STATOR RES. @ 25 °C **.0770**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **496079**

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 575 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
A MEMBER OF THE ABB GROUP

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DATE 12/02/94

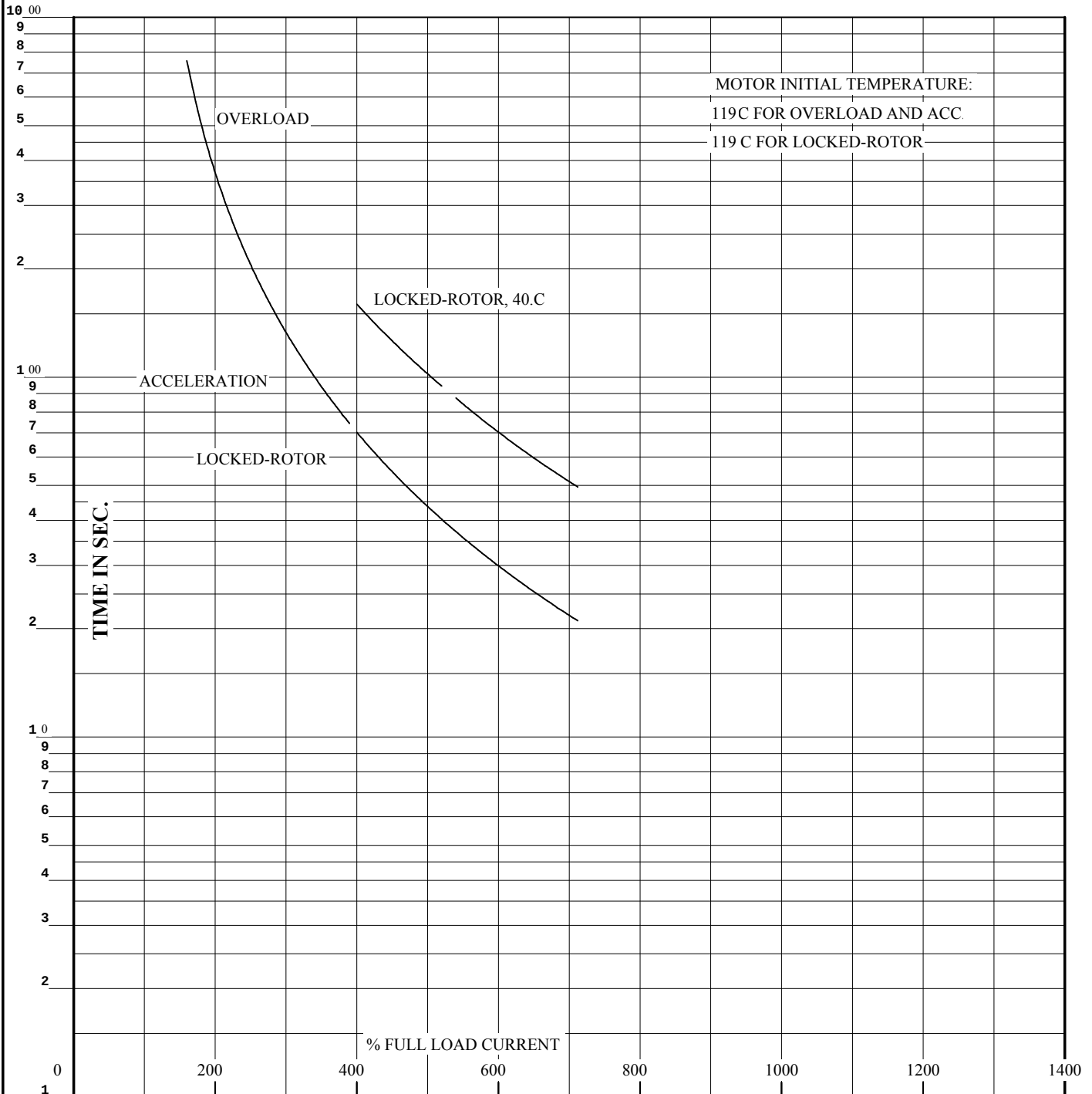
**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0080-R003
ISSUE DATE 06/07/18

REL. S.O.
 FRAME **405T**
 HP **100**
 TYPE **P**
 PHASE/HERTZ **3/60**

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 VOLTS **575**
 AMPS **89.6**
 DUTY **CONT**
 AMB °C/INSUL **40/F**

 S.F. **1.15**
 NEMA DESIGN **B**
 CODE LETTER **G**
 ENCLOSURE **TEFC**
 E/S **496079**

 ROTOR **418142-33-RE**
 TEST S.O. **TYPICAL DATA**
 TEST DATE **---**
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 OHMS (BETWEEN LINES)


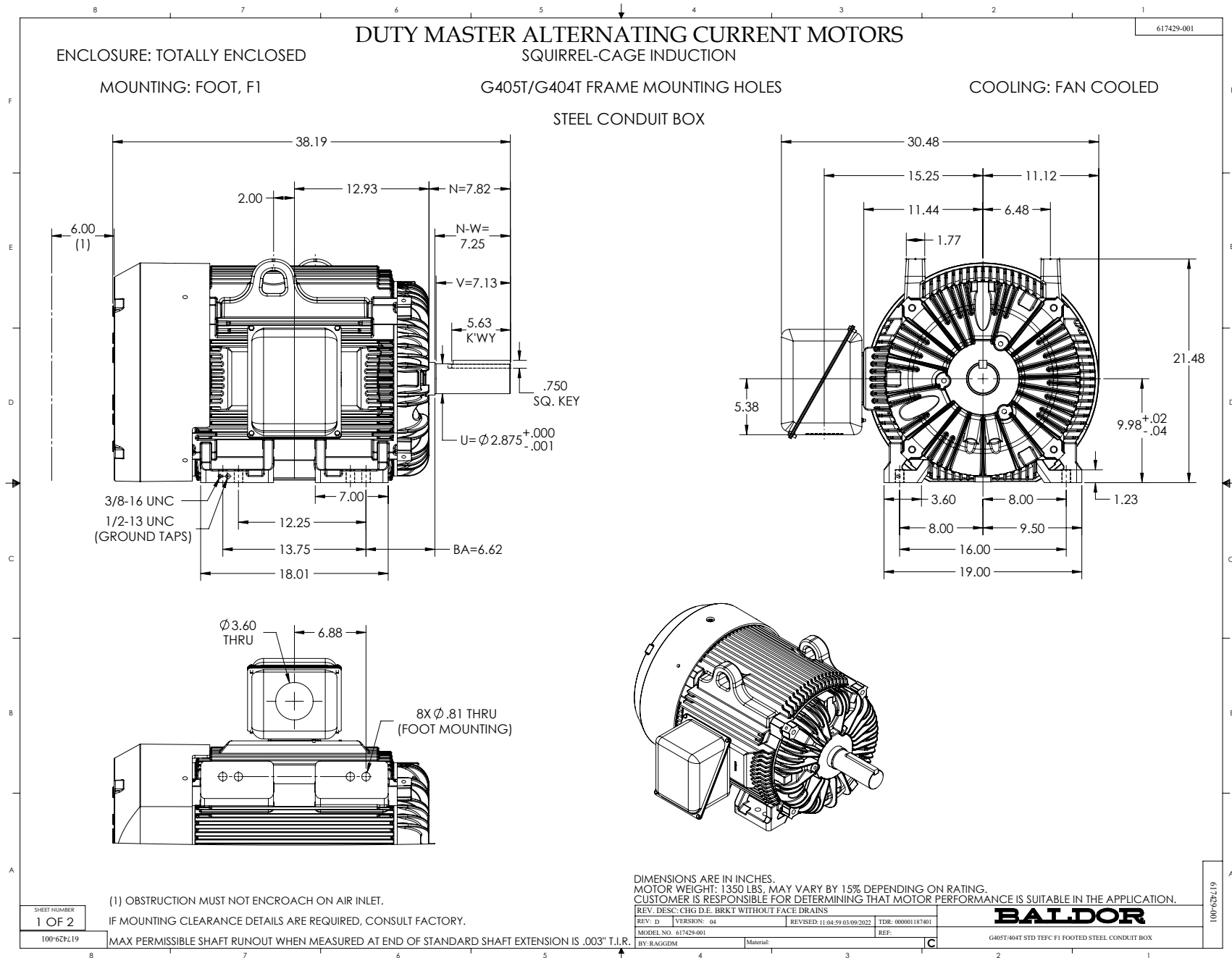
THERMAL LIMIT CURVE

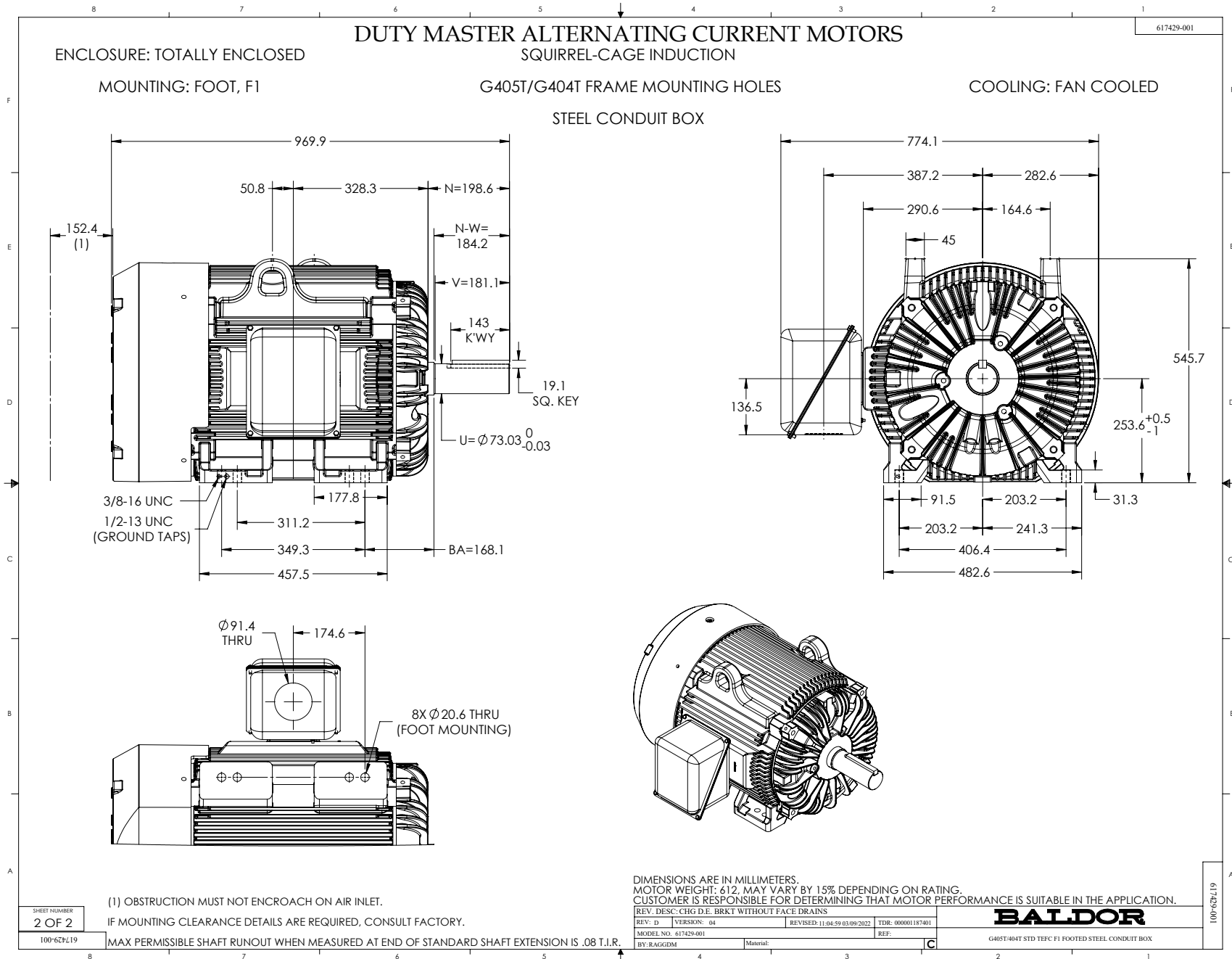
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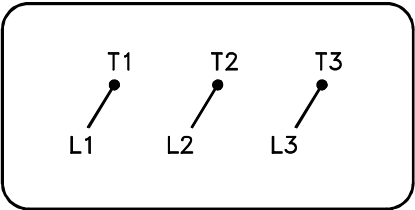
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**A-C MOTOR
PERFORMANCE
CURVES**
A40WG0080-R003
 ISSUE DATE 06/07/18 Page 7 of 10





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