

ABB BALDOR RELIANCE III

Customer information packet

CEM4400T

100HP, 1785RPM, 3PH, 60HZ, 405TC, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	405TC
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	112.000 A @ 460.0 V 224.000 A @ 230.0 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
IP Rating	NONE
KVA Code	G
Motor Lead Quantity/Wire Size	3 @ 2 AWG

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0692
Layout	617429-739
Eff. date	09-04-2024
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	03-27-2017

Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.19 IN
Power Factor	87
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
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

NP2496L	
MOBIL POLYREX EM	

NP2349L

SPEC NO.	A40-7234-0692			CAT.NO.	CEM4400T				FRAME	405TC		
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	

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 NEMA NOM. EFF. 95.4 PCT GUARANTEED MIN EFF. 94.5 PCT						
		DR. BY R.K. BRIDGES		A-C MOTOR PERFORMANCE DATA A40WG0692-R001 ISSUE DATE 01/04/18		
		CK. BY W. L. SMITH				
		APP. BY W. L. SMITH				
		DATE 05/14/14				
		Page 6 of 6				

REL S.O.

FRAME **405T**

HP **100**

TYPE **P**

PHASE/HERTZ **3/60**

RPM **1785**

VOLTS **230/460**

AMPS **224/112**

DUTY **CONT**

AMB °C/INSUL **40/F**

S.F. **1.15**

NEMA DESIGN **B**

CODE LETTER **G**

ENCLOSURE **TEFC**

E/S **596956**

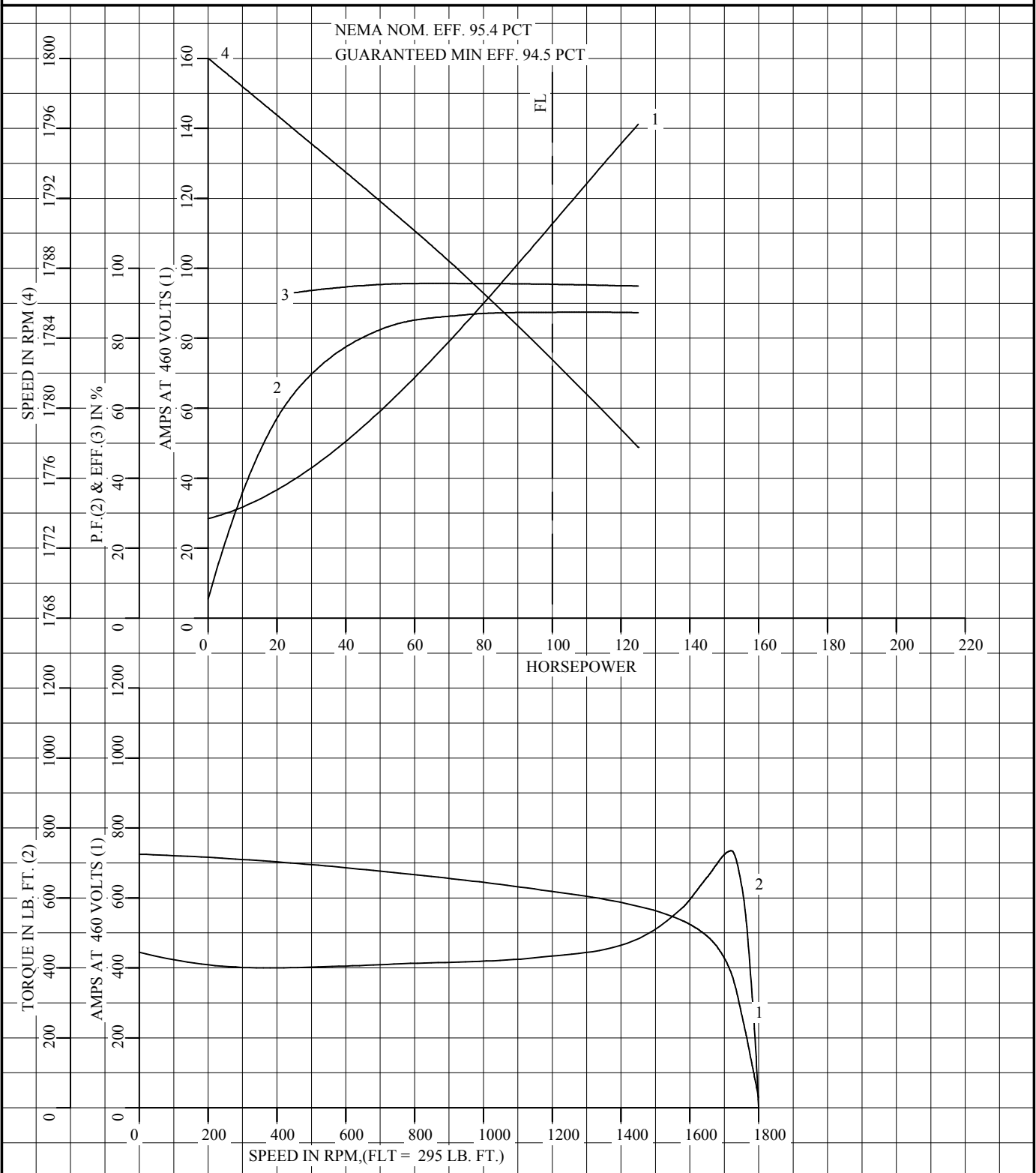
ROTOR **418142-33-RE**

TEST S.O. **TYPICAL DATA**

TEST DATE **---**

STATOR RES. @ 25 °C **.0123/.0492**

OHMS (BETWEEN LINES)



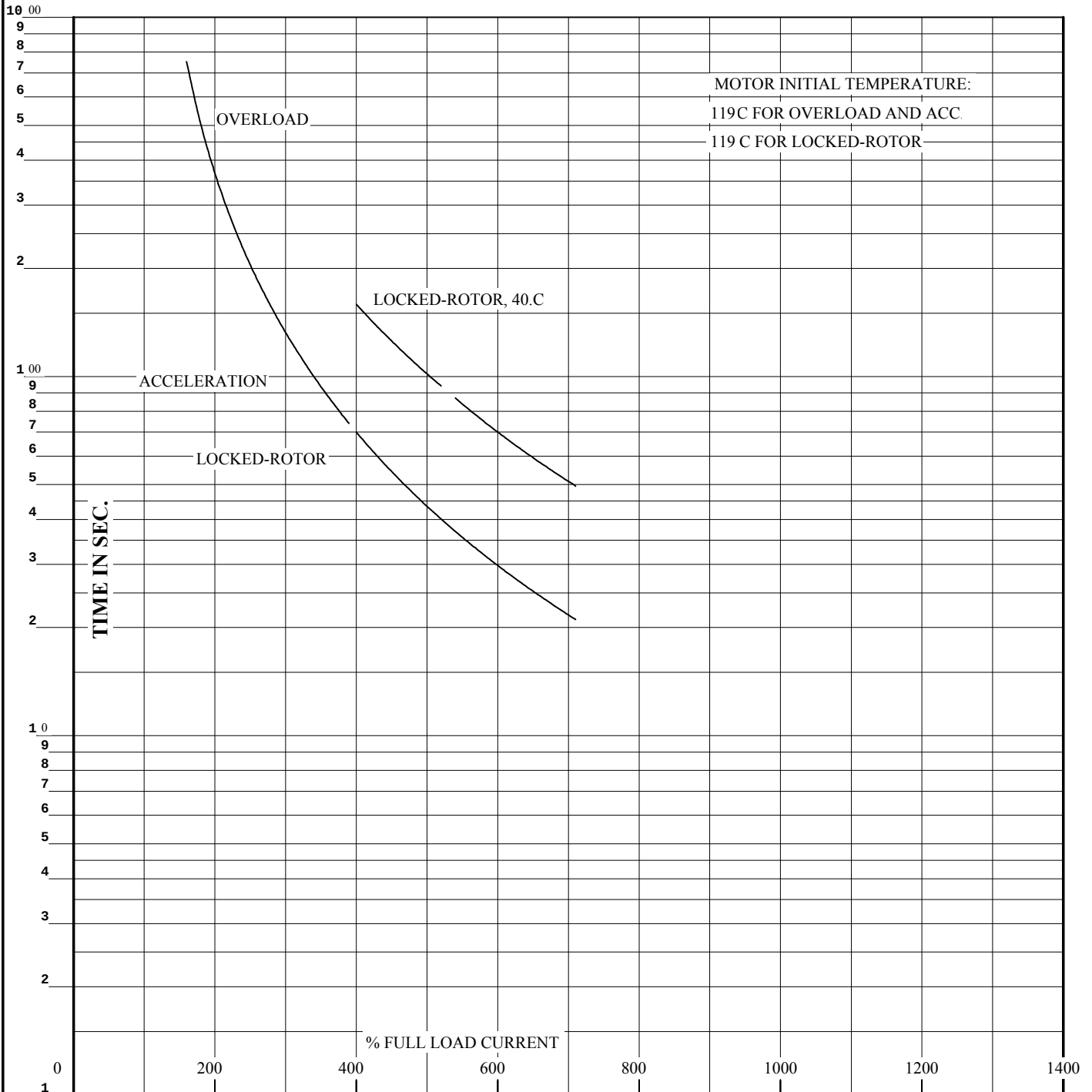
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BALDOR
A MEMBER OF THE ABB GROUP

DR. BY R.K. BRIDGES
 CK. BY W.L. SMITH
 APP. BY W.L. SMITH
 DATE 05/14/14

**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0692-R001
 ISSUE DATE 01/04/18

REL. S.O.
FRAME 405T
HP 100
TYPE P
PHASE/HERTZ 3/60
RPM 1785
VOLTS 230/460
AMPS 224/112
DUTY CONT
AMB °C/INSUL 40/F
S.F. 1.15
NEMA DESIGN B
CODE LETTER G
ENCLOSURE TEFC
E/S 596956
ROTOR 418142-33-RE
TEST S.O. TYPICAL DATA
TEST DATE - - -
STATOR RES. @ 25 °C .0123/.0492
OHMS (BETWEEN LINES)


THERMAL LIMIT CURVE

REMARKS:

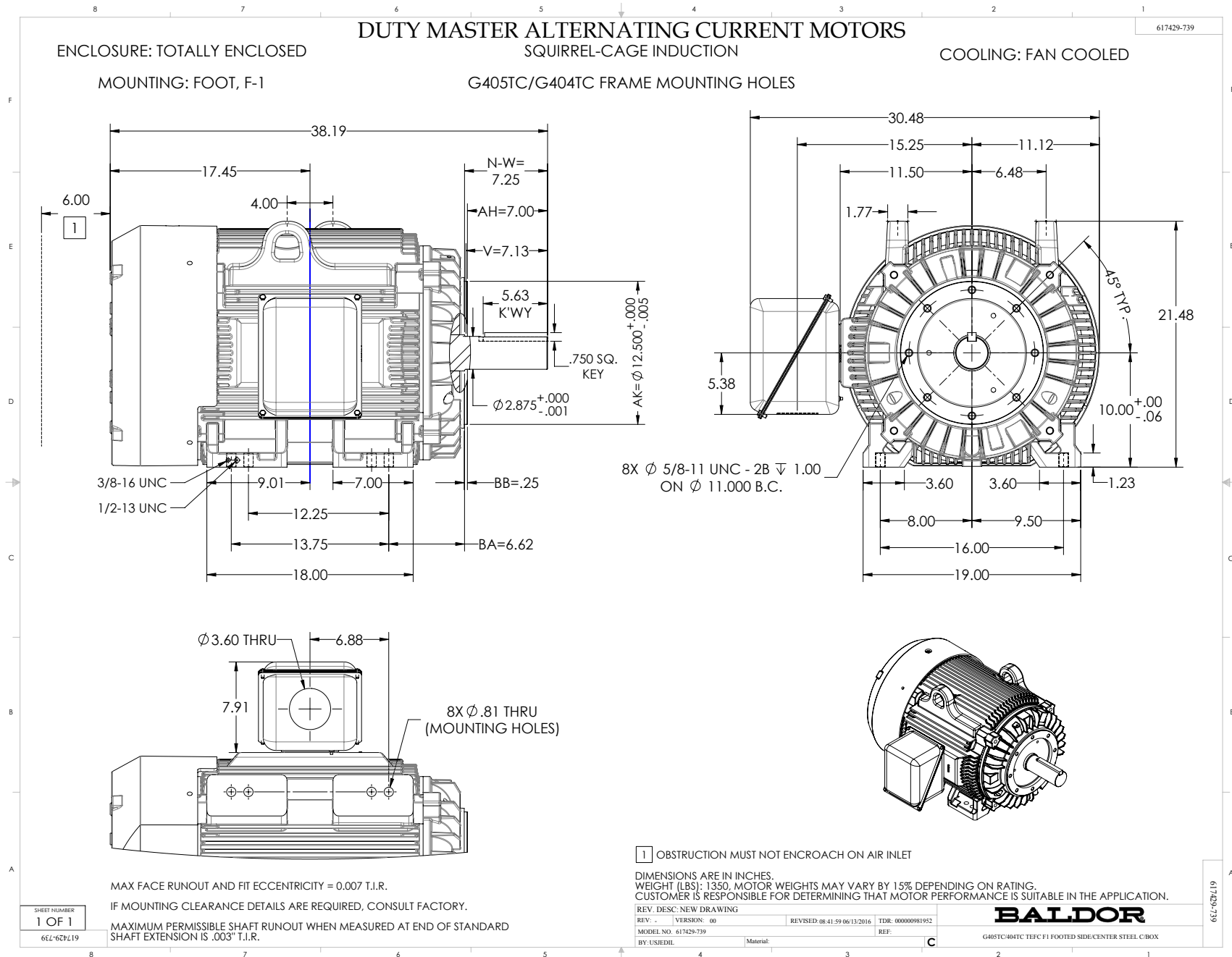
NEMA NOM. EFF. 95.4 PCT

GUARANTEED MIN EFF. 94.5 PCT

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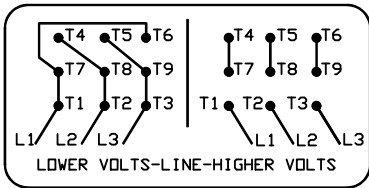
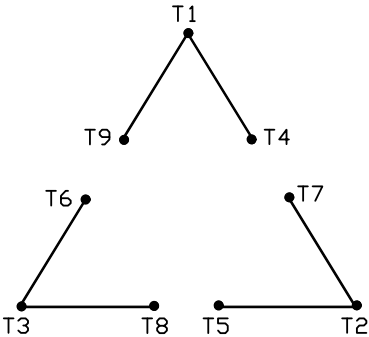

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**A-C MOTOR
PERFORMANCE
CURVES**
A40WG0692-R001
ISSUE DATE 01/04/18 Page 8 of 10



416820-002

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



(N. P. 1575-B)

416820-002

REV. DESC: ADJUST TEXT DARKNESS		
REV. LTR: B	VERSION: 02	TDR: 000001285318
FILE: \RAG\00022\453	REVISED: 09:36:26 09/24/2026	BY: USJOSUL
MTL: -		



CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED
SH1 of 1