

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

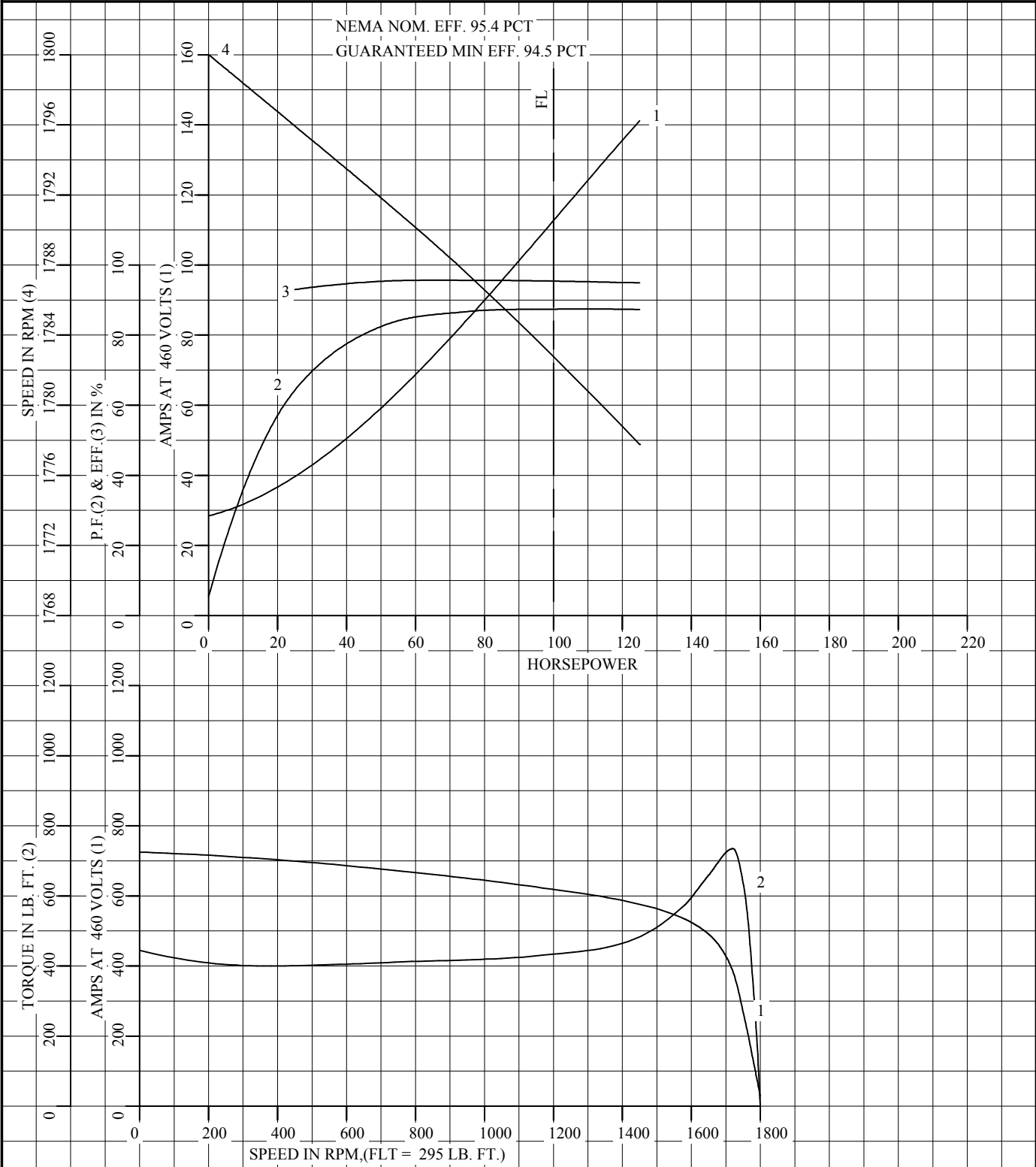
REMARKS: TYPICAL DATA
NEMA NOM. EFF. 95.4 PCT
GUARANTEED MIN EFF. 94.5 PCT



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

**A-C MOTOR
PERFORMANCE A40WG0692-R001
DATA** ISSUE DATE 01/04/18

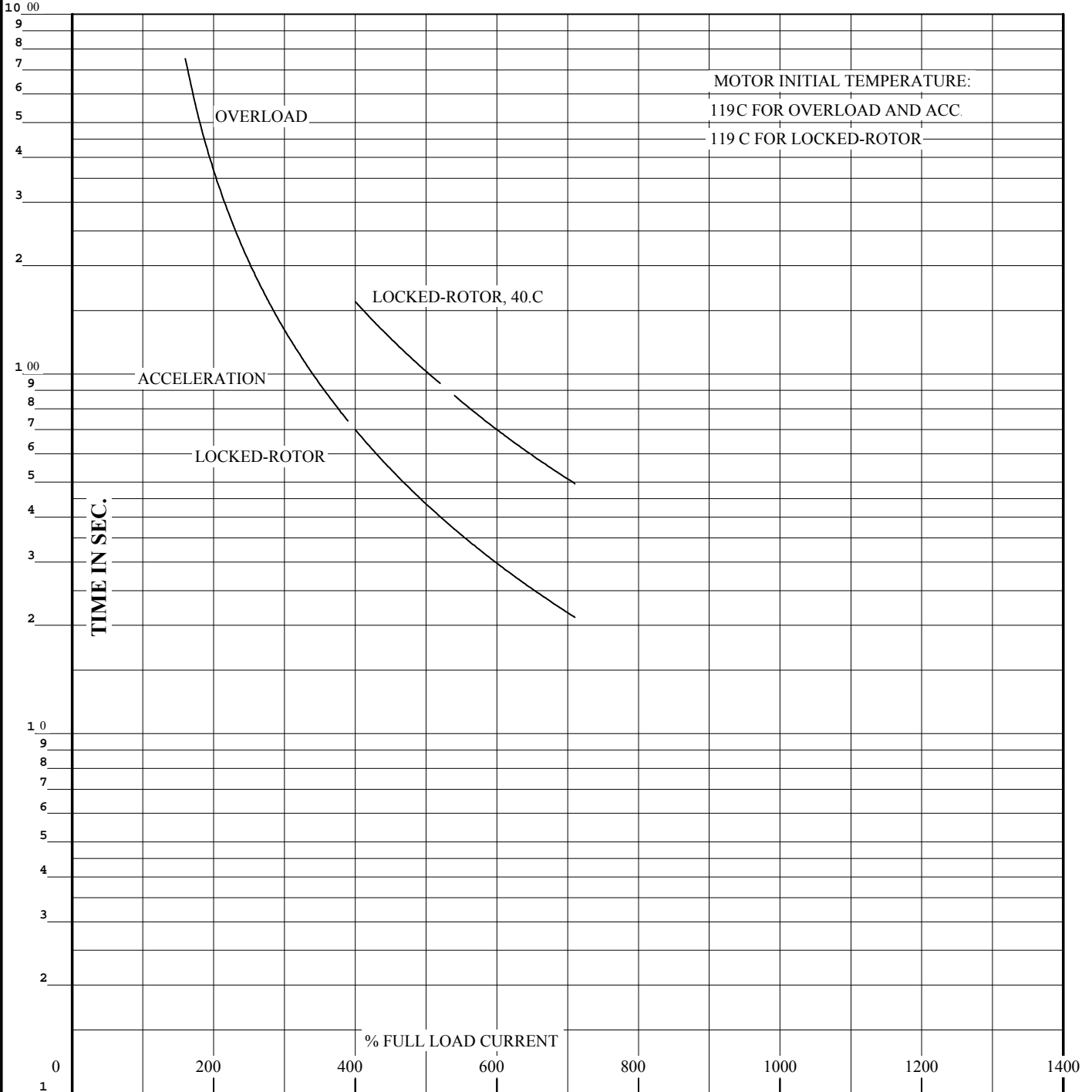
REL S.O.	RPM 1785	S.F. 1.15	ROTOR 418142-33-RE
FRAME 405T	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 100	AMPS 224/112	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0123/.0492
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 596956	OHMS (BETWEEN LINES)



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**A-C MOTOR
 PERFORMANCE CURVES**
 A40WG0692-R001
 ISSUE DATE 01/04/18

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

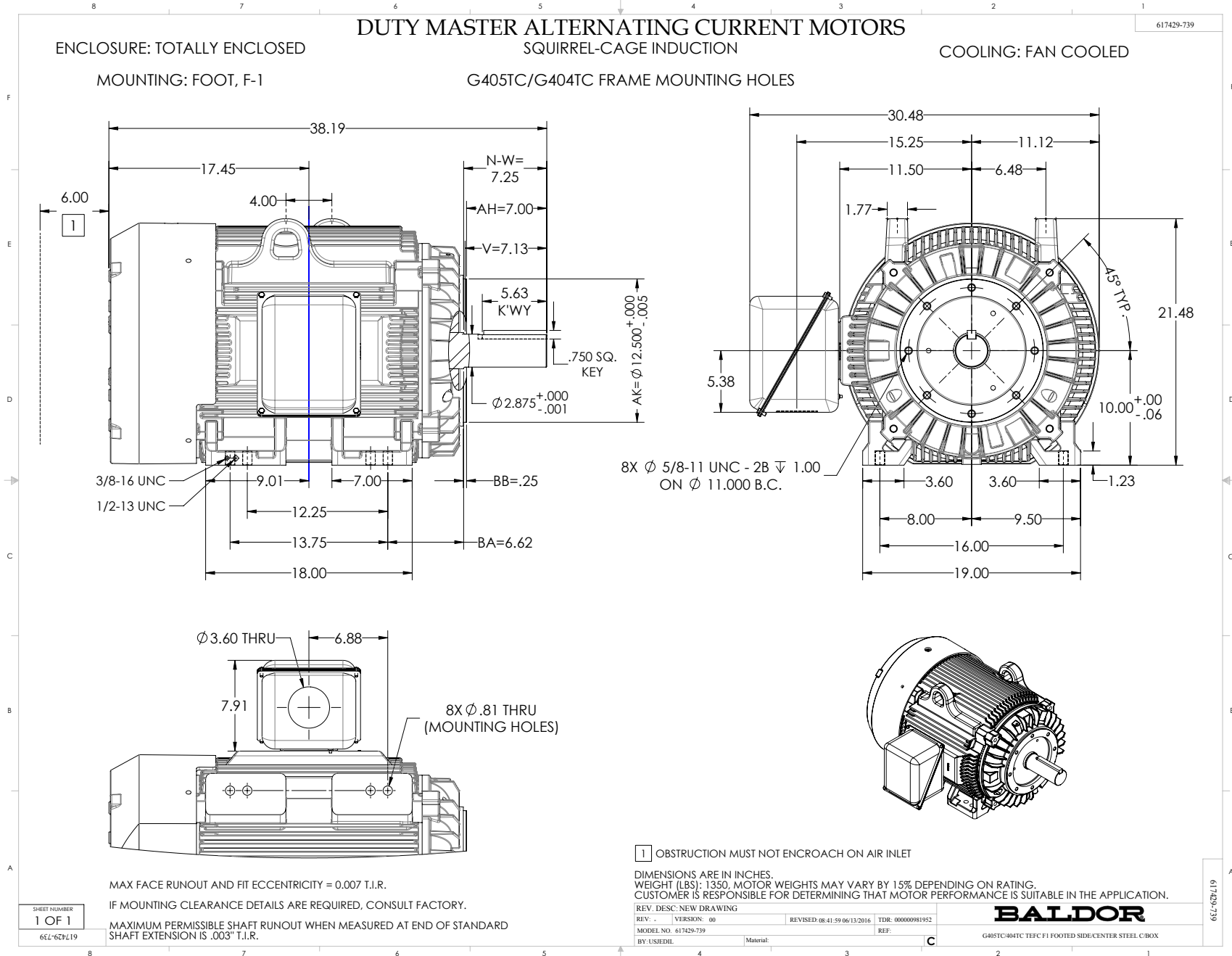
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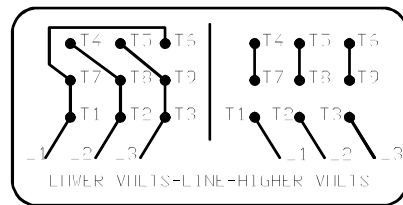
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**A-C MOTOR
PERFORMANCE CURVES** A40WG0692-R001
ISSUE DATE 01/04/18 Page 8 of 10



416820-002

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



(N.P. 1575-B)

416820-002

REV. DESC: 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

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