

ABB BALDOR RELIANCE III

Customer information packet

CEM4400T-5

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	575.0 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)
Current @ Voltage	89.600 A @ 575.0 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	89.6 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	NEMA
Motor Type	A40064M

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0665
Layout	611740-003-SH1
Eff. date	09-04-2024
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	08-08-2014

Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.31 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.	A40-6213-0665	CAT.NO.	CEM4400T-5	FRAME	405TC
HP	100	VOLTS	575	PHASE	3
RPM	1785	AMPS	89.6	DESIGN	B
DRIVE END BEARING	80BC03J30X	DUTY	CONT	TYPE	P
OPP D.E. BEARING	80BC03J30X	ENCL	TEFC	INSUL.CLASS	F
SER.NO.		CODE	G	AMB	40
		POWER FACTOR	87	SF	1.15
				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	5.49	0
1/4	25.0	31.3	1796	64.3	93.0
2/4	50.0	47.6	1792	82.5	95.4
3/4	75.0	67.7	1788	86.7	95.7
4/4	100	89.8	1783	87.4	95.4
5/4	125	113	1778	87.3	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	89.8

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

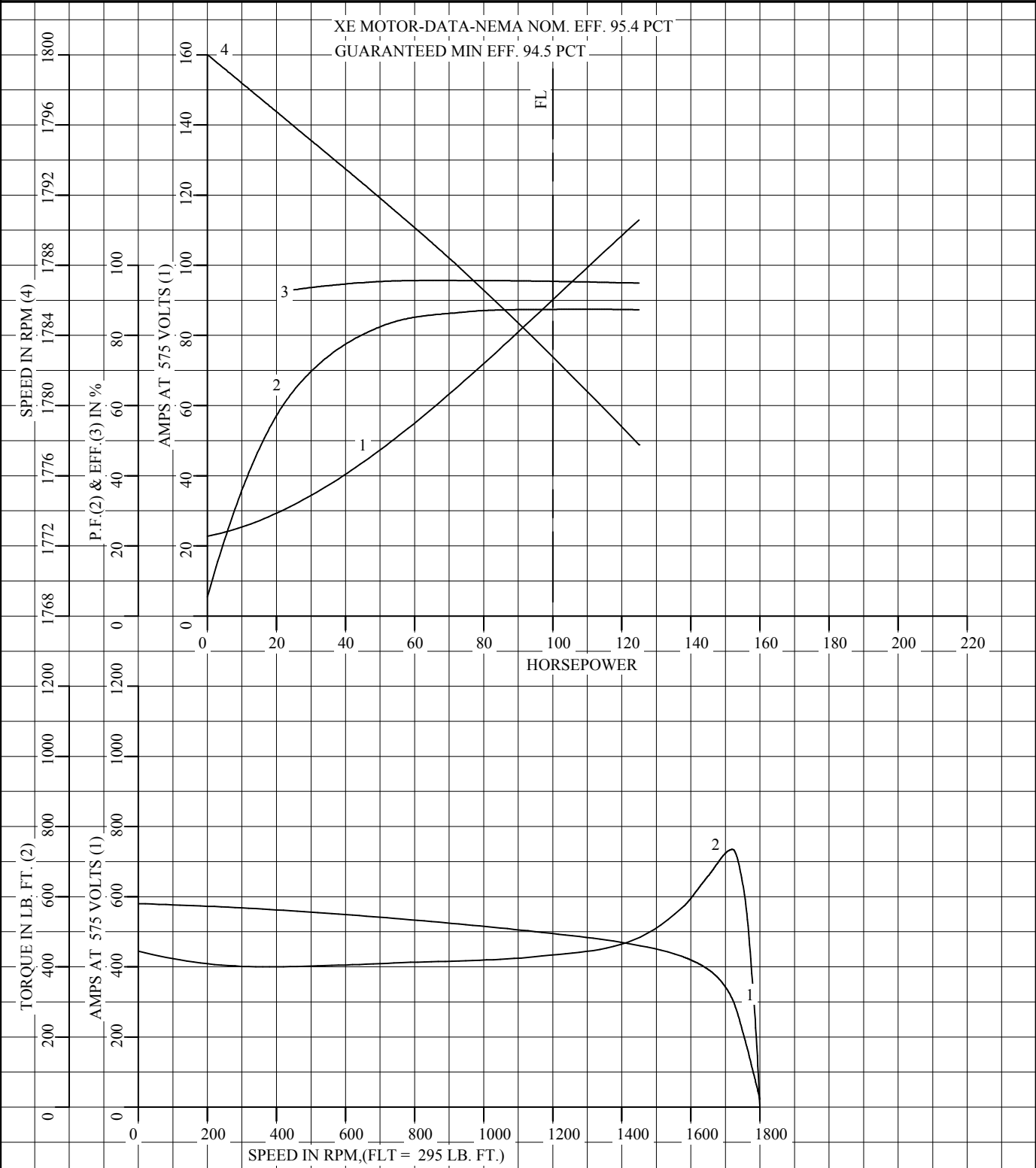
REMARKS: TYPICAL DATA
XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT
GUARANTEED MIN EFF. 94.5 PCT



DR. BY J. P. TSAO
CK. BY W. L. SMITH
APP. BY W. L. SMITH
DATE 08/07/08

**A-C MOTOR
PERFORMANCE A40WG0665-R004
DATA** ISSUE DATE 06/21/19

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)



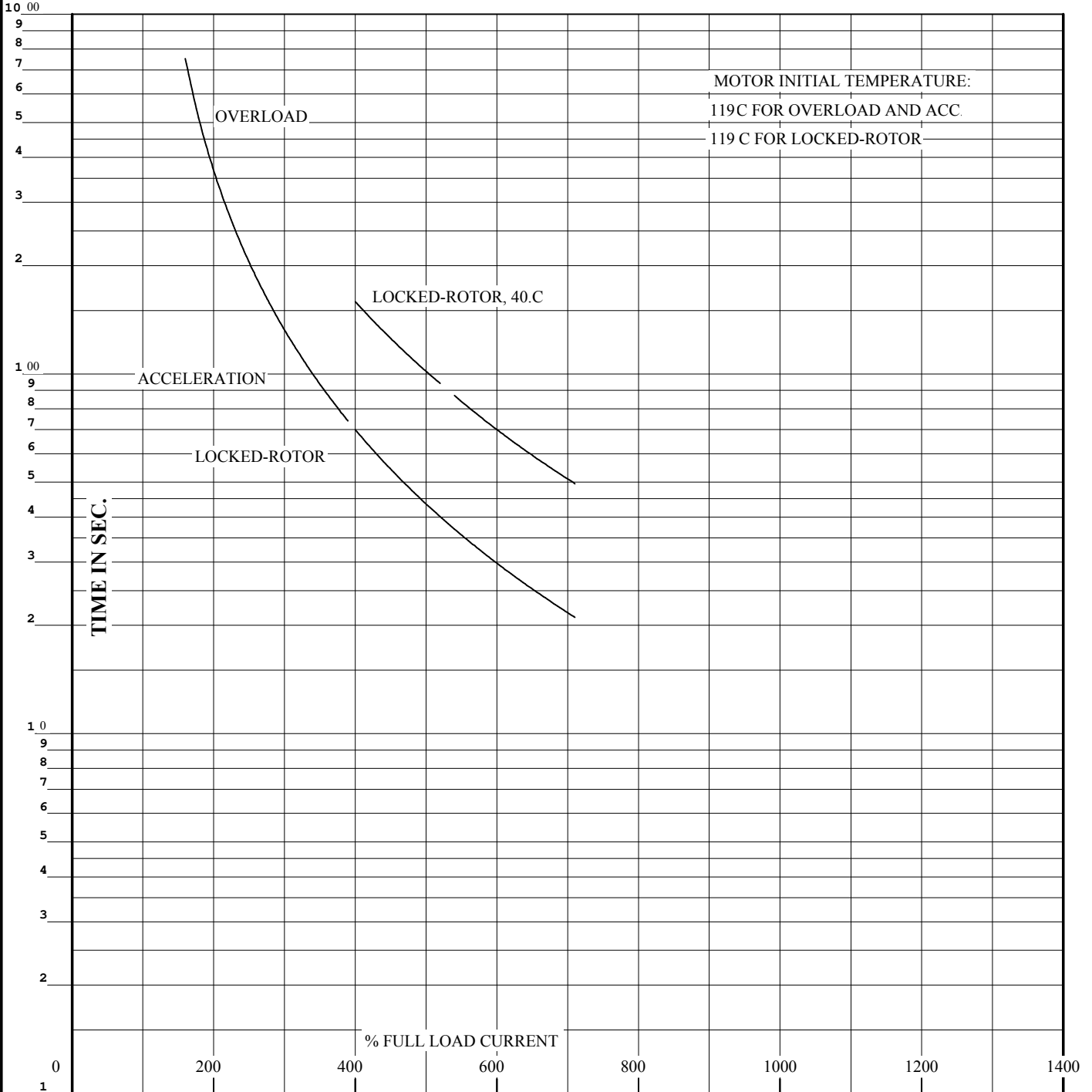
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PERFORMANCE
CURVES** **A40WG0665-R004**
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FRAME 405T	VOLTS 575	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 100	AMPS 89.6	CODE LETTER G	TEST DATE ---
TYPE P	DUTY CONT	ENCLOSURE TEFC	STATOR RES. @ 25 °C .0770
PHASE/HERTZ 3/60	AMB °C/INSUL 40/F	E/S 496079	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT
GUARANTEED MIN EFF. 94.5 PCT

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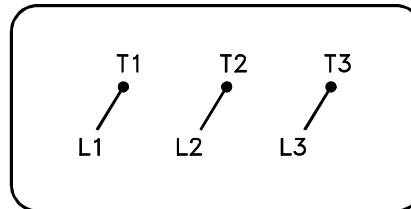


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**A-C MOTOR
PERFORMANCE
CURVES** **A40WG0665-R004**
ISSUE DATE 06/21/19 Page 8 of 10

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