

ABB BALDOR RELIANCE III

Customer information packet

CXT31004T-5

100HP, 1780RPM, 3PH, 60HZ, 405TC, A40072M, TEF

Class -

Division - Division II

Specifications

Enclosure	TEFC
Frame	405TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Division	Division II
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	NEMA PREMIUM NEMA_PREMIUM UR CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	90.700 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	90.7 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	G
Max Speed	3600 rpm
Motor Lead Quantity/Wire Size	3 @ 2 AWG

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG3405
Layout	617429-739
Eff. date	07-08-2024
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	07-15-2021

Motor Standards	NEMA
Motor Type	A40072M
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	Shaft Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4152LUA																		
CAT #		CXT31004T-5				SER					CC		010A					
SPEC		A40-0001-3405				RATING		40C AMB-CONT										
HZ		VOLTS		AMPS		RPM		HP	CODE		SF	DES	PF	NEMA NOM. EFF				
60		575		90.7		1780		100	G		1.15	B	87	%	95.4	%		
														%		%		
PH	3	CL	F	MAX RPM		3600	MAX CORR KVAR			18								
BRG		DE	6316		ODE	6316		ENCL	TEFC	FR	405TC		IP	54				
GREASE		POLYREX EM								MTR WT				LBS				
CL I DIV 2 GRPS A,B,C,D				CL I ZONE 2 GRPS				IIA,IIB,IIC				TEMP T		215	C			
INV READY		CT	6:1		HZ	10-60		VT	1000:1		HZ	0-60		CHP	1:1.5		HZ	60-90
INV TEMP CL		T2D	C	USABLE AT		N/A												
SFA 104																		

ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET CXT31004T-5 - 100HP, 1780RPM, 3PH, 60HZ, 405TC, A40072M, TEF						
S/O		FRAME		HP		TYPE		PHASE/ HERTZ		RPM		VOLTS	
		405TSC		100		P		3/60		1780		575	
AMPS		DUTY		AMB °C/ INSUL		S.F.		NEMA DESIGN		CODE LETTER		ENCLOSURE	
90.7		CONT		40/F		1.15		B		G		TEFC	
E/S		ROTOR		TEST S.O.		TEST DATE		STATOR RES. @25 °C OHMS (BETWEEN LINES)					
---		418142037CE		---		---		.0789					
PERFORMANCE													
LOAD		HP		AMPERES		RPM		% POWER FACTOR			% EFFICIENCY		
NO LOAD		0		26.2		1800		4.28			0		
1/4		25.0		34.0		1796		58.8			93.6		
2/4		50.0		49.6		1791		78.9			95.6		
3/4		75.0		69.2		1786		84.8			95.8		
4/4		100		90.7		1781		86.6			95.4		
5/4		125		113		1776		87.3			94.8		
SPEED TORQUE													
				RPM		TORQUE % FULL LOAD		TORQUE LB.-FT.			AMPERES		
LOCKED ROTOR				0		160		471			563		
PULL UP				360		139		409			535		
BREAKDOWN				1715		236		696			295		
FULL LOAD				1781		100		295			90.7		
AMPERES SHOWN FOR 575 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.													
TYPICAL DATA													
				DRAWN BY: <u>W. L. SMITH</u> CHECKED BY: <u>C.E.JAMISON</u> APPROVED BY: <u>E.J.CHRISTIAN</u> DATE: <u>06/07/18</u>				AC MOTOR PERFORMANCE DATA		A40WG3405-R001 DATE ISSUED 08/24/23			

FRAME 405TSC

RPM 1780

S.F. 1.15

ROTOR 418142037CE

HP 100

VOLTS 575

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 90.7

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

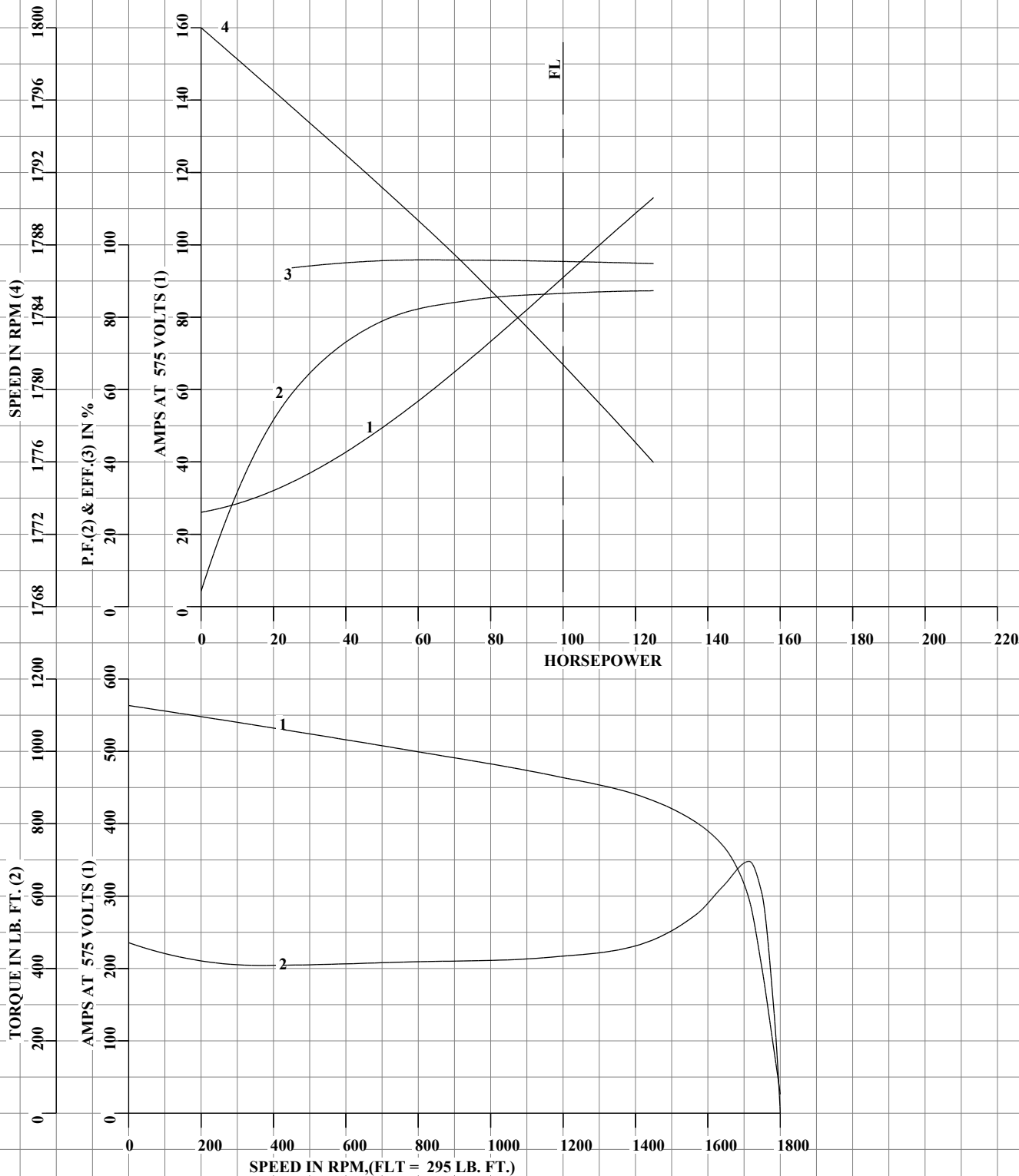
ENCLOSURE TEFC

STATOR RES. @ 25°C .0789

AMB °C / INSUL 40/F

E/S ---

OHMS (BETWEEN LINES)



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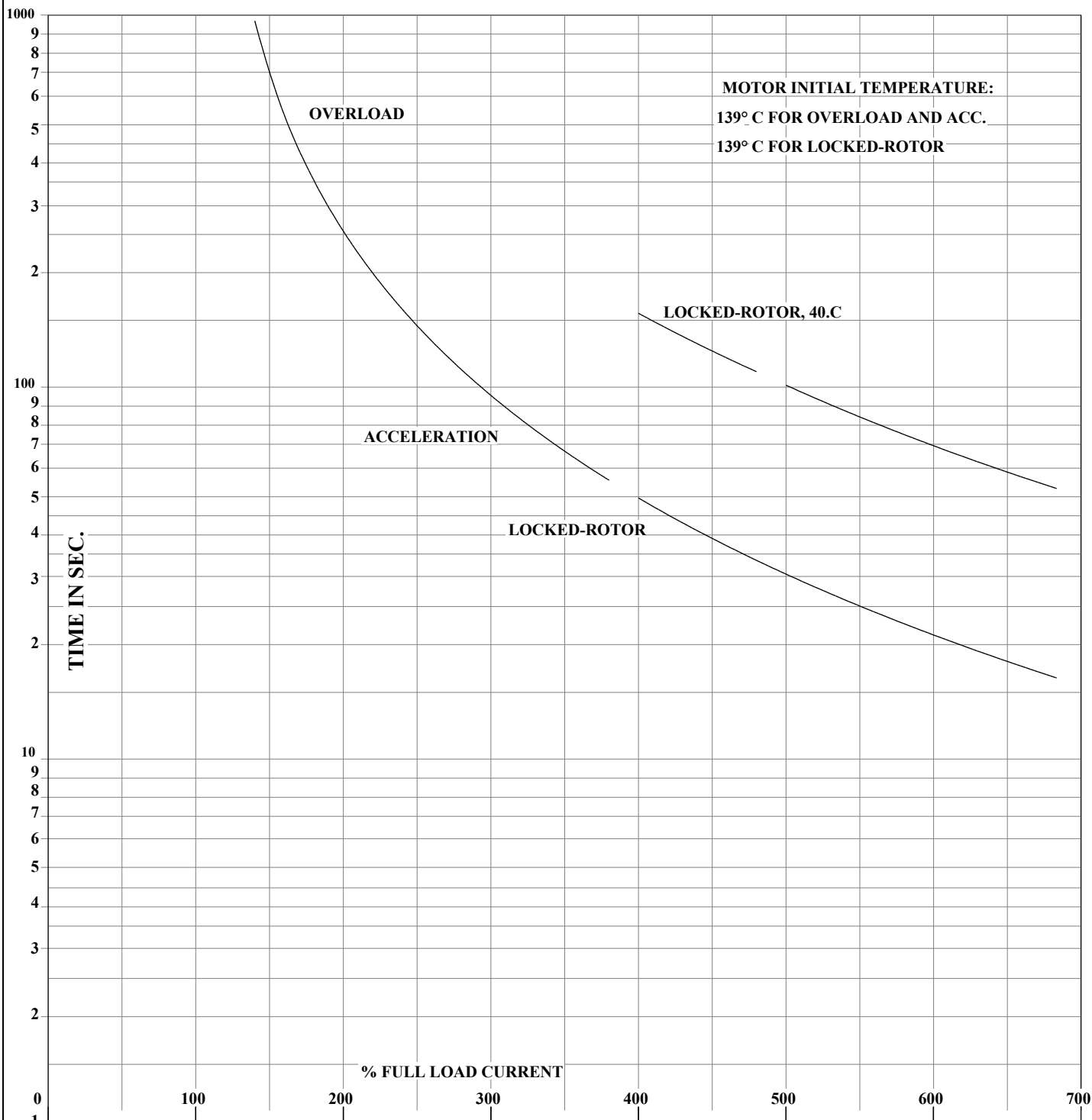
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E/S ---

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

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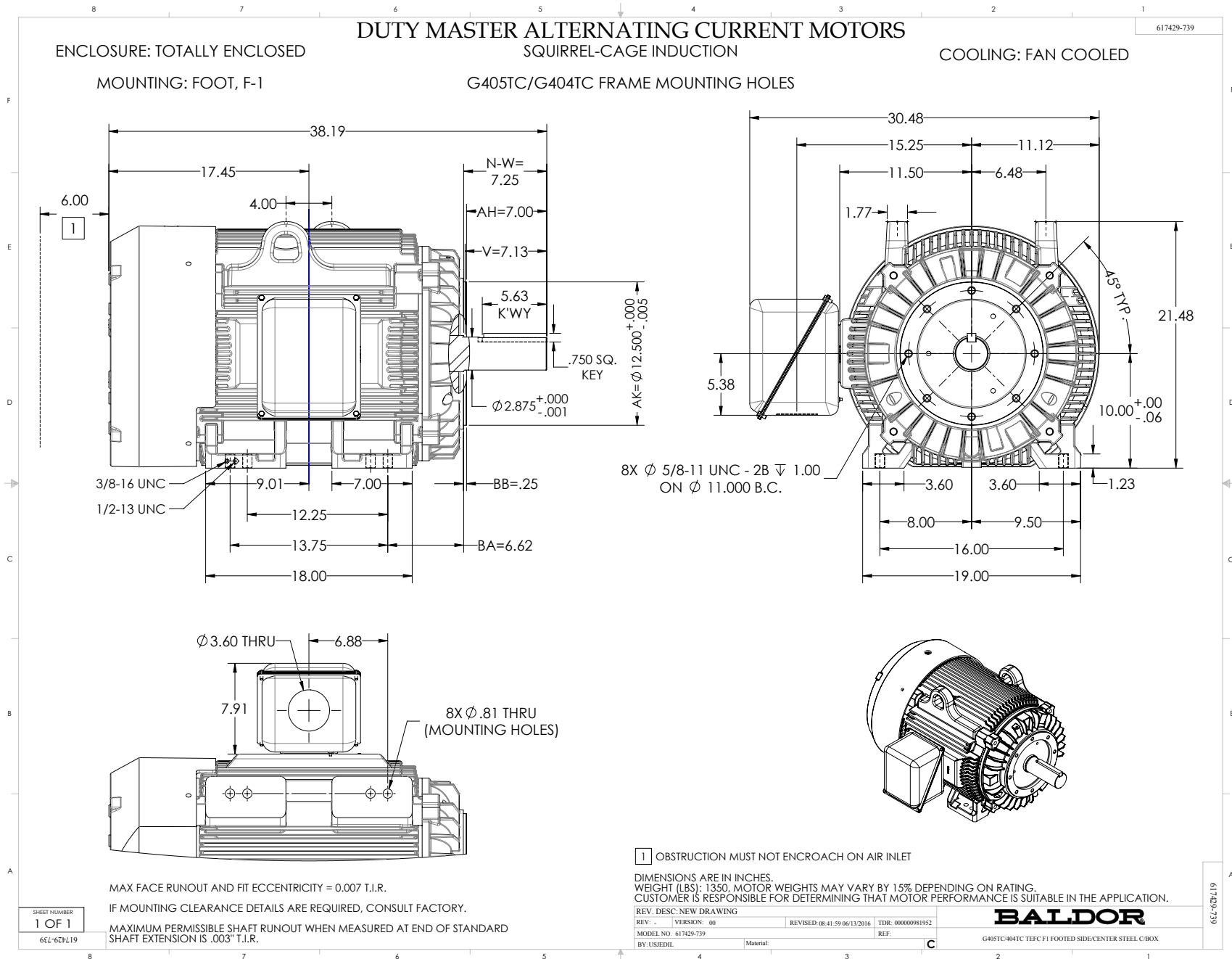


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AC MOTOR
PERFORMANCE
DATA

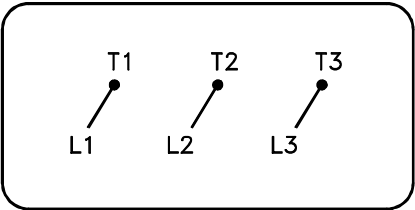
A40WG3405-R001

ISSUE DATE 08/24/23



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