

ABB BALDOR RELIANCE III

Customer information packet

ECP84402T-4

100HP, 3565RPM, 3PH, 60HZ, 405TS, A40066M, TEF

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	405TS
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	C UR US CCSA US CCSAUSEEV CURUS
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	10-60
Current @ Voltage	110.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	110.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG1242
Layout	617429-791
Eff. date	06-19-2025
CD Diagram	416820-036
Poles	02
Leads	3#2
Proprietary	False
Created date	05-14-2025

Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	None
Motor Type	A40066M
Mounting Arrangement	F1
No Load Current	26.3 a
Number of Poles	2
Overall Length	35.19 IN
Power Factor	90
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3565 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4566														
CAT NO	ECP84402T-4			SPEC NO.		A40-0005-1242								
HP	100	AMPS	110		VOLTS		460		DESIGN		B			
FRAME SIZE	405TS	RPM	3565		HZ		60	AMB	40	SF	1.15			
D.E. BRG.DATA	6313		O.D.E. BRG.DATA			6313		PH	3	DUTY	CONT		INSUL.CLASS	P
D.E. BRG.	65BC03J30X			TYPE	ENCL	TEFC	CODE	G						
O.D.E. BRG.	65BC03J30X			POWER FACTOR			90		NEMA-NOM-EFFICIENCY			94.1		
3/4 LOAD EFF.	94.7	IP	56	MAX CORR KVAR			12		GUARANTEED EFFICIENCY			93		
TEMP CODE	T3	TEMP =	200											
CHP HZ	60-70	CT HZ	10-60	VT HZ		0-60								
INVERTER-TEMP-CODE	T3													
SER.NO.				MOTOR WEIGHT										

000613007EX				
CAT NO	ECP84402T-4	SPEC NO.	A40-0005-1242	
NO. ROTOR BARS	38	GREASE TYPE	POLYREX EM	
NO. SLOTS	48	NL AMPS AT RATED VOLTAGE		26.3
5 YEAR WARRANTY		WINDING RES @25 C	.0511	OHMS
MFG. DATE		SER.NO		

ECP84402T-4 - 100HP, 3565RPM, 3PH, 60HZ, 405TS, A40066M, TEF						
ABB BALDOR RELIANCE III S/O	CUSTOMER INFORMATION PACKET FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405TS	100	P	3/60	3565	460
AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
110	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
---	418142005XE	---	---	.0511		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR		% EFFICIENCY
NO LOAD	0	26.3	3600	8.33		0
1/4	25.0	37.4	3591	69.0		90.8
2/4	50.0	58.1	3583	85.7		94.0
3/4	75.0	83.0	3574	89.3		94.7
4/4	99.9	110	3565	90.1		94.6
5/4	125	137	3555	90.6		94.2
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.		AMPERES
LOCKED ROTOR		0	213	314		725
PULL UP		2385	181	267		650
BREAKDOWN		3396	272	401		416
FULL LOAD		3565	100	147		110
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.						
TYPICAL DATA NEMA NOM. EFF. 94.1%						
		DRAWN BY: <u>C.E. JAMISON</u> CHECKED BY: <u>W. L. SMITH</u> APPROVED BY: <u>E.J.CHRISTIAN</u> DATE: <u>07/24/18</u>		AC MOTOR PERFORMANCE DATA		A40WG1242-R007 DATE ISSUED 07/29/26

FRAME 405TS

RPM 3565

S.F. 1.15

ROTOR 418142005XE

HP 100

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 110

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

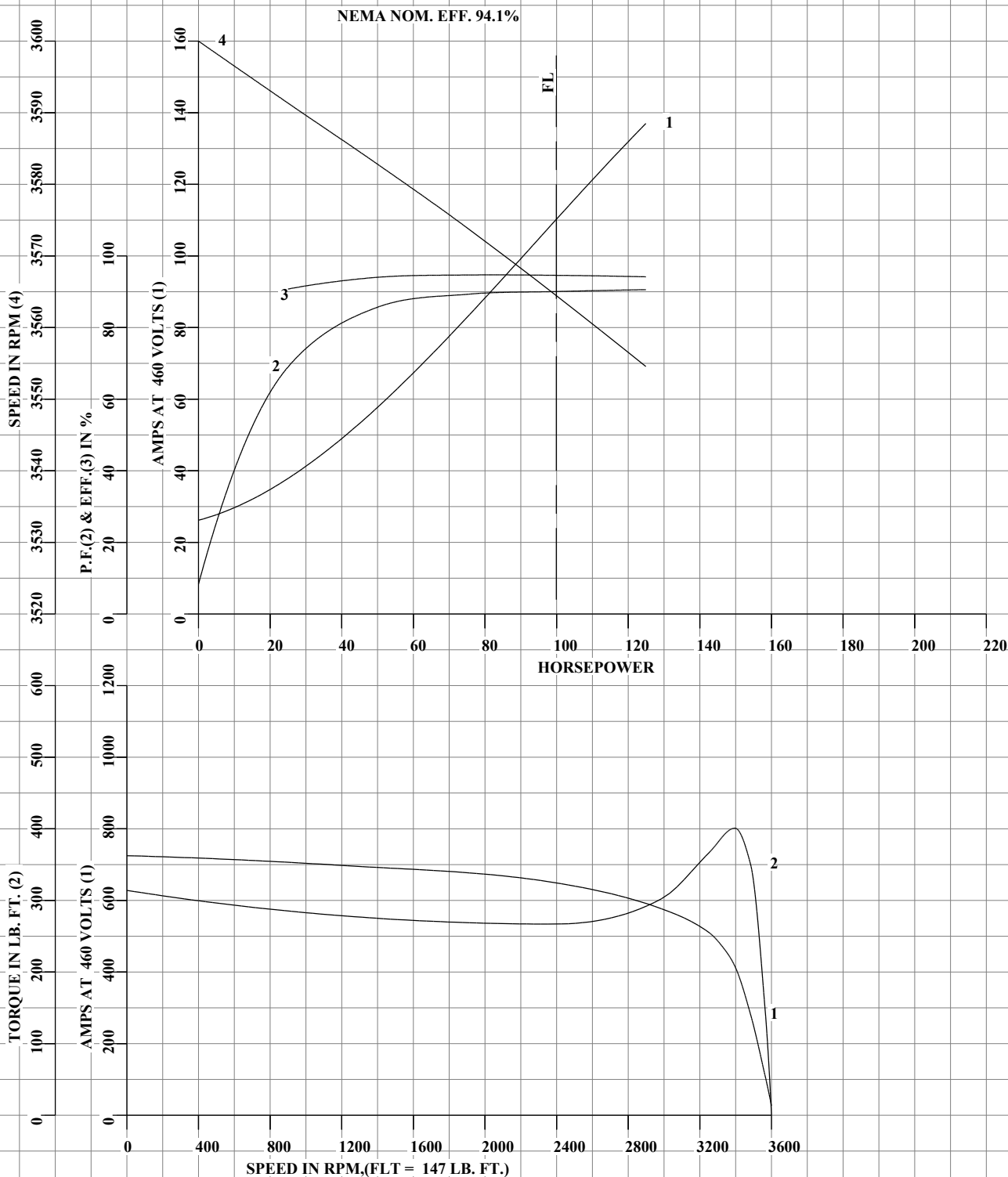
ENCLOSURE TEFC

STATOR RES. @ 25°C .0511

AMB °C / INSUL 40/F

E/S ---

OHMS (BETWEEN LINES)



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AC MOTOR
 PERFORMANCE
 DATA

A40WG1242-R007

ISSUE DATE 07/29/26

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S.F. 1.15

ROTOR 418142005XE

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DUTY CONT

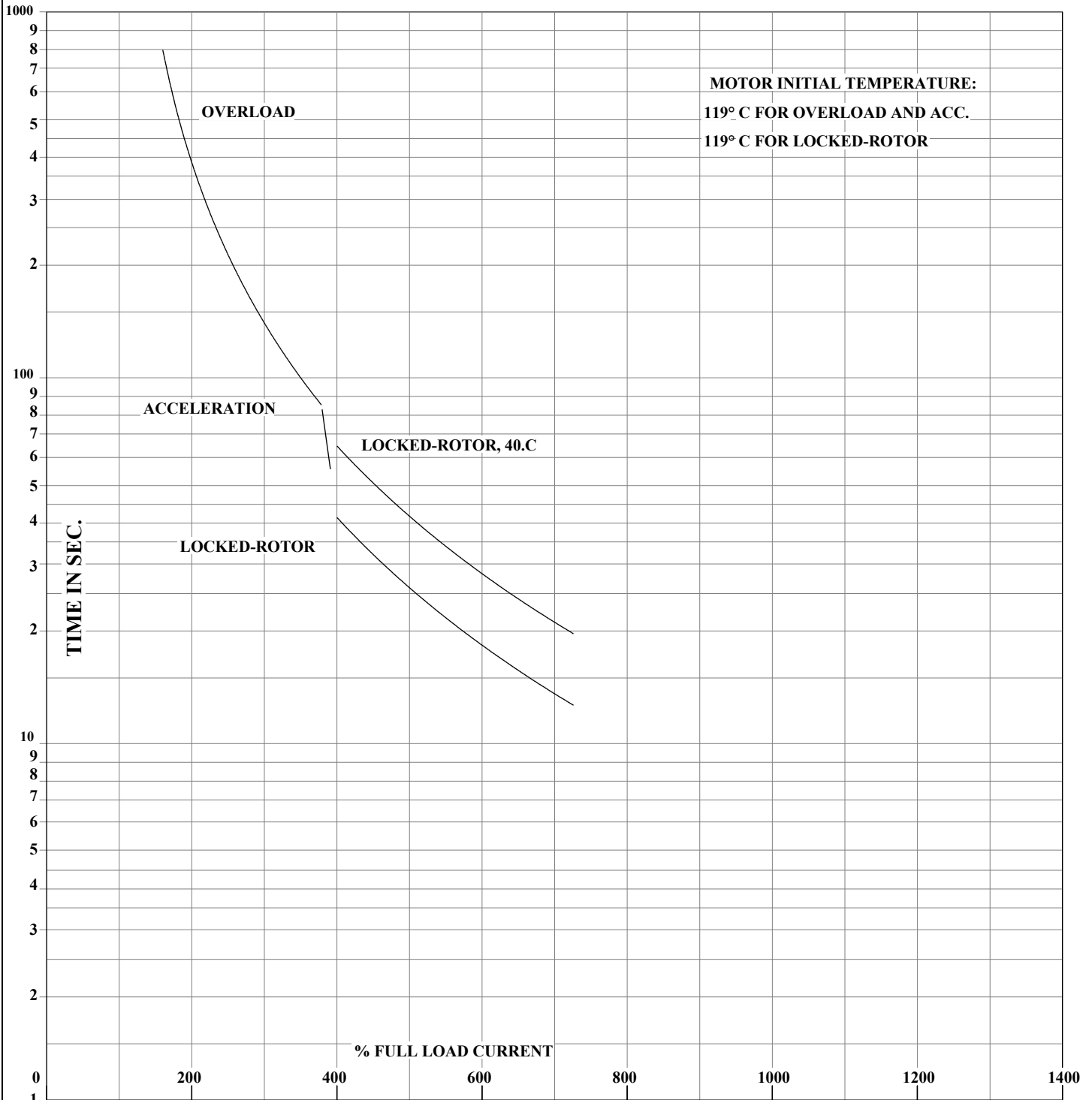
ENCLOSURE TEFC

STATOR RES. @ 25°C .0511

AMB °C / INSUL 40/F

E/S ---

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
NEMA NOM. EFF. 94.1%

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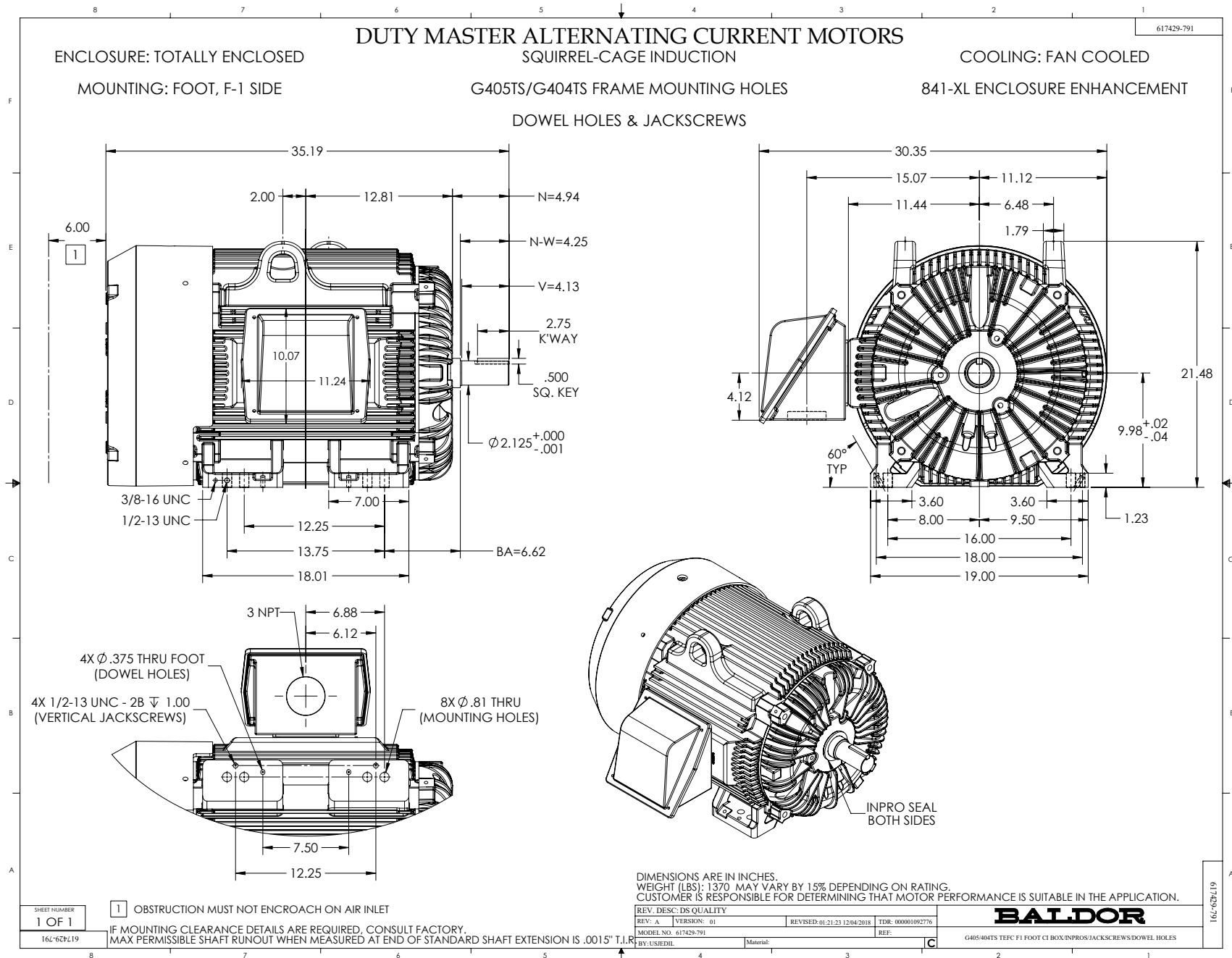


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AC MOTOR
PERFORMANCE
DATA

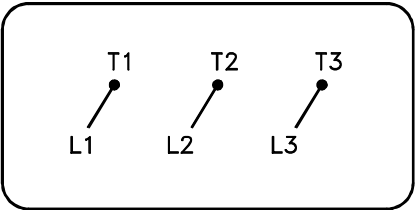
A40WG1242-R007

ISSUE DATE 07/29/26



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