

ABB BALDOR RELIANCE III

Customer information packet

ECP84400TR-4

100HP, 1785RPM, 3PH, 60HZ, 405T, A40072M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	405T
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	1800 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	Mobil SHC 220 (Athens Only)
Constant Torque Speed Range	15-60
Current @ Voltage	115.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	115.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG5476
Layout	617429-818
Eff. date	06-19-2025
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	05-13-2025

Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	None
Motor Type	A40072M
Mounting Arrangement	F1
No Load Current	36.1 a
Number of Poles	4
Overall Length	38.19 IN
Power Factor	85
Pulley End Bearing Type	Roller
Pulley Face Code	Standard
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

NP4566															
CAT NO	ECP84400TR-4			SPEC NO.		A40-0025-5476									
HP	100	AMPS		115		VOLTS		460		DESIGN		B			
FRAME SIZE	405T	RPM		1785		HZ		60	AMB		40	SF 1.15			
D.E. BRG.DATA	NU316		O.D.E. BRG.DATA			6316			PH 3		DUTY		CONT	INSUL.CLASS	F
D.E. BRG.	80RUO3M30X			TYPE ENCL		TEFC		CODE G							
O.D.E. BRG.	80BC03J30X			POWER FACTOR			85		NEMA-NOM-EFFICIENCY				95.4		
3/4 LOAD EFF.	95.7	IP 56		MAX CORR KVAR				22		GUARANTEED EFFICIENCY				94.5	
TEMP CODE	T3	TEMP =		200											
CHP HZ	60-90	CT HZ		15-60		VT HZ		0-60							
INVERTER-TEMP-CODE	T3														
SER.NO.				MOTOR WEIGHT											

000613007EX				
CAT NO	ECP84400TR-4	SPEC NO.	A40-0025-5476	
NO. ROTOR BARS	47	GREASE TYPE	MOBIL SHC 220	
NO. SLOTS	60	NL AMPS AT RATED VOLTAGE		36.1
5 YEAR WARRANTY		WINDING RES @25 C	.0482	OHMS
MFG. DATE		SER.NO		

ECP84400TR-4 - 100HP, 1785RPM, 3PH, 60HZ, 405T, A40072M, TEFC							
CUSTOMER INFORMATION PACKET		FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
		405T	100	P	3/60	1785	460
AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE	
115	CONT	40/F	1.15	B	G	TEFC	
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)			
-	418142037CE	---	---	.0482			
PERFORMANCE							
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY		
NO LOAD	0	36.1	1800	4.27	0		
1/4	25.0	48.4	1796	52.0	93.0		
2/4	50.0	66.6	1792	73.7	95.4		
3/4	75.0	89.4	1788	82.0	95.7		
4/4	100	115	1783	85.3	95.5		
5/4	125	143	1778	86.4	95.0		
SPEED TORQUE							
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR		0	169	498	725		
PULL UP		270	145	427	674		
BREAKDOWN		1719	255	751	382		
FULL LOAD		1783	100	295	115		
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.							
TYPICAL DATA 95.4 PCT NOMINAL EFFICIENCY							
		DRAWN BY: <u>W. L. SMITH</u> CHECKED BY: <u>J. P. TSAO</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>02/28/20</u>		AC MOTOR PERFORMANCE DATA		A40WG5476-R002 DATE ISSUED 08/28/23	

FRAME 405T

RPM 1785

S.F. 1.15

ROTOR 418142037CE

HP 100

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 115

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

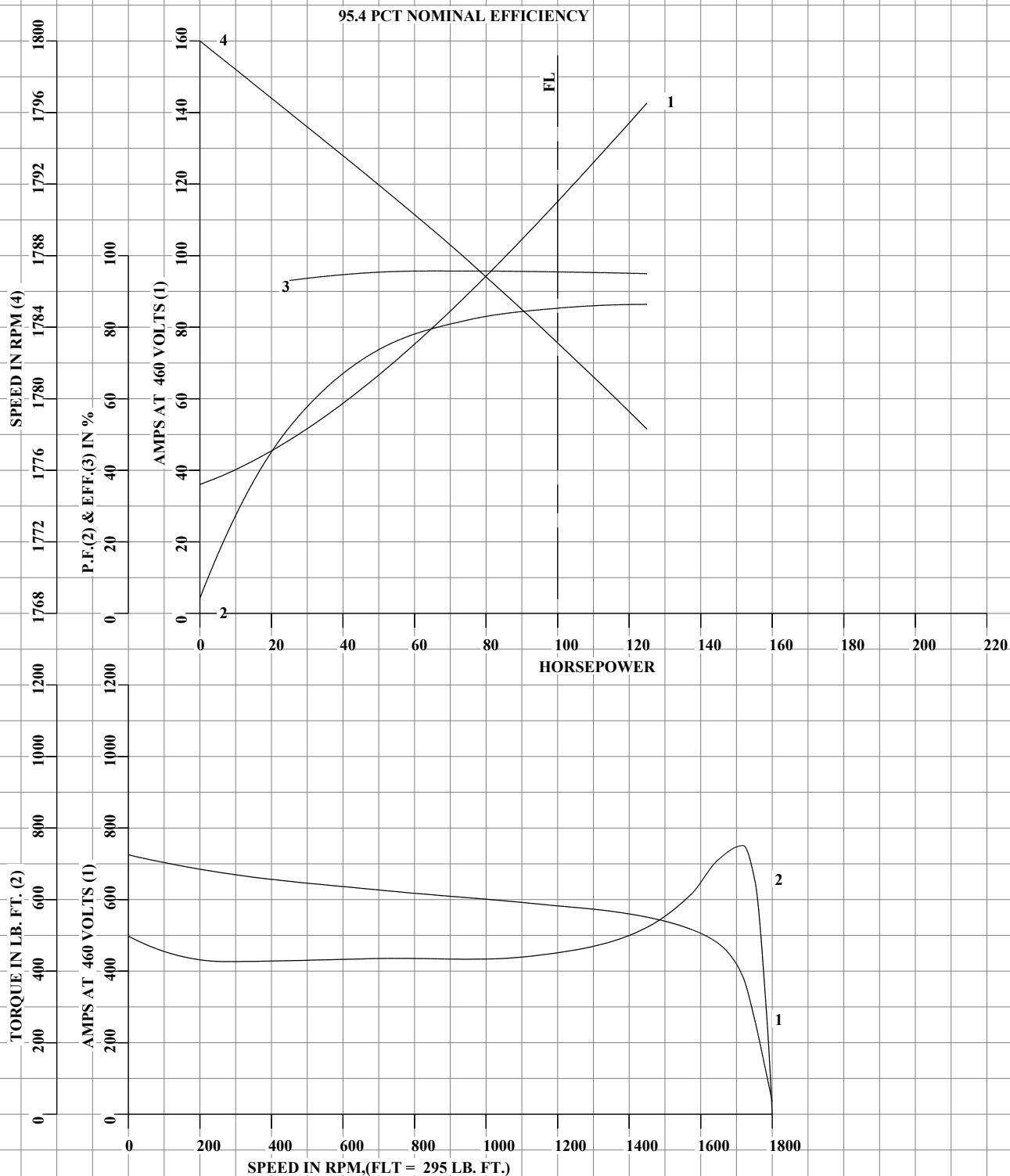
ENCLOSURE TEFC

STATOR RES. @ 25°C .0482

AMB °C / INSUL 40/F

E/S -

OHMS (BETWEEN LINES)



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AC MOTOR
PERFORMANCE
DATA

A40WG5476-R002

ISSUE DATE 08/28/23

FRAME 405T

RPM 1785

S.F. 1.15

ROTOR 418142037CE

HP 100

VOLTS 460

NEMA DESIGN B

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TYPE P

AMPS 115

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PHASE / HERTZ 3/60

DUTY CONT

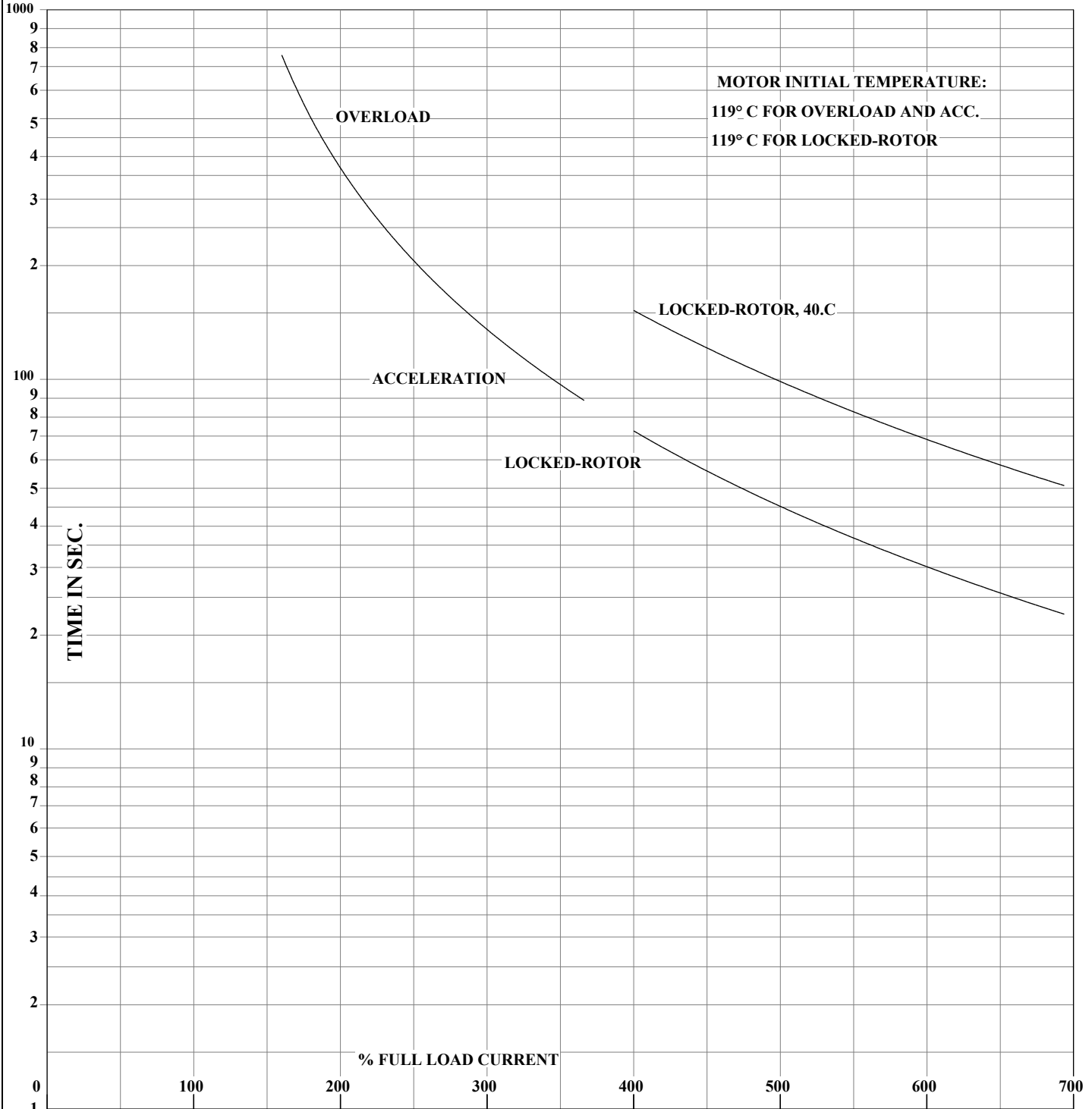
ENCLOSURE TEFC

STATOR RES. @ 25°C .0482

AMB °C / INSUL 40/F

E/S -

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
95.4 PCT NOMINAL EFFICIENCY

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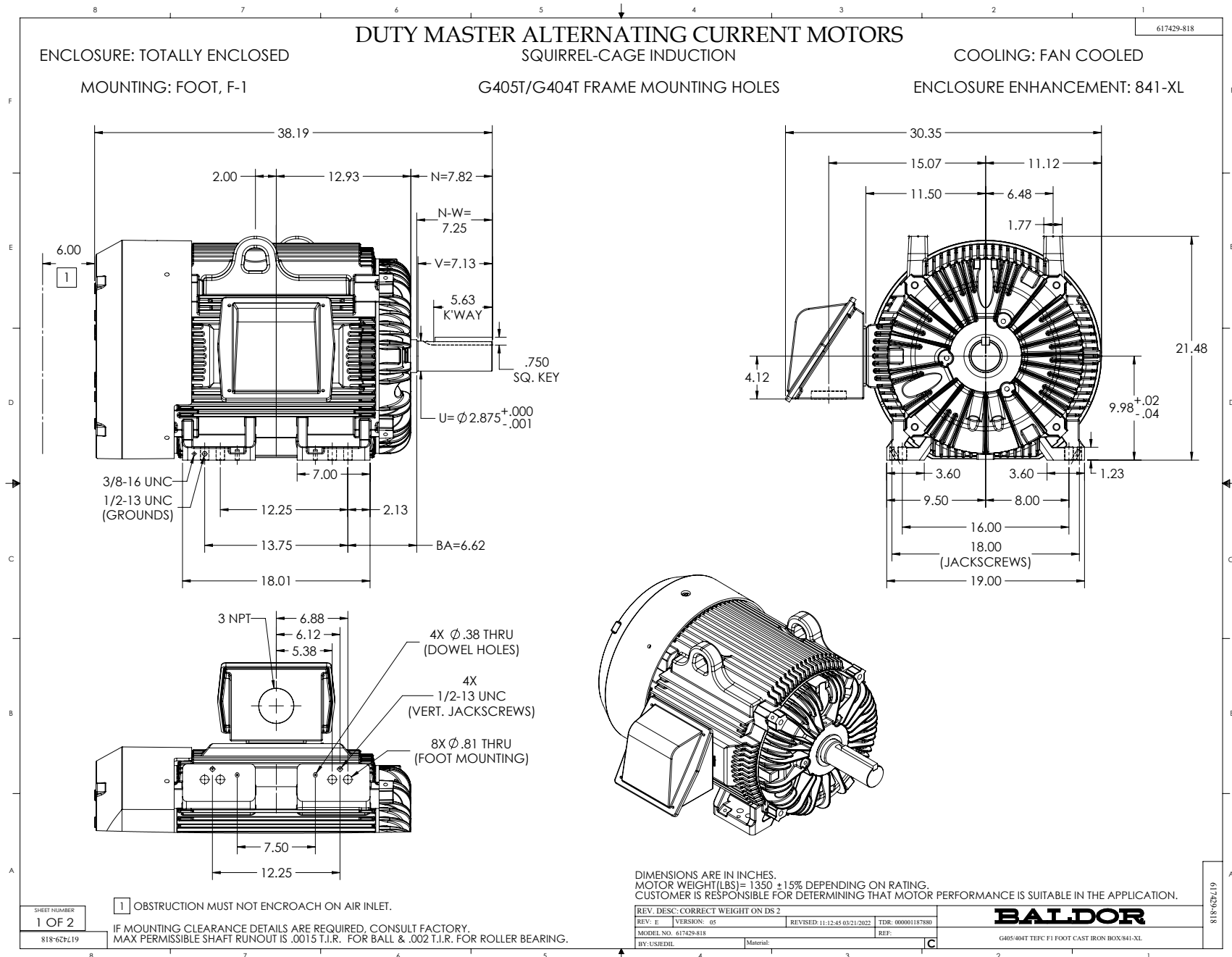


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AC MOTOR
PERFORMANCE
DATA

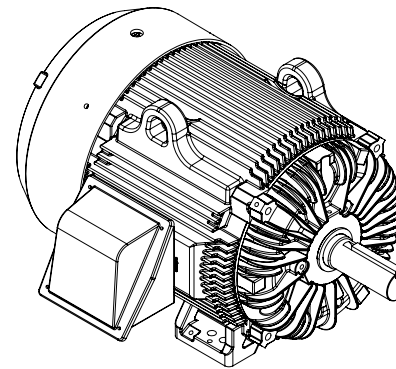
A40WG5476-R002

ISSUE DATE 08/28/23



617429-818

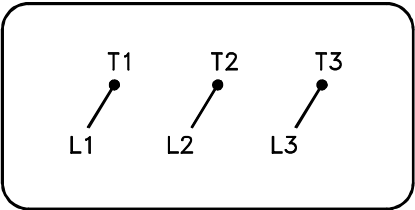
ENCLOSURE ENHANCEMENT: 841-XL



G405/404T TEFC F1 FOOT CAST IRON BOX/841-XL

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