

ABB BALDOR RELIANCE III

Customer information packet

ECP84400T-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	Polyrex EM (-20F +300F)
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	05-12-2025

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	Ball
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	ECP84400T-4			SPEC NO.		A40-0024-5476							
HP	100	AMPS	115		VOLTS		460		DESIGN		B		
FRAME SIZE	405T	RPM	1785		HZ		60	AMB	40	SF	1.15		
D.E. BRG.DATA	6316		O.D.E. BRG.DATA			6316		PH	3	DUTY	CONT	INSUL.CLASS	F
D.E. BRG.	80BC03J30X		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	ECP84400T-4	SPEC NO.	A40-0024-5476	
NO. ROTOR BARS	47	GREASE TYPE	POLYREX EM	
NO. SLOTS	60	NL AMPS AT RATED VOLTAGE		36.1
5 YEAR WARRANTY		WINDING RES @25 C	.0482	OHMS
MFG. DATE		SER.NO		

ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET							ECP84400T-4 - 100HP, 1785RPM, 3PH, 60HZ, 405T, A40072M, TEFC						
S/O			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 ---

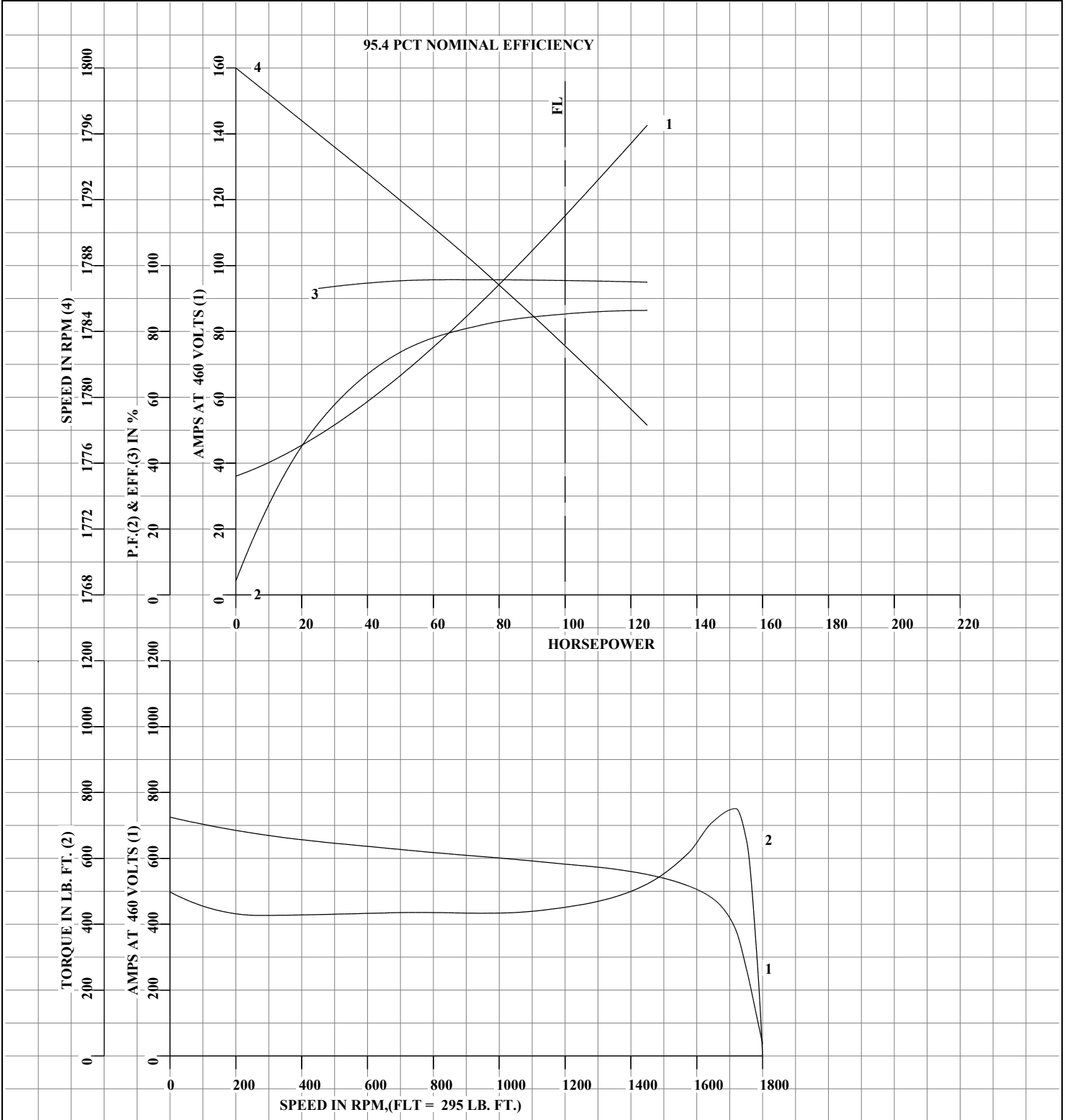
PHASE / HERTZ 3/60

DUTY CONT

ENCLOSURE TEFC

STATOR RES. @ 25°C .0482

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

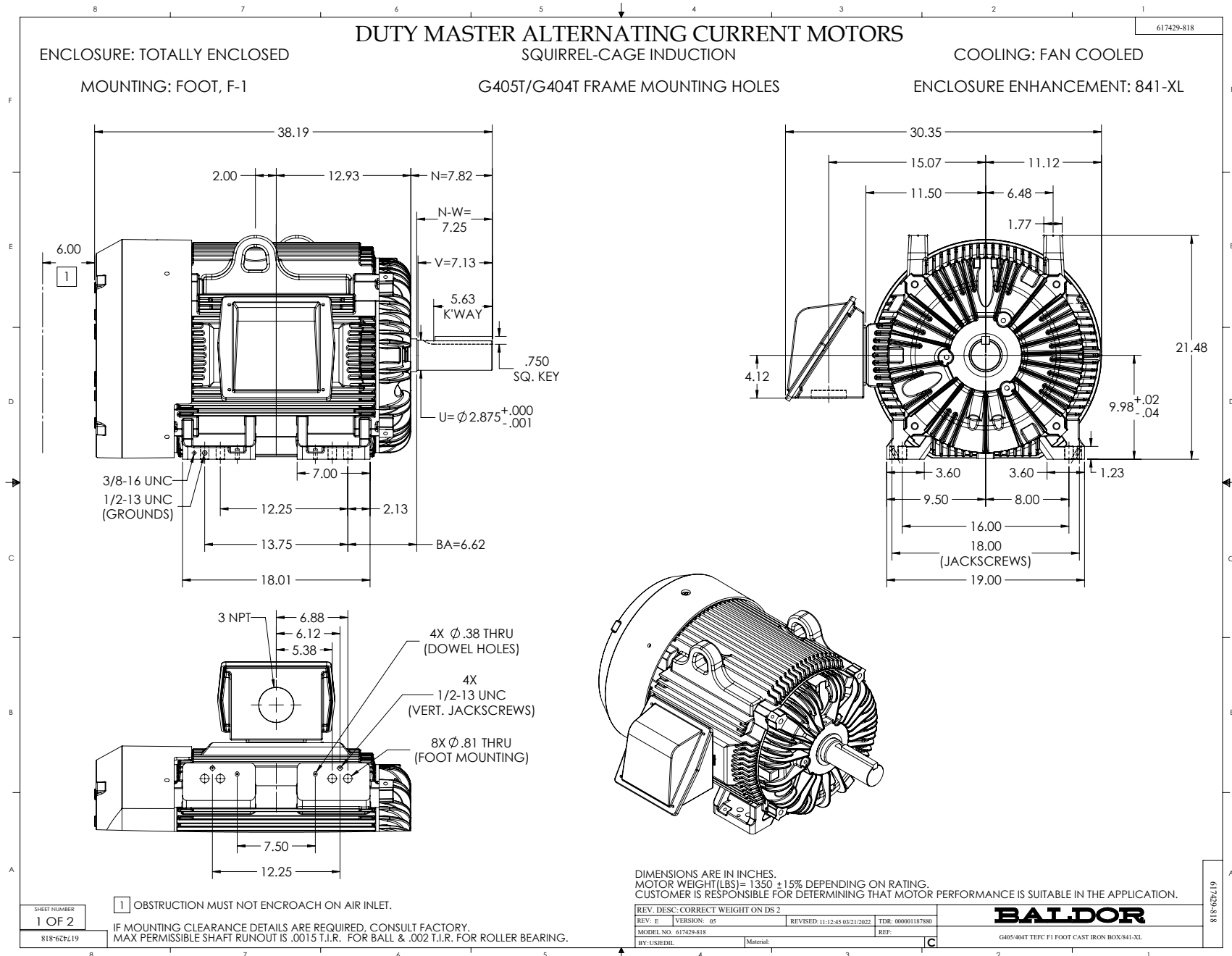


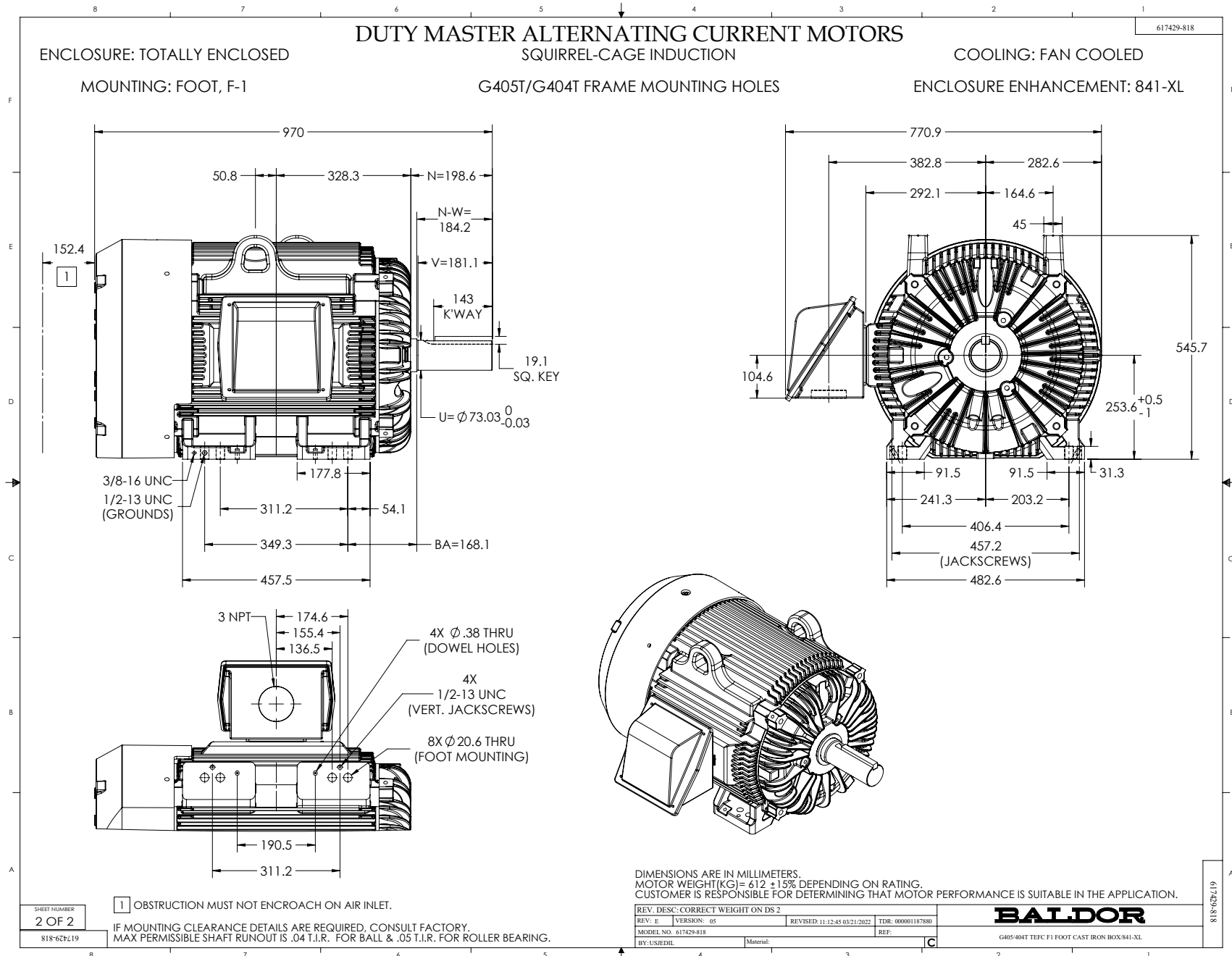
DRAWN BY: W. L. SMITH
CHECKED BY: J. P. TSAO
APPROVED BY: W. L. SMITH
DATE: 02/28/20

AC MOTOR
PERFORMANCE
DATA

A40WG5476-R002

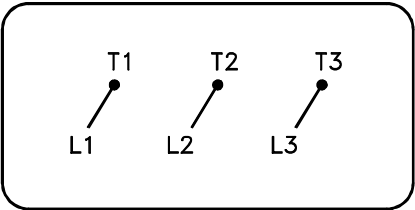
ISSUE DATE 08/28/23





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