

ABB BALDOR RELIANCE III

Customer information packet

EM4400T-G

100HP, 1785RPM, 3PH, 60HZ, 405T, A40064M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	405T
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	112.000 A @ 460.0 V 224.000 A @ 230.0 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	112.0 a
Insulation Class	H
Inverter Code	Not Inverter
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG

Part Detail

Revision	N
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG1610
Layout	617429-001
Eff. date	09-19-2023
CD Diagram	416820-002
Poles	04
Leads	3#2,6#4
Proprietary	False
Created date	07-17-2013

Motor Standards	NEMA
Motor Type	A40064M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	38.04 IN
Power Factor	87
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Ground Indicator	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	

NP2381L

SPEC NO.	P40G3927	CAT.NO.	EM4400T-G				FRAME	405T
HP	100//75	PHASE	3	DESIGN	B	TYPE	P	
RPM	1785//1485	HZ	60//50	AMB	40	SF	1.15	
VOLTS	230/460//190/380	DUTY	CONT		INSUL.CLASS	H		
AMPS	224/112//206/103		ENCL	TEFC	CODE	G		
DRIVE END BEARING	80BC03J30X	NEMA-NOM-EFFICIENCY		95.4				
OPP D.E. BEARING	80BC03J30X							
SER.NO.								
	VPWM INV DUTY 10:1 CT AT 1.0SF					MOTOR WEIGHT		

ABB BALDOR RELIANCE III							CUSTOMER INFORMATION PACKET							EM4400T-G - 100HP, 1785RPM, 3PH, 60HZ, 405T, A40064M, TEFC						
S/O			FRAME			HP			TYPE			PHASE/ HERTZ			RPM			VOLTS		
			405T			100			P			3/60			1785			230/460		
AMPS			DUTY			AMB °C/ INSUL			S.F.			NEMA DESIGN			CODE LETTER			ENCLOSURE		
224/112			CONT			40/H			1.15			B			G			TEFC		
E/S			ROTOR			TEST S.O.			TEST DATE			STATOR RES. @25 °C OHMS (BETWEEN LINES)								
596956			418142-33-RE			---			---			.0123/.0492								
PERFORMANCE																				
LOAD			HP			AMPERES			RPM			% POWER FACTOR			% EFFICIENCY					
NO LOAD			0			28.6			1800			5.49			0					
1/4			25.0			39.2			1796			64.3			93.0					
2/4			50.0			59.5			1792			82.5			95.4					
3/4			75.0			84.6			1788			86.7			95.7					
4/4			100			112			1783			87.4			95.4					
5/4			125			141			1778			87.3			94.9					
SPEED TORQUE																				
						RPM			TORQUE % FULL LOAD			TORQUE LB.-FT.			AMPERES					
LOCKED ROTOR						0			151			445			725					
PULL UP						360			136			400			706					
BREAKDOWN						1721			250			735			382					
FULL LOAD						1783			100			295			112					
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.																				
TYPICAL DATA XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT GUARANTEED MIN EFF. 94.5 PCT																				
						DRAWN BY: <u>J. P. TSAO</u> CHECKED BY: <u>W. L. SMITH</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>06/13/14</u>						AC MOTOR PERFORMANCE DATA			A40WG1610-R006 DATE ISSUED 06/13/14					

FRAME 405T

RPM 1785

S.F. 1.15

ROTOR 418142-33-RE

HP 100

VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 224/112

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

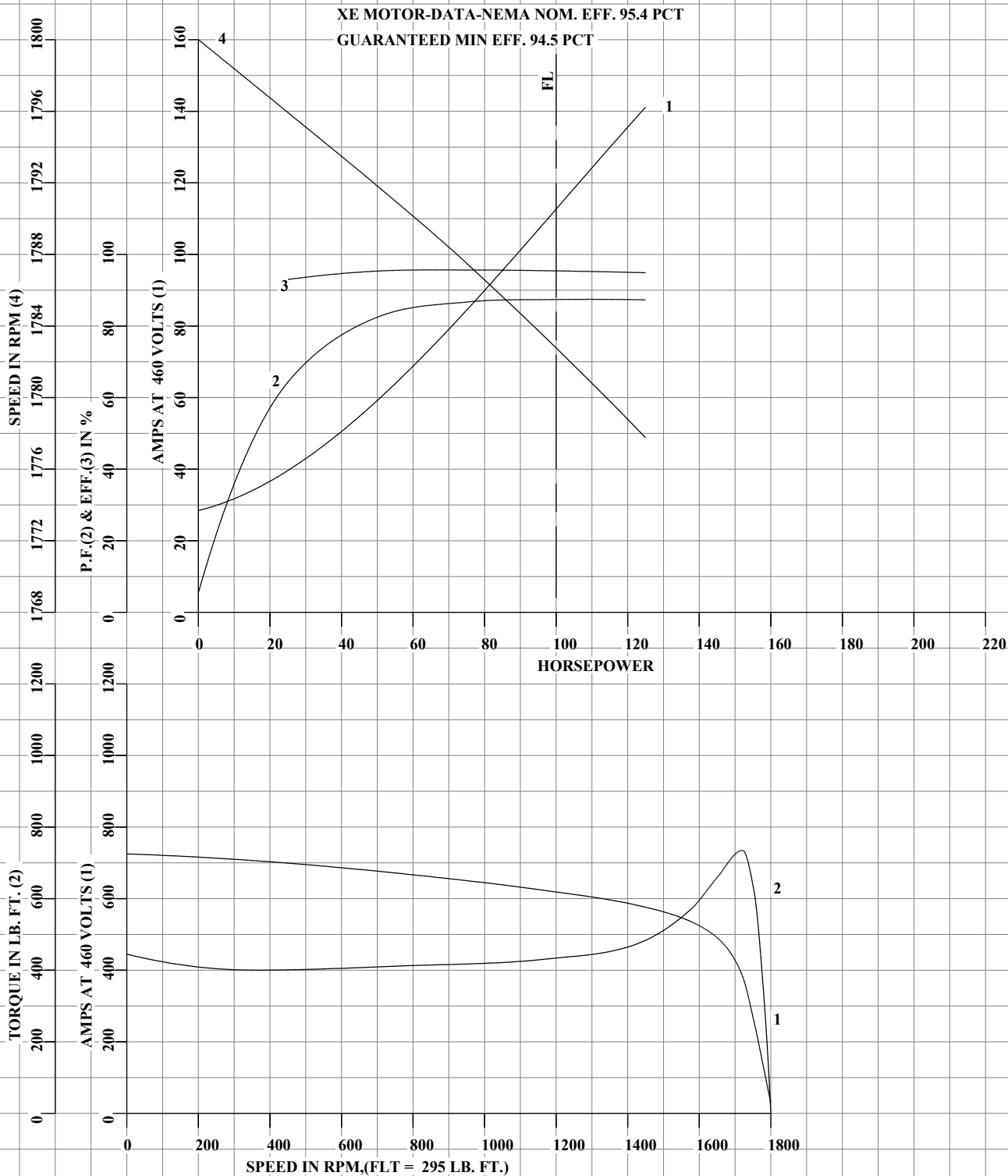
ENCLOSURE TEFC

STATOR RES. @ 25°C .0123/.0492

AMB °C / INSUL 40/H

E/S 596956

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 230/460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

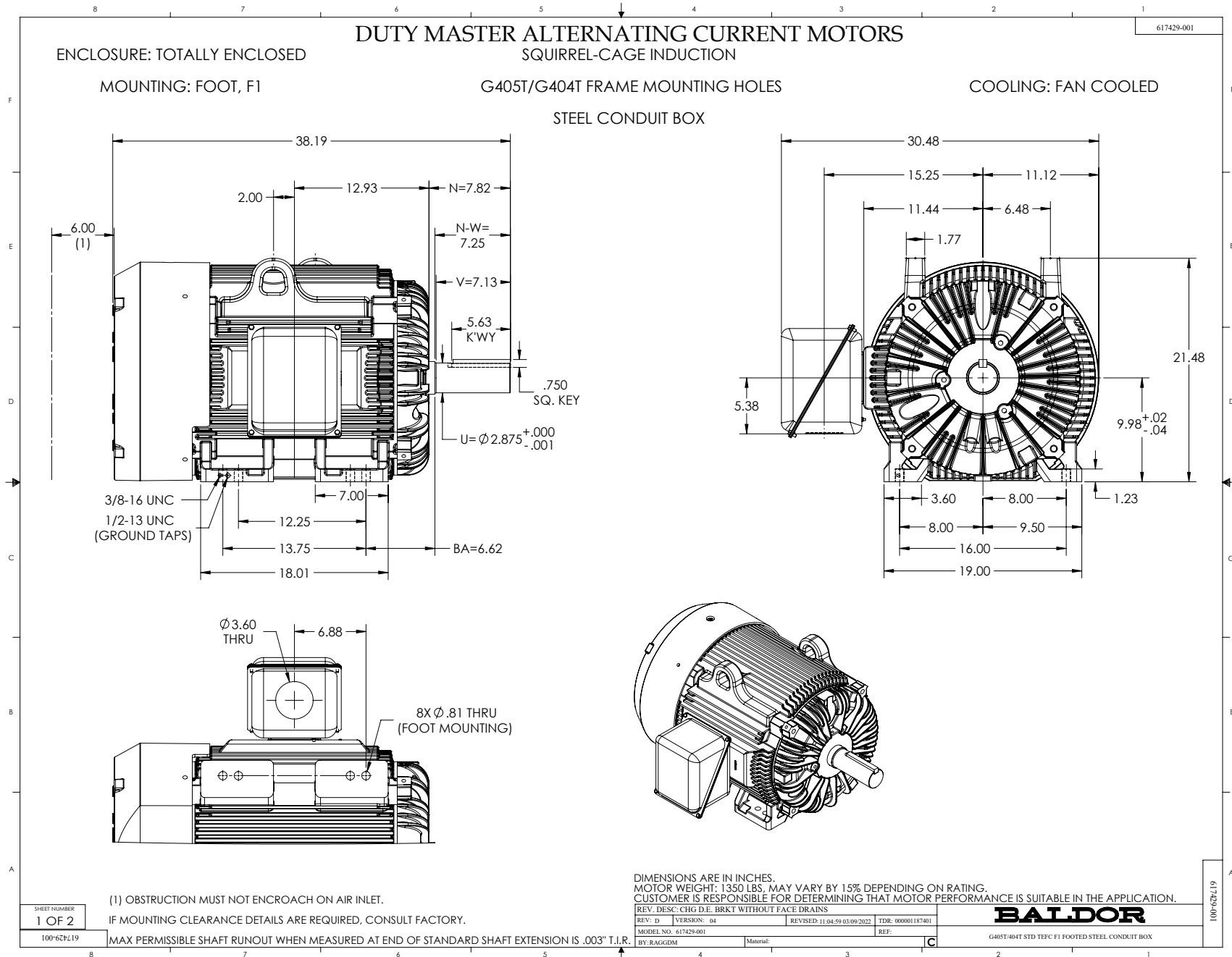


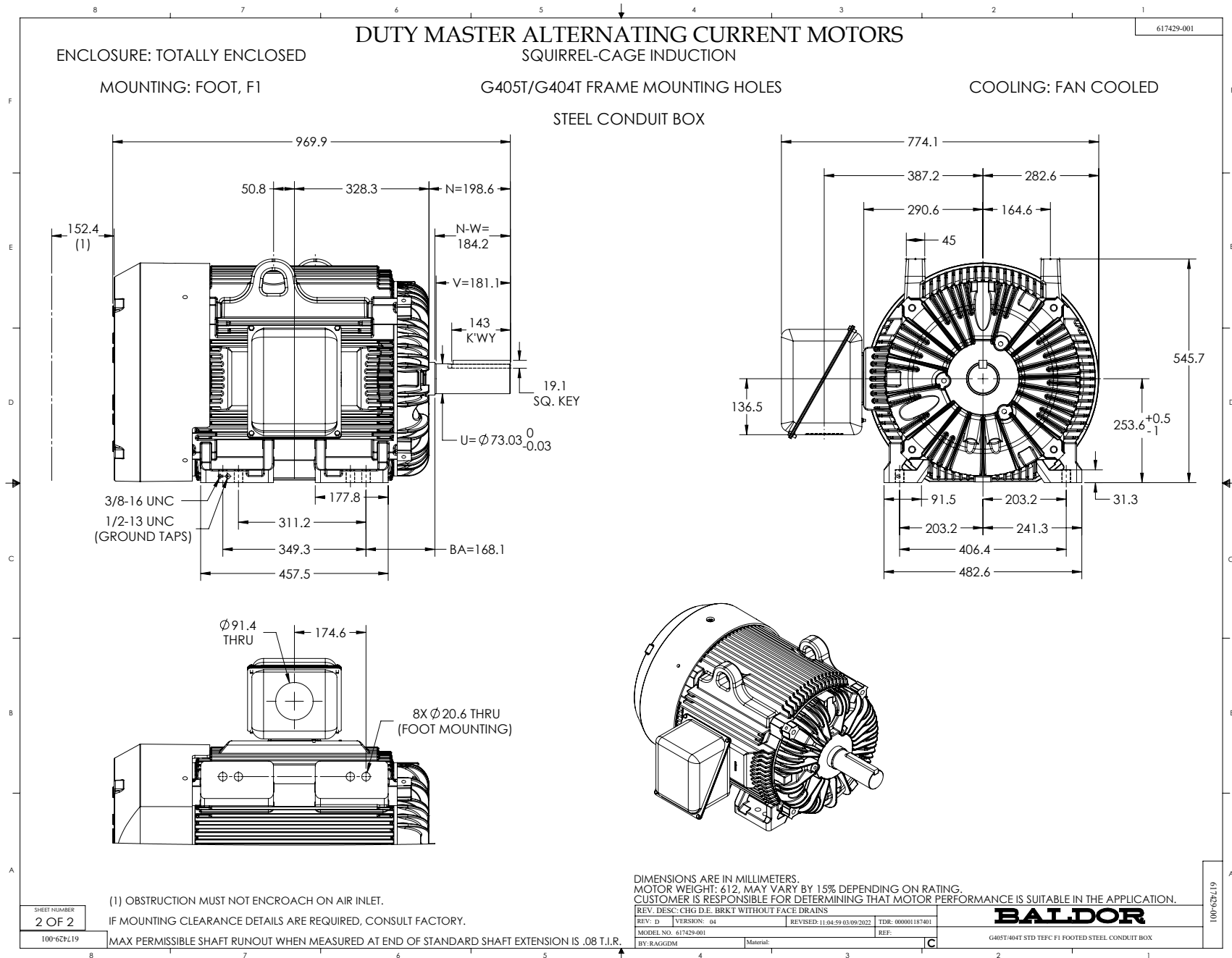
DRAWN BY: J. P. TSAO
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AC MOTOR
PERFORMANCE
DATA

A40WG1610-R006

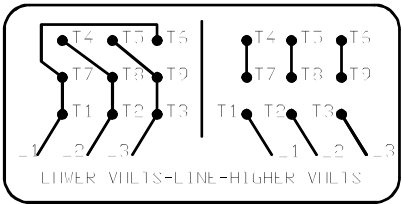
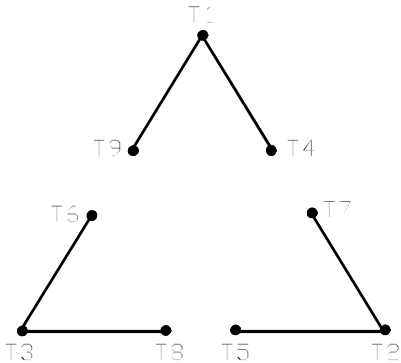
ISSUE DATE 06/13/14





416820-002

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

REV. DESC: FONT CHANGE FOR PDF SEARCHABLE		
REV. LTR: A	VERSION: 01	TDR: 000001009382
FILE: \MGA\00000\661	REVISED: 02:46:19 02/13/2020	BY: MGHMTT
MTL: —	⊗ ◻	

BALDOR - RELIANCE®

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED
SH 1 of 1

416820-002