

ABB BALDOR RELIANCE III

Customer information packet

EM4458T

50HP, 890RPM, 3PH, 60HZ, 404T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	404T
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	50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	126.000 A @ 230.0 V 63.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	63.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	F
Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0784
Layout	617429-001
Eff. date	03-08-2023
CD Diagram	416820-002
Poles	08
Leads	3#4,6#6
Proprietary	False
Created date	11-23-2015

Motor Type	A40060M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	38.20 IN
Power Factor	80
Product Family	General Industrial
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	890 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2496L	
MOBIL POLYREX EM	

NP2349L

SPEC NO.	A40-6923-0784			CAT.NO.	EM4458T					FRAME	404T	
HP	50	VOLTS	230/460		PHASE	3	DESIGN	B	TYPE	P		
RPM	890	AMPS	126/63		HZ	60	AMB	40	SF	1.15		
DRIVE END BEARING	80BC03J30X		DUTY	CONT	INSUL.CLASS			F				
OPP D.E. BEARING	80BC03J30X		ENCL	TEFC	CODE	F						
SER.NO.				POWER FACTOR		80	NEMA-NOM-EFFICIENCY					93
						MAX CORR KVAR		20	GUARANTEED EFFICIENCY			91.7
						NEMA NOM/CSA QUOTED EFF						
											MOTOR WEIGHT	

ABB BALDOR RELIANCE III S/O		CUSTOMER INFORMATION PACKET		EM4458T - 50HP, 890RPM, 3PH, 60HZ, 404T, TEFC, F1		
	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	404T	50	P	3/60	890	230/460
AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
126/63	CONT	40/F	1.15	B	F	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
595683	418142-71-BE	---	---	.0347/.139		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	29.4	900	3.93	0	
1/4	12.5	32.6	897	40.0	90.1	
2/4	25.0	40.3	895	62.3	93.3	
3/4	37.5	50.7	892	73.8	93.7	
4/4	50.0	63.0	889	79.6	93.4	
5/4	62.5	76.8	885	82.3	92.6	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	140	415	346	
PULL UP		335	125	369	311	
BREAKDOWN		845	219	646	197	
FULL LOAD		889	100	296	63.0	
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.						
XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 93.0 PCT.						
ABB		DRAWN BY: <u>P.B. GREENE</u> CHECKED BY: <u>K.W. KANOUFF</u> APPROVED BY: <u>K.W. KANOUFF</u> DATE: <u>08/11/89</u>		AC MOTOR PERFORMANCE DATA		A40WG0784-R001 DATE ISSUED 08/11/89

FRAME 404T

VOLTS 230/460

NEMA DESIGN B

TEST S.O. ---

HP 50

AMPS 126/63

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

STATOR RES. @ 25°C .0347/.139

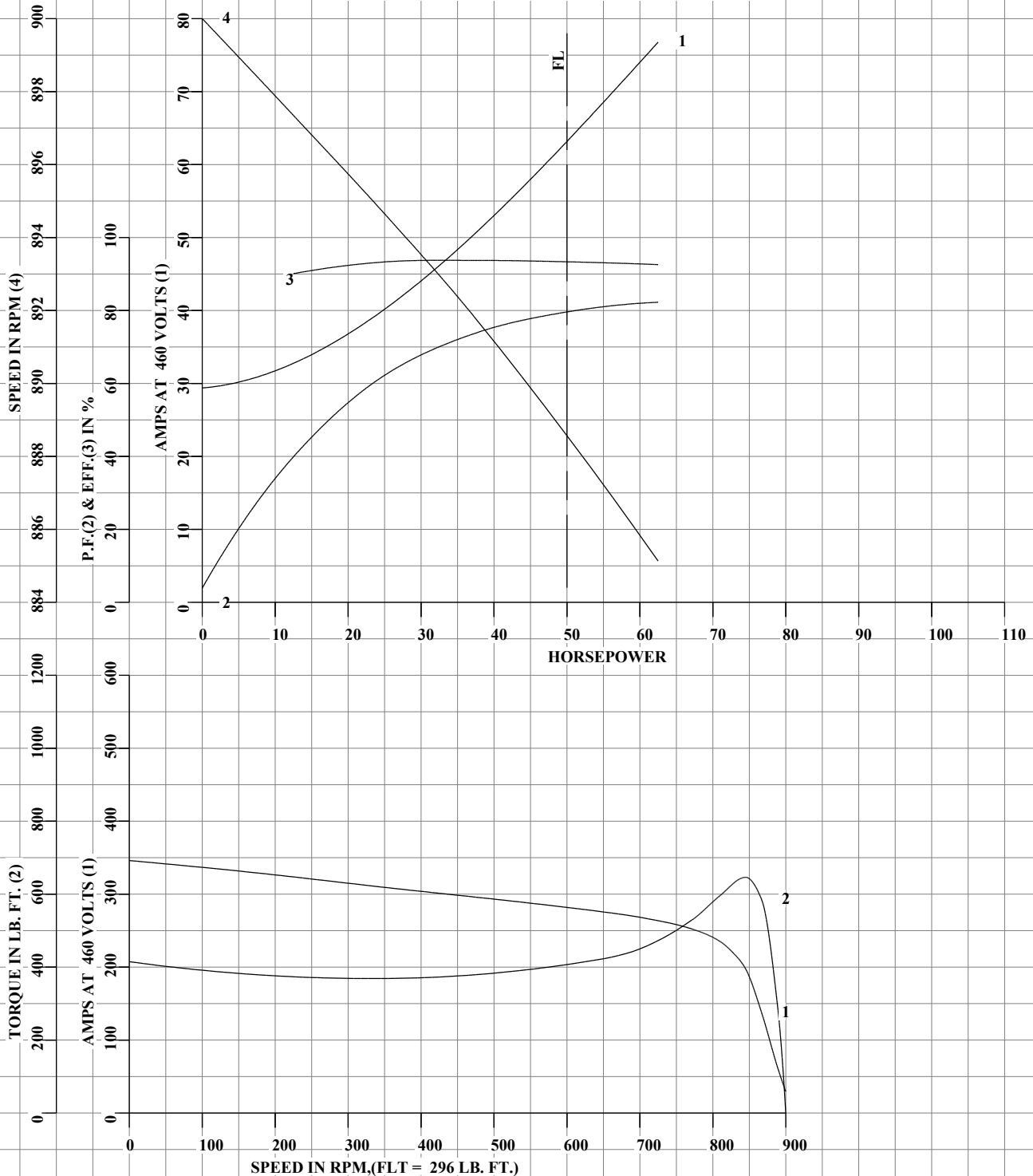
PHASE / HERTZ 3/60

AMB °C / INSUL 40/F

E/S 595683

OHMS (BETWEEN LINES)

XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 93.0 PCT.



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

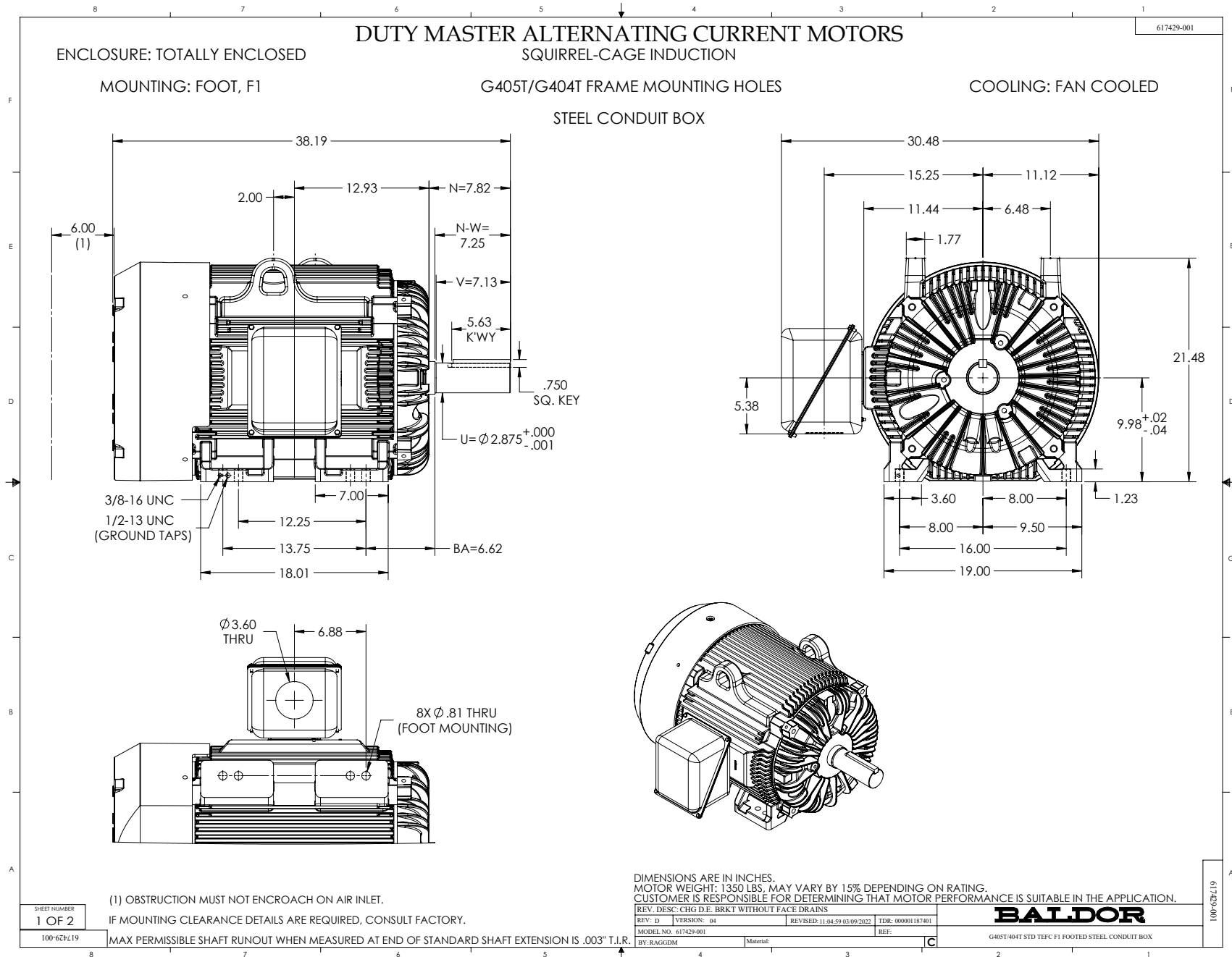


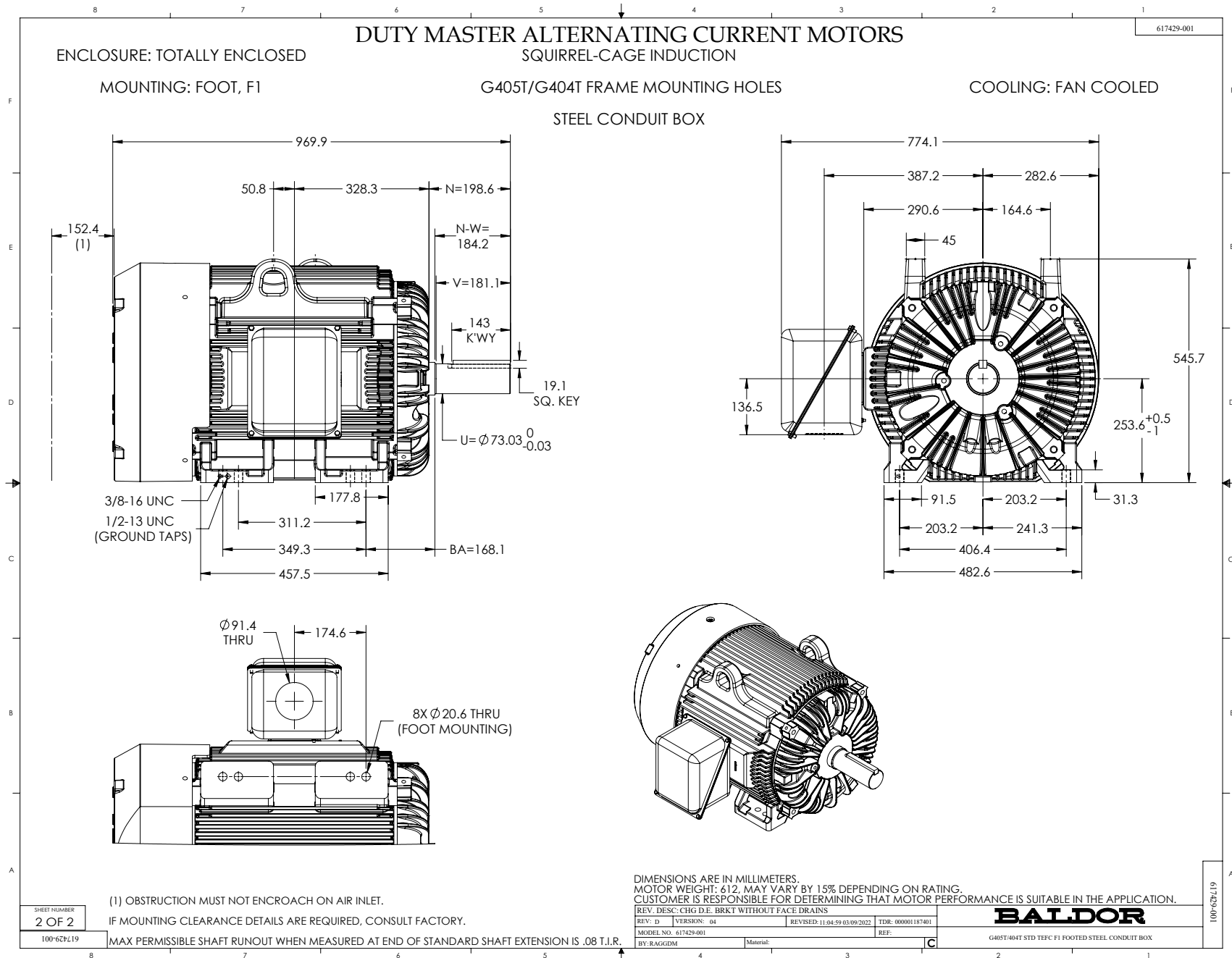
DRAWN BY: P.B. GREENE
 CHECKED BY: K.W. KANOUFF
 APPROVED BY: K.W. KANOUFF
 DATE: 08/11/89

AC MOTOR
 PERFORMANCE
 DATA

A40WG0784-R001

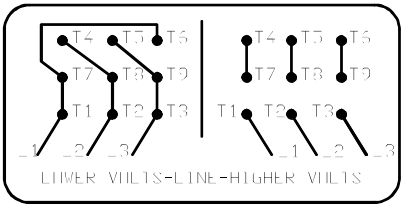
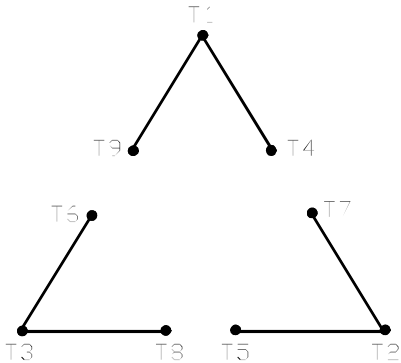
ISSUE DATE 08/11/89





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