

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		

Parts List

Part number	Description	Quantity
SA310837	SA A40-6923-0784	1.000 ea
RA298235	RA A40-6923-0784	1.000 ea
421948032	LABEL, MYLAR	1.000 ea
NP2496L	MOTOR LUBE NAMEPLATE	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP2349L	SUPER-E ,SS, CURUS EEV, CC, LASER	1.000 ea
412118006A	DRAIN	2.000 ea
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea
083198127A	G400 MOLDED FAN COVER	1.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
702618011RN	FAN 440 702618004T - 2.00 BORE 17.5 DIA	1.000 ea
004824015A	GREASE POLYREX EM	0.880 lb
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018010CK	HHCS 3/8-16X1-1/4 PLTD. 032018010CR	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
410700000DA	WAVY SPRING WASHER	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034530040BB	P/NIP 1/4X5	1.000 ea

034530040AB	P/NIP 1/8X5 GALV.	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
077176000L	C/BOX, PAINTED 440	1.000 ea
077176001A	CBOX Cover 360-400	1.000 ea
043292000AJ	GASK 320-400	1.000 ea
402731001A	GASK 360-440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025Y17	WILKOFAS, 789.701, SUPER E PEARL GOLD	0.375 ga
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180044JA	KEY 3/4X3/4X5-1/2 L	1.000 ea
604797045	STD. 400 FRAME SKID	1.000 ea
032510024D	CARRIAGE BOLT - 444	2.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	2.000 ea
034001016AB	WSHR .562ID 1.375OD .109	2.000 ea
033300014AC	HEX NUT, SHIPPING - 400	2.000 ea
604799003C	PLASTIC BAG 42X32X46	1.000 ea

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.						
		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

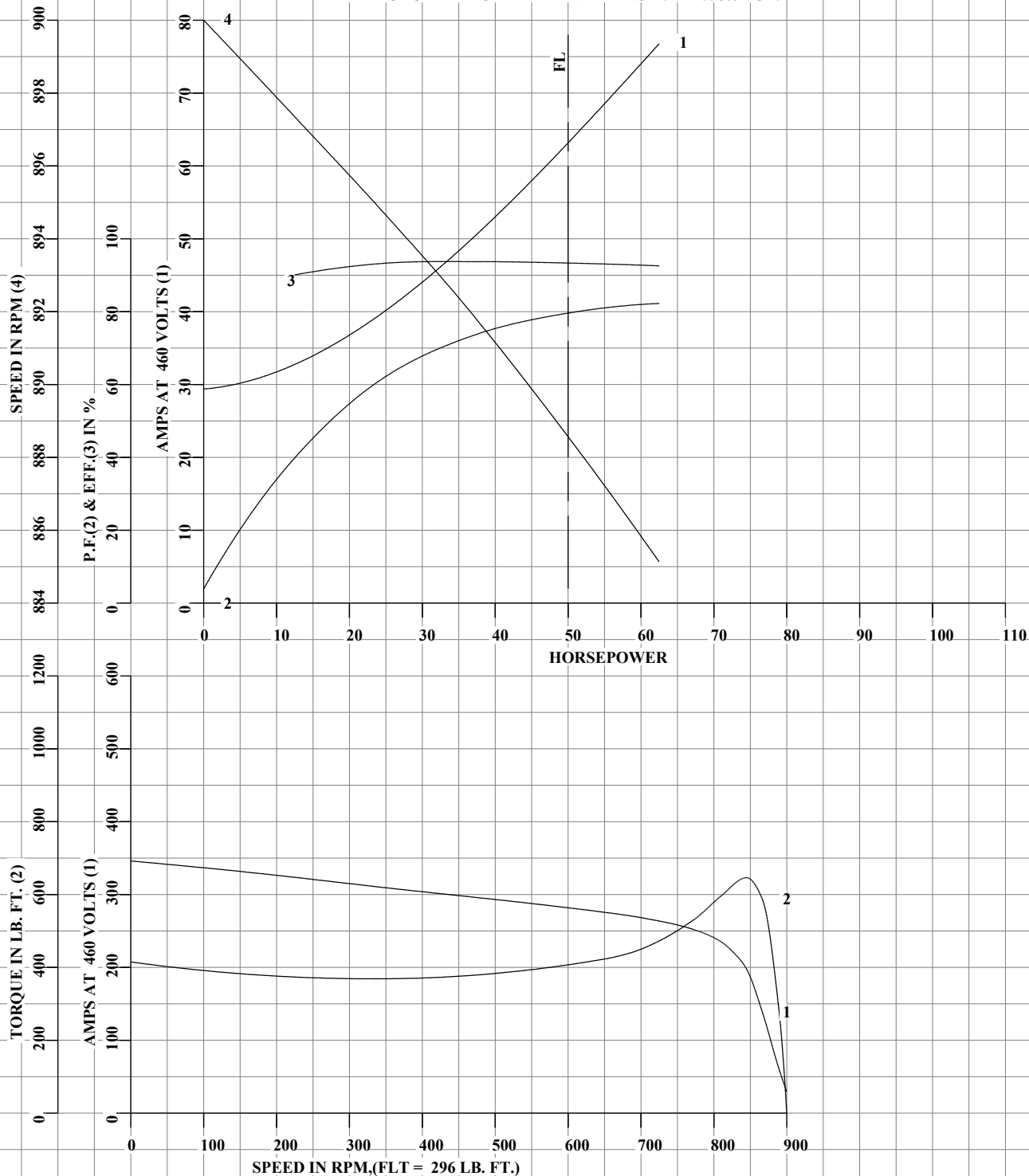
PHASE / HERTZ 3/60

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.

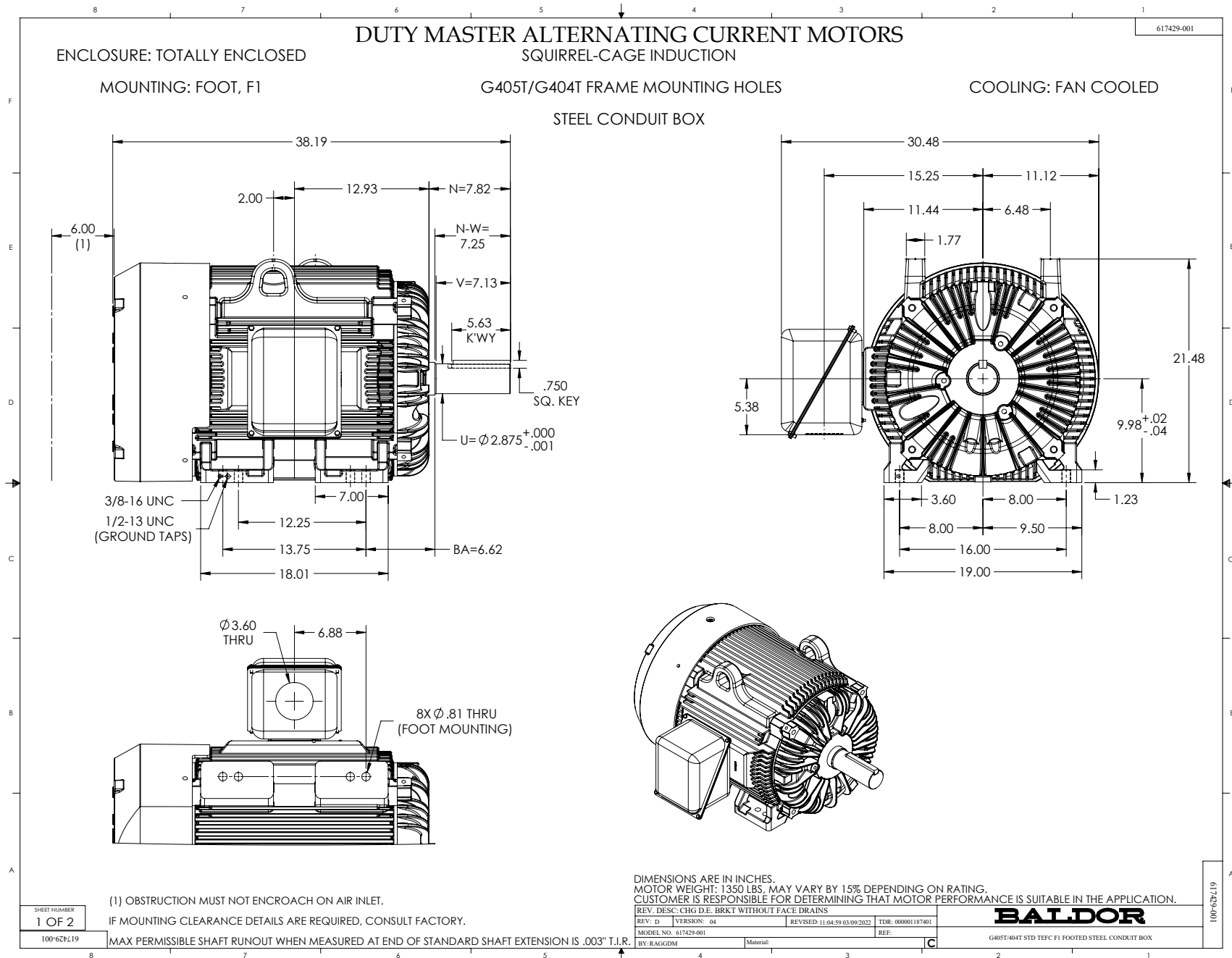


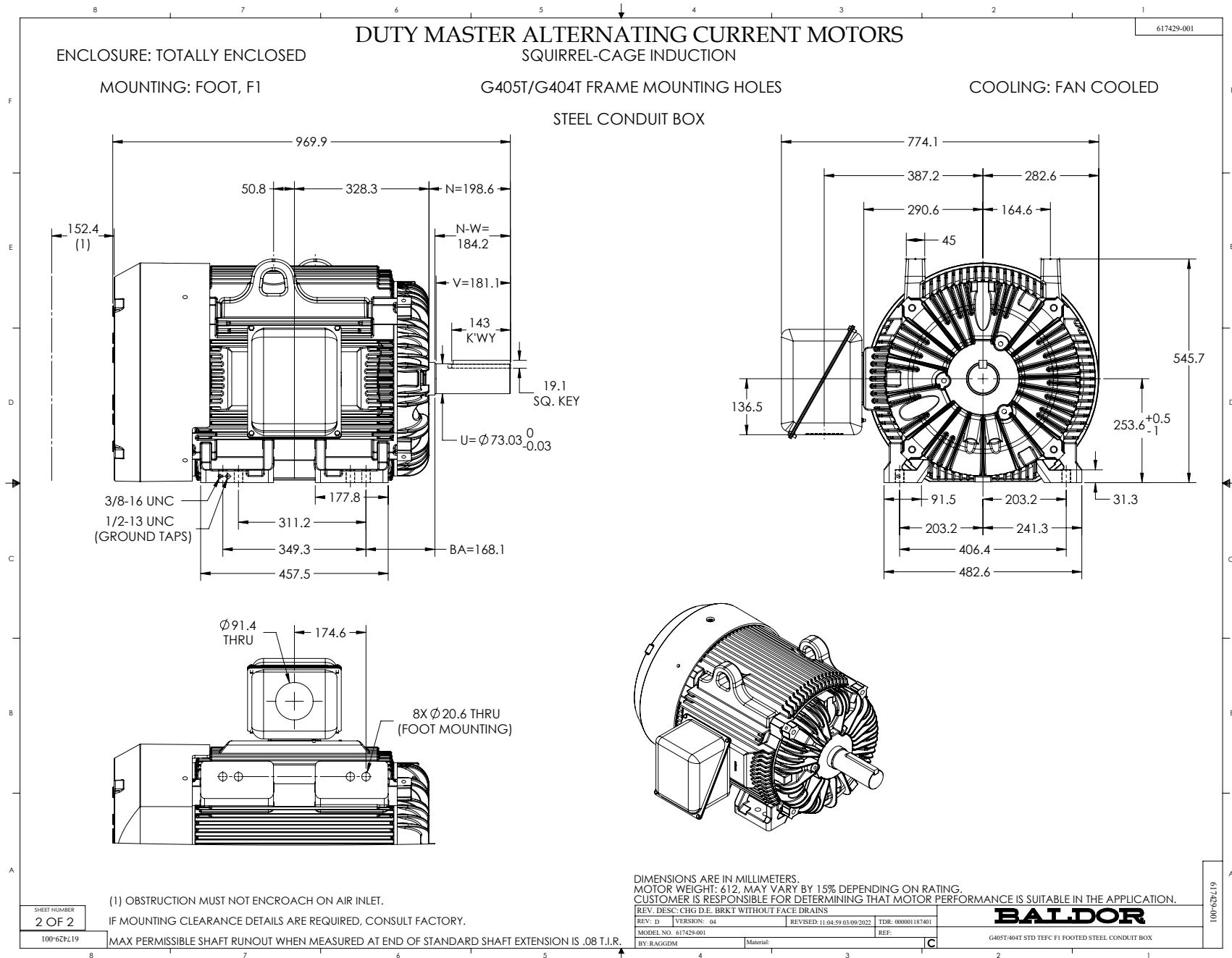
DRAWN BY: P.B. GREENE
 CHECKED BY: K.W. KANOUFF
 APPROVED BY: K.W. KANOUFF
 DATE: 08/11/89

AC MOTOR
 PERFORMANCE
 DATA

A40WG0784-R001

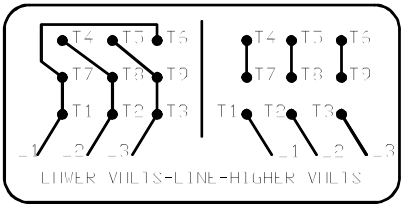
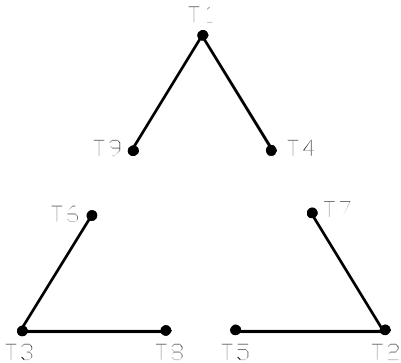
ISSUE DATE 08/11/89





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
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BALDOR - RELIANCE®

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

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