

ABB BALDOR RELIANCE III

Customer information packet

EWDM4458T

50HP, 890RPM, 3PH, 60HZ, 405T, TEFC, F1

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	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	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	129.000 A @ 230.0 V 64.300 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Enclosure Modification	Severe Duty Features
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	64.3 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	IP55
KVA Code	F

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG0784
Layout	617429-533
Eff. date	10-22-2021
CD Diagram	416820-002
Poles	08
Leads	3#4,6#6
Proprietary	False
Created date	09-11-2019

Motor Lead Quantity/Wire Size	3 @ 4 AWG
Motor Standards	NEMA
Motor Type	A40060M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	38.19 IN
Power Factor	78
Product Family	Washdown Features
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	Shaft 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	

NP2428L

SPEC NO.	A40-7122-0784			CAT.NO.	EWDM4458T					FRAME	405T	
HP	50	VOLTS	230/460		PHASE	3	DESIGN	B	TYPE	P		
RPM	890	AMPS	129/64.3		HZ	60	AMB	40	SF	1.15		
DRIVE END BEARING	80BC03JPP30A		DUTY	CONT	INSUL.CLASS		F					
OPP D.E. BEARING	80BC03JPP30A		ENCL	TEFC	CODE	F						
SER.NO.				POWER FACTOR		78	NEMA-NOM-EFFICIENCY				92.4	
						MAX CORR KVAR		17	GUARANTEED EFFICIENCY			91
	IP55					NEMA NOM/CSA QUOTED EFF						
	4:1CT AND 4:1VT ON VPWM INVERT					ER, 1.00SF			MOTOR WEIGHT			

Parts List

Part number	Description	Quantity
SA374282	SA A40-7122-0784	1.000 ea
RA364128	RA A40-7122-0784	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
000692000CY	N/P	2.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP2428L	WASHDOWN DUTY MOTOR, SS, CC, CSA-C	1.000 ea
412118006A	DRAIN	2.000 ea
034690005AB	PPLG 3/4 PLATED	1.000 ea
089412501A	BRKT FTMT G400 FIN MACH 6316 89412500WCA	1.000 ea
083198101H	G400 STD FAN COVER MACHINING	1.000 ea
034180012DA	KEY 1X4X1/4X1-1/2 L	1.000 ea
702618011RX	FAN 440 702618004T - 2.002 BORE 17.5 DI	1.000 ea
004824015A	GREASE POLYREX EM	0.880 lb
032018020EN	HHCS 5/8-11X2-1/2 304SS.	4.000 ea
032018008CN	HHCS 3/8-16X1 304 SS-360	4.000 ea
032018026CN	HHCS 3/8-16X3-1/4 304S.S	3.000 ea
415045002B	SLGR	1.000 ea
410700000DA	WAVY SPRING WASHER	1.000 ea
034001014AF	WSHR 3/8" 304S.S.- 440	4.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
034690001AB	1/8" NPT SQHDPLG	1.000 ea
034690002AB	PPLG 1/4" PLTD.	1.000 ea
089412501CH	G400 STD FT MNT BRKT MCHG 6316 BRG WITH	1.000 ea
032018020EN	HHCS 5/8-11X2-1/2 304SS.	4.000 ea
032018026CN	HHCS 3/8-16X3-1/4 304S.S	3.000 ea
415045002B	SLGR	1.000 ea
415028001CH	SEAL - 400	1.000 ea
076708141	CAST IRON 3" LEAD OUTLET	1.000 ea

065776000C	GASKET,MAIN CBOX, 320-400	1.000 ea
076709000A	C/B Cover - 360	1.000 ea
067053000B	GASK 320-400	1.000 ea
032018007AN	HHCS 1/4-20X7/8 304S.S	4.000 ea
032018010CN	HHCS 3/8-16X1-1/4 304S.	4.000 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
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
004824003AJF	WILKO781.01 WHITE2 COATS - MG1025W01	0.375 ga
033775004EA	DRSCR #6-1/4 304 S.S.	10.000 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

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	50	P	3/60	890	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
129/64.3	CONT	40/F	1.15	B	F	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
400784	418142-71-BE	---	---	.0347/.139		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	29.4	900	4.62	0	
1/4	12.5	32.8	897	40.3	88.7	
2/4	25.0	40.8	895	62.0	92.6	
3/4	37.5	51.6	892	73.0	93.2	
4/4	50.0	64.3	889	78.3	92.9	
5/4	62.5	78.7	885	80.6	92.2	
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES	
LOCKED ROTOR		0	140	415	346	
PULL UP		335	125	368	311	
BREAKDOWN		845	218	645	198	
FULL LOAD		889	100	296	64.3	
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA TYPICAL DATA-NEMA NOM. EFF. 92.4%						
		DR. BY	P.B. GREENE	A-C MOTOR PERFORMANCE DATA A40WG0784-R005 ISSUE DATE 09/11/19		
		CK. BY	K.W. KANOUFF			
		APP. BY	E.J. CHRISTIAN			
		DATE	08/11/89			

REL S.O.

 RPM **890**

 S.F. **1.15**

 ROTOR **418142-71-BE**

 FRAME **405T**

 VOLTS **230/460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **50**

 AMPS **129/64.3**

 CODE LETTER **F**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

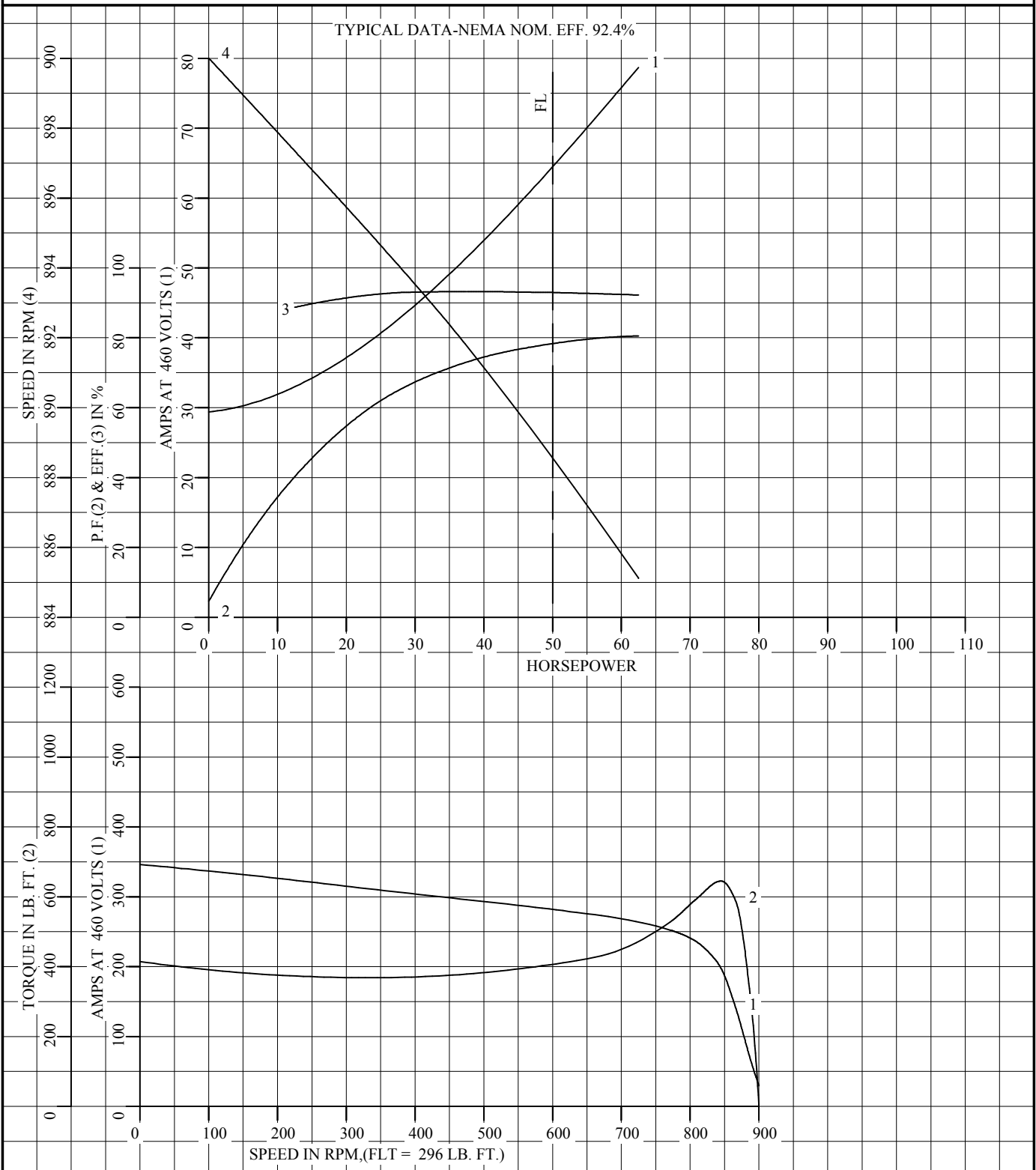
 STATOR RES. @ 25 °C **.0347/.139**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **400784**

OHMS (BETWEEN LINES)



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

BALDOR
A MEMBER OF THE ABB GROUP

DR. BY P.B. GREENE
CK. BY K.W. KANOUFF
APP. BY E.J. CHRISTIAN
DATE 08/11/89

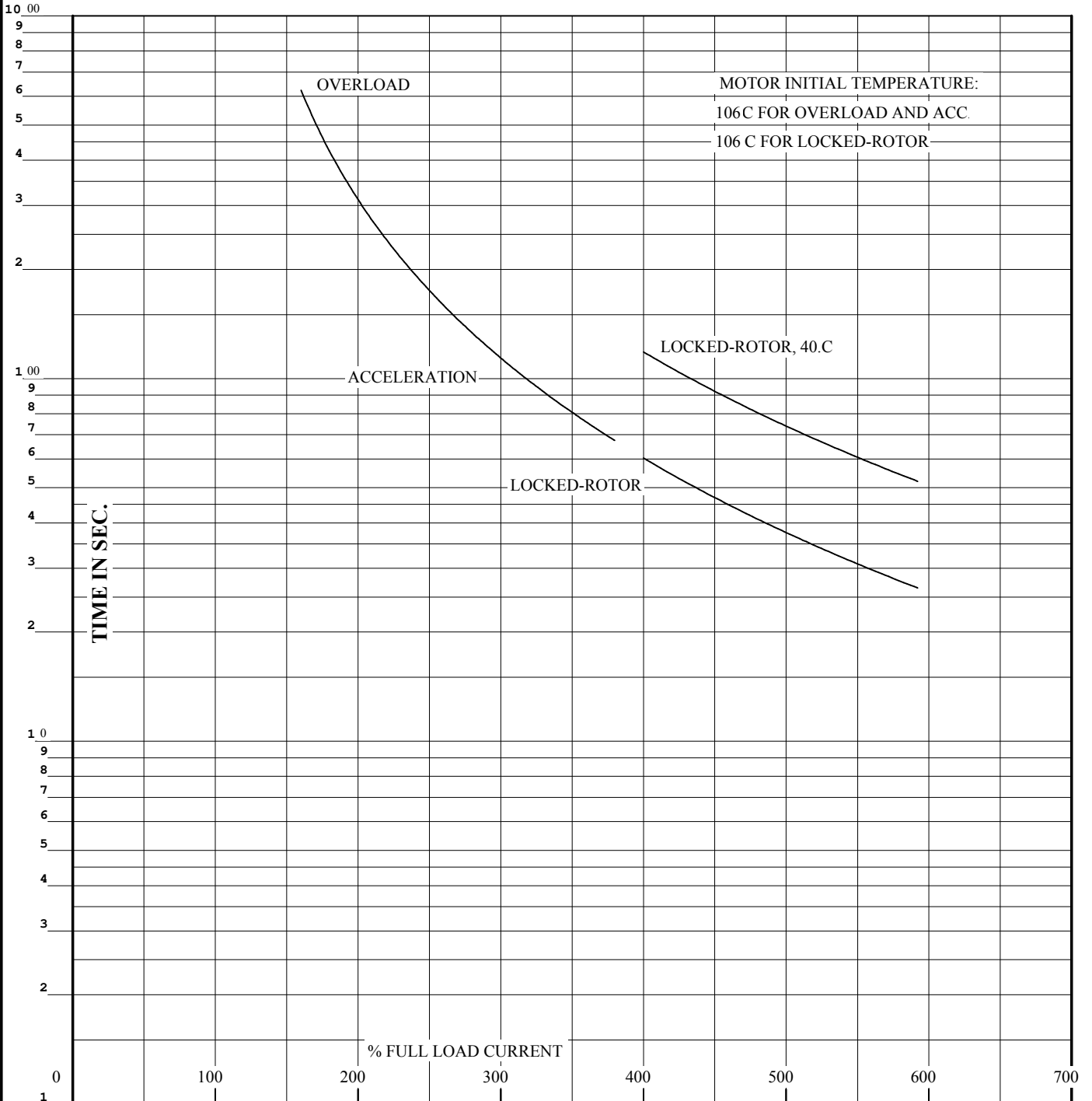
**A-C MOTOR
PERFORMANCE
CURVES**

A40WG0784-R005

ISSUE DATE 09/11/19

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REL. S.O.	RPM 890	S.F. 1.15	ROTOR 418142-71-BE
FRAME 405T	VOLTS 230/460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP 50	AMPS 129/64.3	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 400784	OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: TYPICAL DATA-NEMA NOM. EFF. 92.4%

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

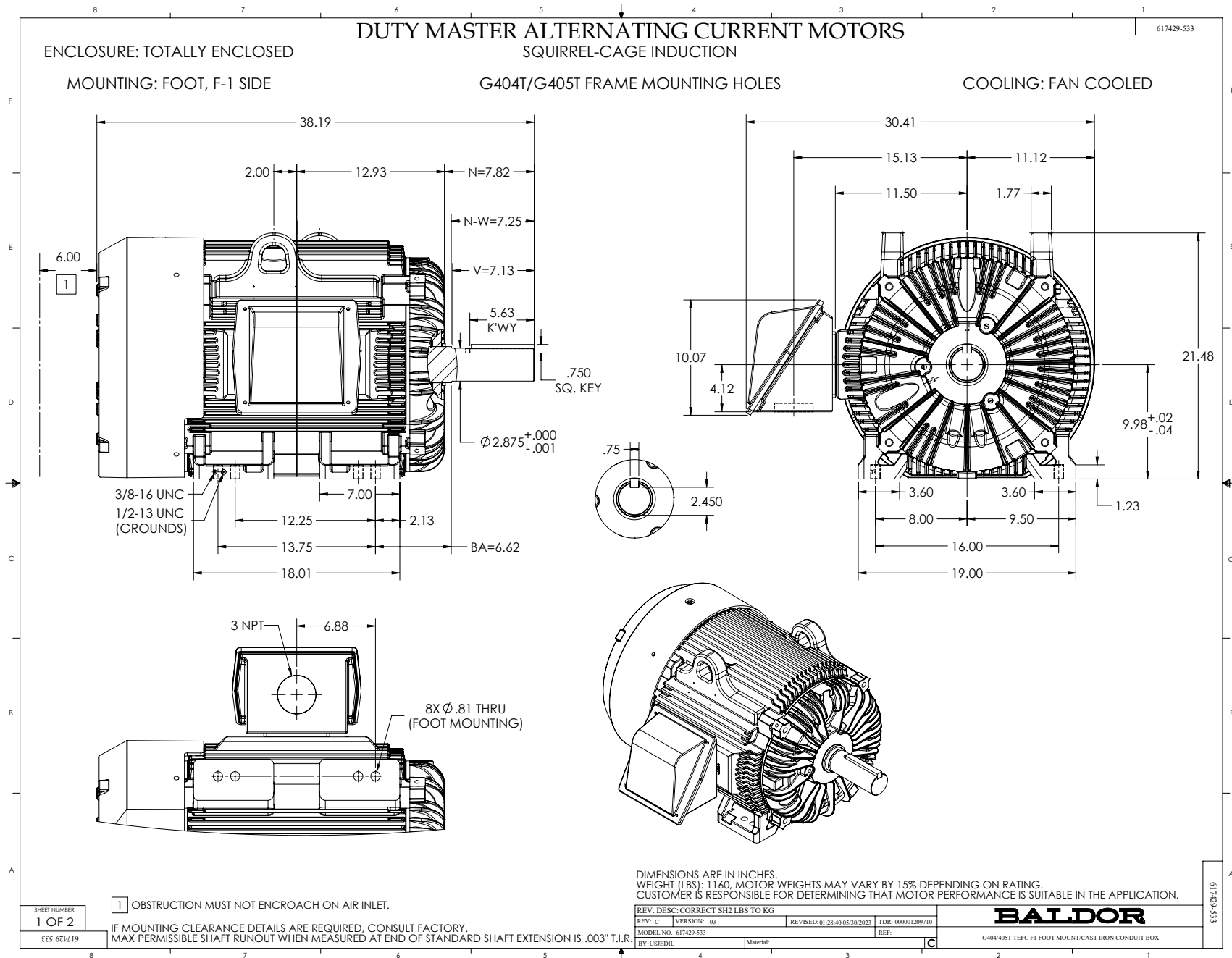


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**A-C MOTOR
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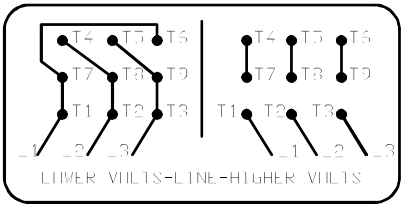
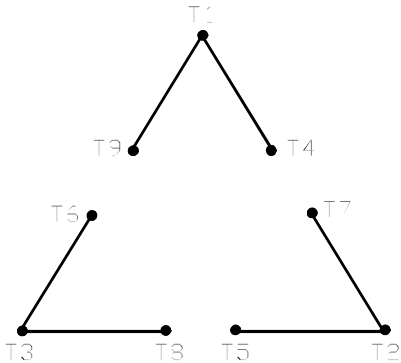
617429-533

COOLING: FAN COOLED



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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