

ABB BALDOR RELIANCE III

Customer information packet

ECP84410T-4

125HP, 1785, 3PH, 60HZ, 444T, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	444T
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	125.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UR CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	10-60
Current @ Voltage	144.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	144.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	IP56
KVA Code	G

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG3870
Layout	617434-660
Eff. date	12-10-2025
CD Diagram	416820-036
Poles	04
Leads	3#1/0
Proprietary	False
Created date	12-12-2018

Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 1/0 AWG
Motor Standards	None
Motor Type	A44076M
Mounting Arrangement	F1
No Load Current	44.8 a
Number of Poles	4
Overall Length	44.97 IN
Power Factor	85
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	3.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Phase Seq-Std Rot (CCWODE)
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	ECP84410T-4			SPEC NO.		A44-5000-3870							
HP	125	AMPS		144		VOLTS		460		DESIGN		B	
FRAME SIZE	444T	RPM		1785		HZ		60	AMB		40	SF 1.15	
D.E. BRG.DATA	6318			O.D.E. BRG.DATA			6318			PH 3		DUTY CONT INSUL.CLASS F	
D.E. BRG.	90BC03J30X			TYPE ENCL		TEFC		CODE G					
O.D.E. BRG.	90BC03J30X			POWER FACTOR			85			NEMA-NOM-EFFICIENCY 95.4			
3/4 LOAD EFF.	95.8	IP 56		MAX CORR KVAR				27.0		GUARANTEED EFFICIENCY 94.5			
TEMP CODE	T3	TEMP = 200											
CHP HZ	60-90	CT HZ 10-60		VT HZ		0-60							
INVERTER-TEMP-CODE	T3												
SER.NO.				MOTOR WEIGHT									

000613007EX				
CAT NO	ECP84410T-4	SPEC NO.	A44-5000-3870	
NO. ROTOR BARS	58	GREASE TYPE	POLYREX EM	
NO. SLOTS	72	NL AMPS AT RATED VOLTAGE		44.8
5 YEAR WARRANTY		WINDING RES @25 C	.03840	OHMS
MFG. DATE		SER.NO		

Parts List

Part number	Description	Quantity
SA364327	SA A44-5000-3870	1.000 ea
RA353651	RA A44-5000-3870	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
NP4566	SS INV IEEE841-2021,CLI DIV2,CURUS-E,CSA	1.000 ea
000613007EX	SS IEEE 841 EMBOSSED AUXILIARY NAMEPLATE	1.000 ea
000692000FF	N/P	1.000 ea
000692000JP	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
000692000VH	N/P (RELEASE 1000 PCS)	1.000 ea
421948051	LABEL, MYLAR	1.000 ea
004824015A	GREASE POLYREX EM	1.160 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
032620016LA	SOCKET SET SCREW-449	3.000 ea
034017014AB	LCKW 3/8 STD. PLATED	4.000 ea
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 ea
034530064AB	P/NIP 1/8 X 8" L Pipe Nipple	1.000 ea
034530064BB	P/NIP 1/4X8 PLATED	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
034690005AB	PPLG 3/4 PLATED	2.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
078548001R	FAN KB 234/150 (84) 400	1.000 ea
083199082RA	G28 SHORT FAN COVER W/BAFFLE ASSEMBLY	1.000 ea
089490099D	G28 BRKT 089490098WCA	1.000 ea
410700004A	WSHR	1.000 ea
415028079H	SEAL,.625 WIDE,318 BRG	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011D	WASHER	3.000 ea

032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
415915007G	GASK, LAC	1.000 ft
034530044AB	P/NIP 1/8X5-1/2L GALV.	1.000 ea
034530044BB	P/NIP 1/4X5-1/2L PLT	1.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034630002AB	CPLG 1/4" PLATED	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
089490099D	G28 BRKT 089490098WCA	1.000 ea
415028079H	SEAL,.625 WIDE,318 BRG	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
418151014G	RETAIN RING	1.000 ea
423709011D	WASHER	3.000 ea
702623013A	THERMAL BARRIER -- G28 -- BRACKET MTD	1.000 ea
032018008BK	HHCS 5/16-18X1L PLATED	4.000 ea
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
415000115H	T/LUG #2AWG-4/OAWG	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
067053001C	GASK 440	1.000 ea
076863000C	+CBCST BLKT - 440	1.000 ea
076864000A	*MFC MOVE* CBCST BLKT - 440	1.000 ea
406056007A	GASKET, 440	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.440 ga
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180054KA	7/8 SQ X 6.75 KEY	1.000 ea
MN416	TAG-INSTAL-MAINT w/wire. (1200/bx) 3/19	1.000 ea
PK5004A09	BASE 48 X 39-1/4 WITH STACKED 2X4 RUUNER	1.000 ea

LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
412118006A	DRAIN	2.000 ea

ABB BALDOR RELIANCE III S/O							CUSTOMER INFORMATION PACKET							ECP84410T-4 - 125HP, 1785, 3PH, 60HZ, 444T, TEFC, F1														
							FRAME			HP			TYPE			PHASE/ HERTZ			RPM			VOLTS						
							444			125			P			3/60			1785			460						
AMPS							DUTY			AMB °C/ INSUL			S.F.			NEMA DESIGN			CODE LETTER			ENCLOSURE						
144							CONT			40/F			1.15			B			G			TEFC						
E/S							ROTOR			TEST S.O.			TEST DATE			STATOR RES. @25 °C OHMS (BETWEEN LINES)												
498834							418143052KE			---			---			.0383												
PERFORMANCE																												
LOAD					HP			AMPERES					RPM					% POWER FACTOR					% EFFICIENCY					
NO LOAD					0			44.8					1800					4.44					0					
1/4					31.3			61.7					1796					51.1					92.8					
2/4					62.5			84.1					1792					73.0					95.3					
3/4					93.7			112					1788					81.7					95.7					
4/4					125			144					1784					85.3					95.5					
5/4					156			178					1780					86.6					95.1					
SPEED TORQUE																												
								RPM				TORQUE % FULL LOAD				TORQUE LB.-FT.				AMPERES								
LOCKED ROTOR								0				133				489				892								
PULL UP								270				114				420				875								
BREAKDOWN								1729				290				1067				500								
FULL LOAD								1784				100				368				144								
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.																												
TYPICAL DATA NEMA NOMINAL EFFICIENCY = 95.4PCT.																												
								DRAWN BY: <u>CD</u> CHECKED BY: <u>CD</u> APPROVED BY: <u>R. MCELVEEN</u> DATE: <u>1/18/11</u>								AC MOTOR PERFORMANCE DATA				A44WG3870-R001 DATE ISSUED 05/04/21								

FRAME 444

RPM 1785

S.F. 1.15

ROTOR 418143052KE

HP 125

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 144

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

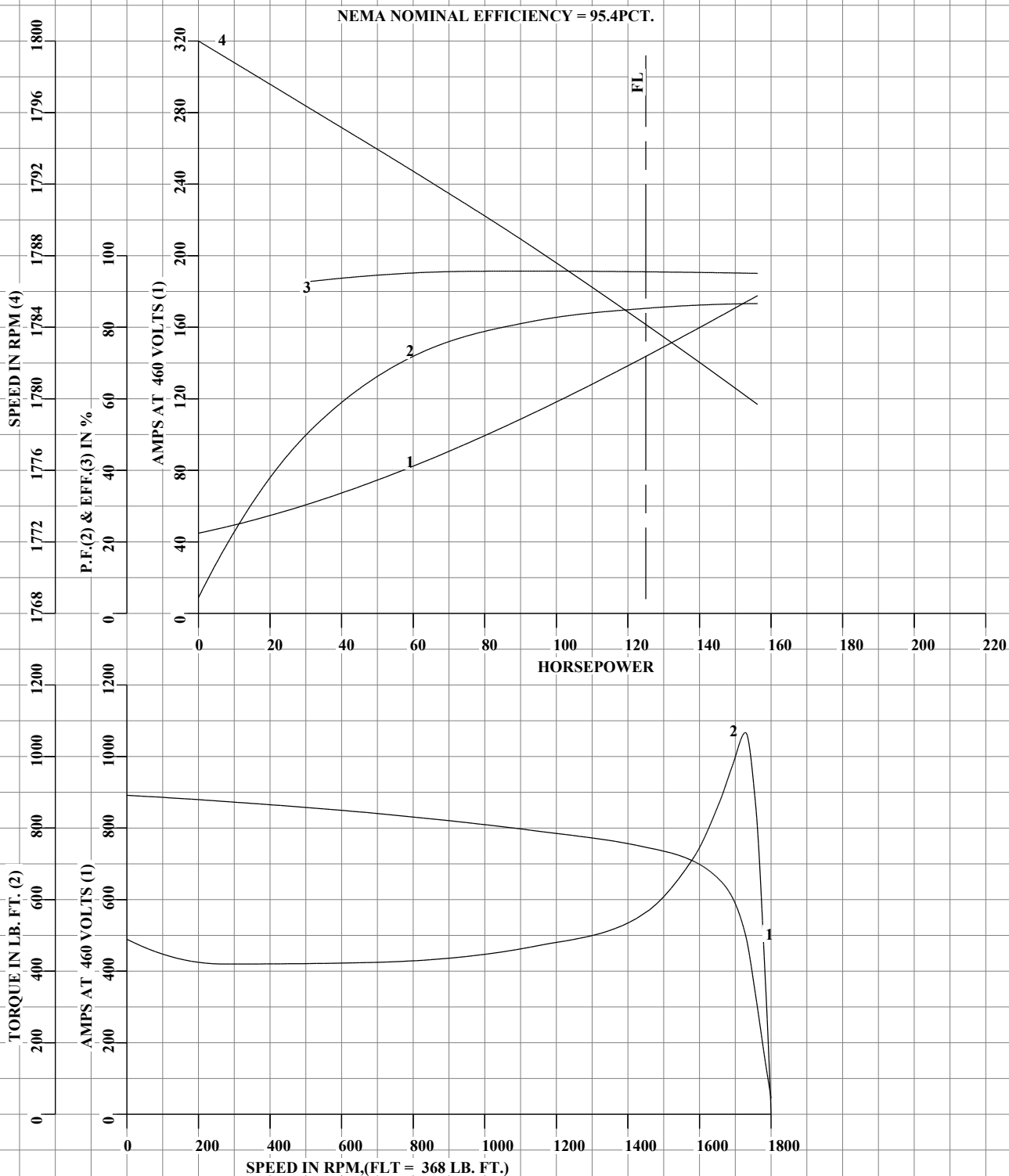
ENCLOSURE TEFC

STATOR RES. @ 25°C .0383

AMB °C / INSUL 40/F

E/S 498834

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: CD
CHECKED BY: CD
APPROVED BY: R. MCELVEEN
DATE: 1/18/11

AC MOTOR
PERFORMANCE
DATA

A44WG3870-R001

ISSUE DATE 05/04/21

FRAME 444

RPM 1785

S.F. 1.15

ROTOR 418143052KE

HP 125

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 144

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

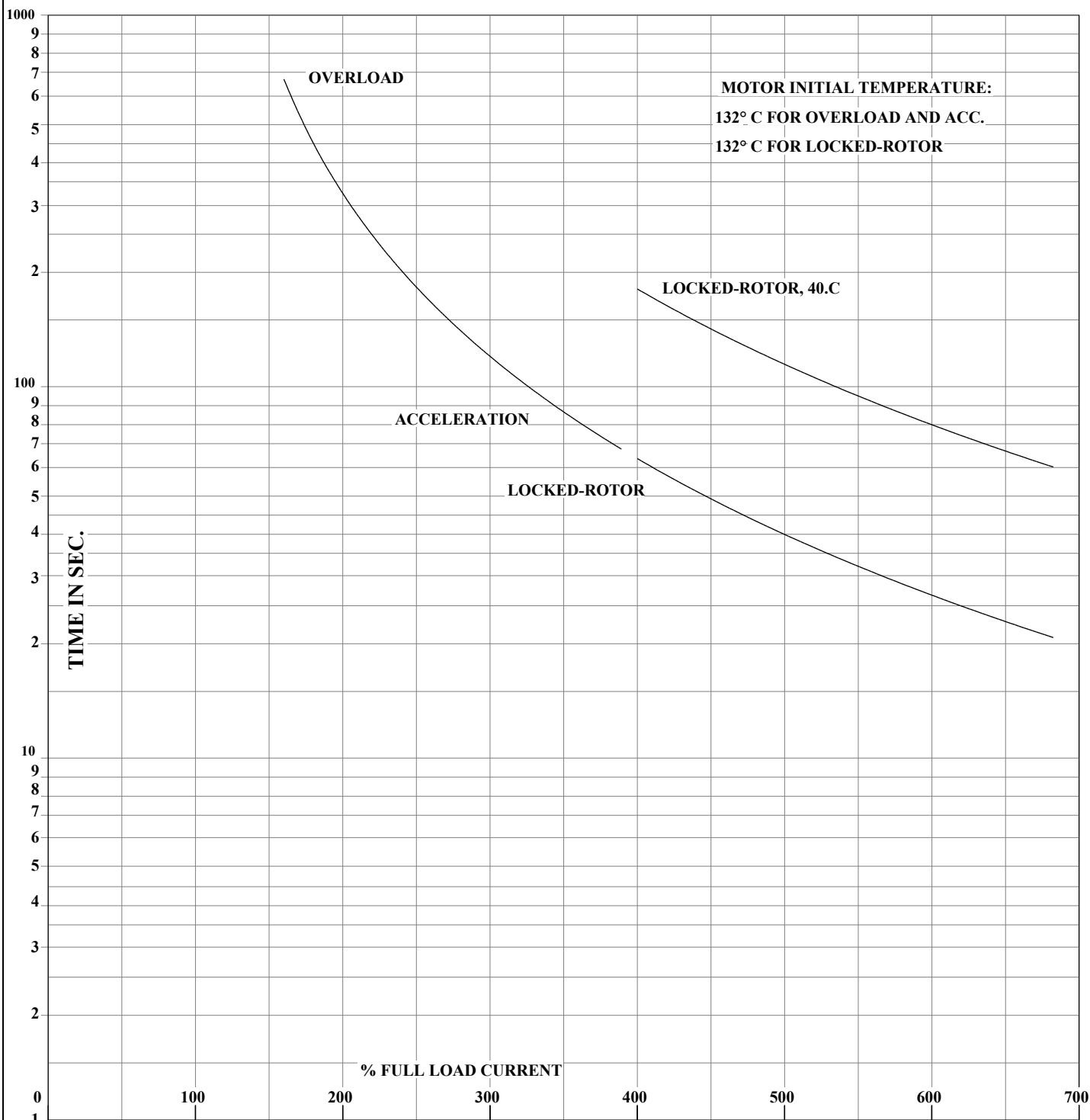
ENCLOSURE TEFC

STATOR RES. @ 25°C .0383

AMB °C / INSUL 40/F

E/S 498834

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
NEMA NOMINAL EFFICIENCY = 95.4PCT.

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

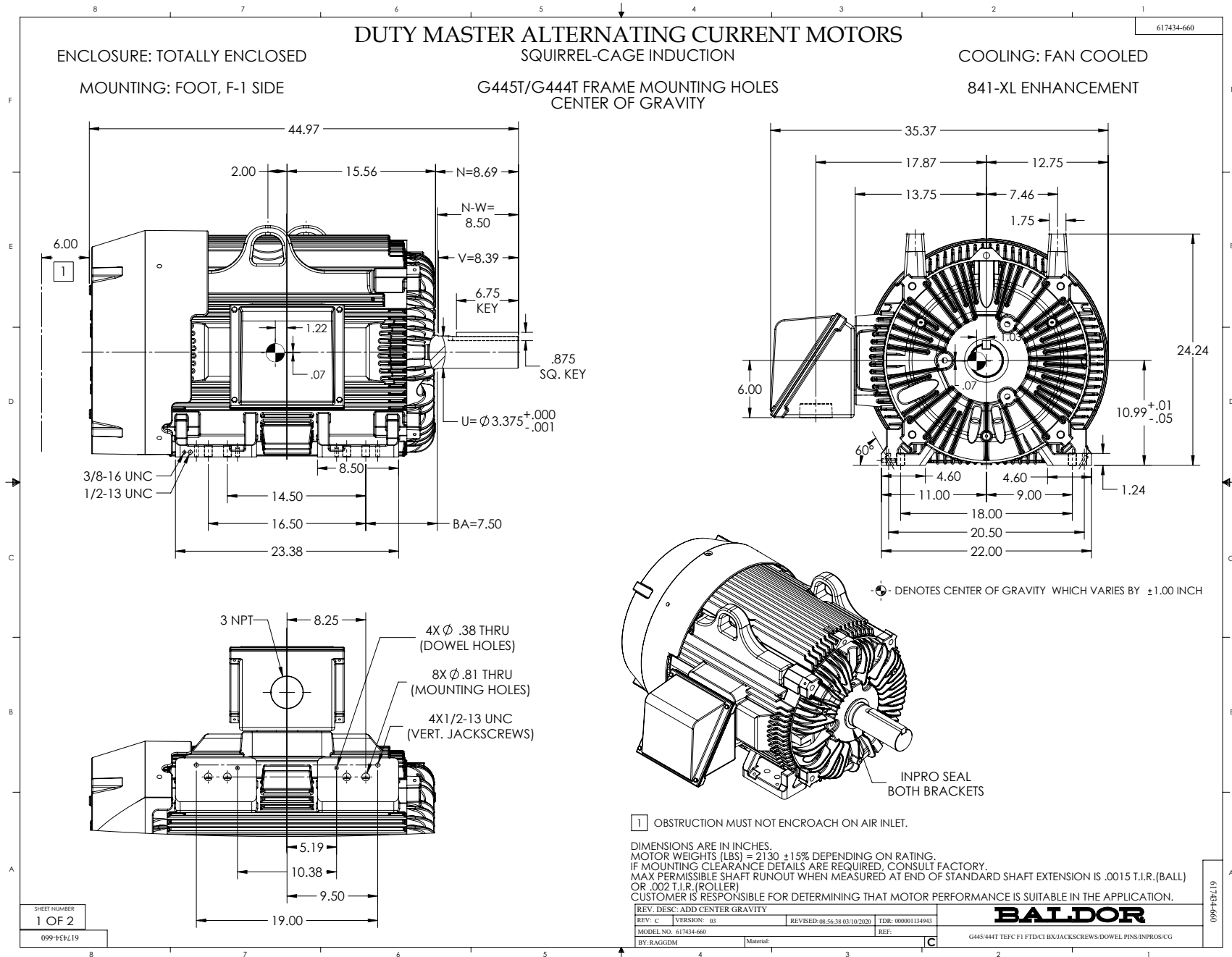


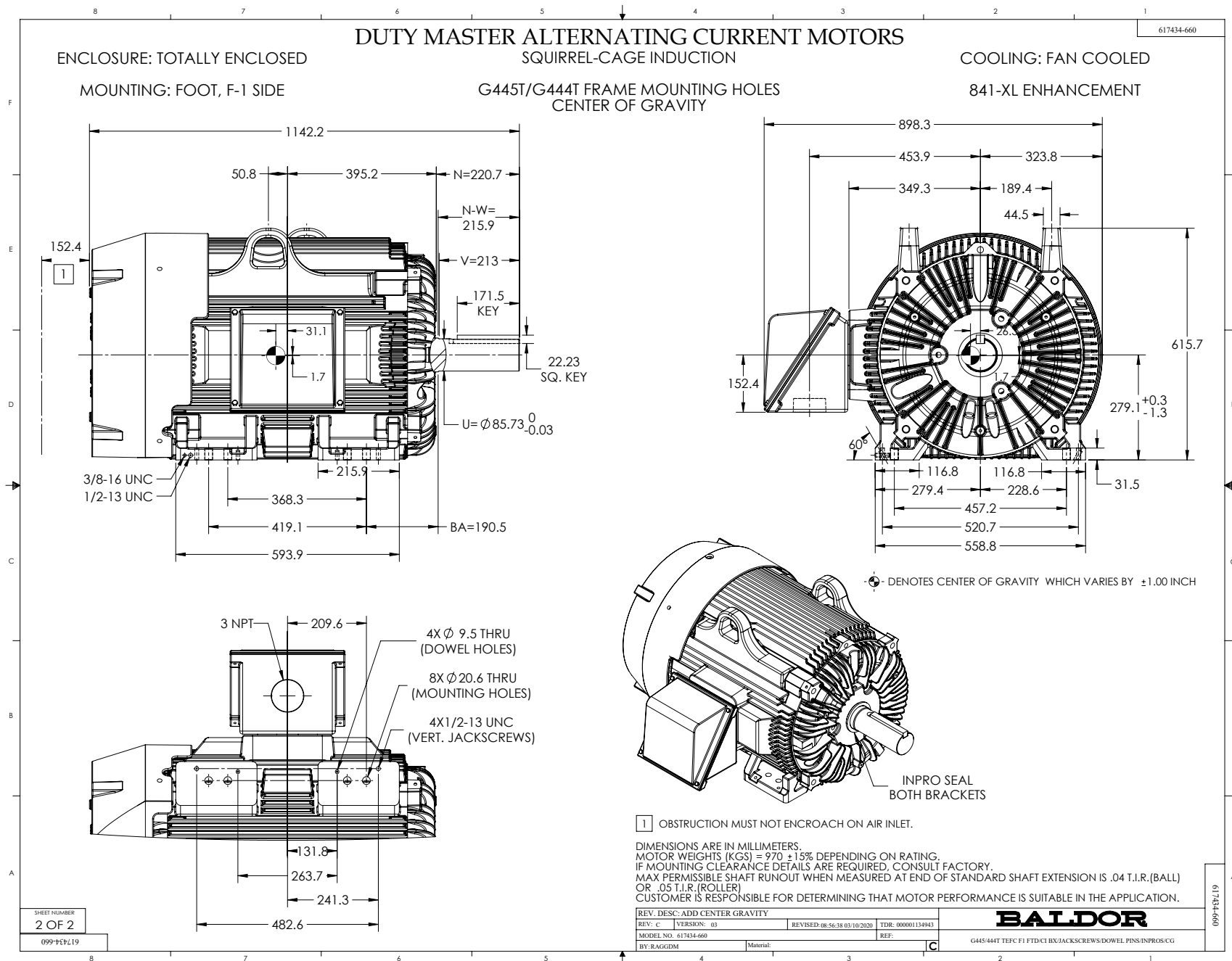
DRAWN BY: CD
CHECKED BY: CD
APPROVED BY: R. MCELVEEN
DATE: 1/18/11

AC MOTOR
PERFORMANCE
DATA

A44WG3870-R001

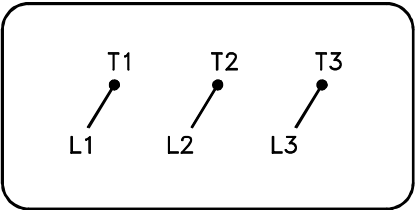
ISSUE DATE 05/04/21





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