

ABB BALDOR RELIANCE III

Customer information packet

ECP84400TR-4

100HP, 1785RPM, 3PH, 60HZ, 405T, A40072M, TEFC

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	405T
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	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	C UR US CCSA US CCSAUSEEV CURUS
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Mobil SHC 220 (Athens Only)
Constant Torque Speed Range	15-60
Current @ Voltage	115.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.4 %
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	115.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G

Part Detail

Revision	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A40WG5476
Layout	617429-818
Eff. date	06-19-2025
CD Diagram	416820-036
Poles	04
Leads	3#2
Proprietary	False
Created date	05-13-2025

Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	3 @ 2 AWG
Motor Standards	None
Motor Type	A40072M
Mounting Arrangement	F1
No Load Current	36.1 a
Number of Poles	4
Overall Length	38.19 IN
Power Factor	85
Pulley End Bearing Type	Roller
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	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4566															
CAT NO	ECP84400TR-4			SPEC NO.		A40-0025-5476									
HP	100	AMPS		115		VOLTS		460		DESIGN		B			
FRAME SIZE	405T	RPM		1785		HZ		60	AMB		40	SF 1.15			
D.E. BRG.DATA	NU316		O.D.E. BRG.DATA			6316			PH	3	DUTY		CONT	INSUL.CLASS	F
D.E. BRG.	80RUO3M30X			TYPE		ENCL		TEFC	CODE		G				
O.D.E. BRG.	80BC03J30X			POWER FACTOR			85		NEMA-NOM-EFFICIENCY			95.4			
3/4 LOAD EFF.	95.7	IP	56	MAX CORR KVAR				22		GUARANTEED EFFICIENCY			94.5		
TEMP CODE	T3	TEMP =		200											
CHP HZ	60-90	CT HZ		15-60		VT HZ		0-60							
INVERTER-TEMP-CODE	T3														
SER.NO.				MOTOR WEIGHT											

000613007EX				
CAT NO	ECP84400TR-4	SPEC NO.	A40-0025-5476	
NO. ROTOR BARS	47	GREASE TYPE	MOBIL SHC 220	
NO. SLOTS	60	NL AMPS AT RATED VOLTAGE		36.1
5 YEAR WARRANTY		WINDING RES @25 C	.0482	OHMS
MFG. DATE		SER.NO		

Parts List

Part number	Description	Quantity
SA438656	SA A40-0025-5476	1.000 ea
RA431027	RA A40-0025-5476	1.000 ea
000692000RT	N/P	1.000 ea
034001016AB	WSHR .562ID 1.375OD .109	1.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	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
415070001A	RUBBER MOUNT 3X3X1 THICK	1.000 ea
000692000FF	N/P	1.000 ea
000692000JP	N/P	1.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	1.000 ea
604797013R	447 FR. ROLLER BEARING MOTOR SHAFT	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
604799003C	PLASTIC BAG 42X32X46	1.000 ea
000692000VH	N/P (RELEASE 1000 PCS)	1.000 ea
033300014AC	HEX NUT, SHIPPING - 400	2.000 ea
034001016AB	WSHR .562ID 1.375OD .109	2.000 ea
034001014AB	FLAT WASHER 3/8"PLATED	2.000 ea
032510024D	CARRIAGE BOLT - 444	2.000 ea
604797045	STD. 400 FRAME SKID	1.000 ea
004824015AP	GREASE MOBILITH SHC 220	0.884 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
034180008DA	KEY 1/4X1/4X1 L (shipping)	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	1.000 ea
034530052AB	P/NIP 1/8X6-1/2 Zinc	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
078548001R	FAN KB 234/150 (84) 400	1.000 ea

083198101A	G400 STD FAN COVER MACHINING	1.000 ea
089412501C	G400 MACH 6316 FT MT BRKT 089412500WCA	1.000 ea
415028079G	SEAL,.625 WIDE,316 BRG	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea
032018020EK	HHCS 5/8-11X2-1/2 PLTD.	4.000 ea
032018024CK	HHCS 3/8-16X3 PLTD.	3.000 ea
034530040AB	P/NIP 1/8X5 GALV.	1.000 ea
034530040BB	P/NIP 1/4X5	1.000 ea
034631002AB	BUSH 1/4 TO 1/8 PLTD.	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
089412501C	G400 MACH 6316 FT MT BRKT 089412500WCA	1.000 ea
415028079G	SEAL,.625 WIDE,316 BRG	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea
032018010CK	HHCS 3/8-16X1-1/4 PLTD. 032018010CR	4.000 ea
033512008LB	HHTTS 1/4-20X1 PLATED	4.000 ea
034000014AB	WSH ID.406 OD.812 TH.065	4.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
067053000B	GASK 320-400	1.000 ea
076708000BB	CONDUIT BOX-360	1.000 ea
076709000A	C/B Cover - 360	1.000 ea
406099000A	PLUG - FAN COVER 320-440	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
415039016A	TERBD, 360-400	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	4.000 ea
034180044JA	KEY 3/4X3/4X5-1/2 L	1.000 ea
MG1025N19	WILKO 778.50 BLUE GREEN - 55 GAL DRUMS	0.375 ga
004824003CBY	WILKO PAINT 060.02 - ACTIVATOR	0.063 ga
421948051	LABEL, MYLAR	1.000 ea

000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
412118006A	DRAIN	2.000 ea

ECP84400TR-4 - 100HP, 1785RPM, 3PH, 60HZ, 405T, A40072M, TEFC						
ABB BALDOR RELIANCE III S/O	CUSTOMER INFORMATION FRAME	PACKET HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	405T	100	P	3/60	1785	460
AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
115	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
-	418142037CE	---	---	.0482		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR		% EFFICIENCY
NO LOAD	0	36.1	1800	4.27		0
1/4	25.0	48.4	1796	52.0		93.0
2/4	50.0	66.6	1792	73.7		95.4
3/4	75.0	89.4	1788	82.0		95.7
4/4	100	115	1783	85.3		95.5
5/4	125	143	1778	86.4		95.0
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.		AMPERES
LOCKED ROTOR		0	169	498		725
PULL UP		270	145	427		674
BREAKDOWN		1719	255	751		382
FULL LOAD		1783	100	295		115
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.						
TYPICAL DATA 95.4 PCT NOMINAL EFFICIENCY						
		DRAWN BY: <u>W. L. SMITH</u> CHECKED BY: <u>J. P. TSAO</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>02/28/20</u>		AC MOTOR PERFORMANCE DATA		A40WG5476-R002 DATE ISSUED 08/28/23

FRAME 405T

RPM 1785

S.F. 1.15

ROTOR 418142037CE

HP 100

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 115

CODE LETTER G

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

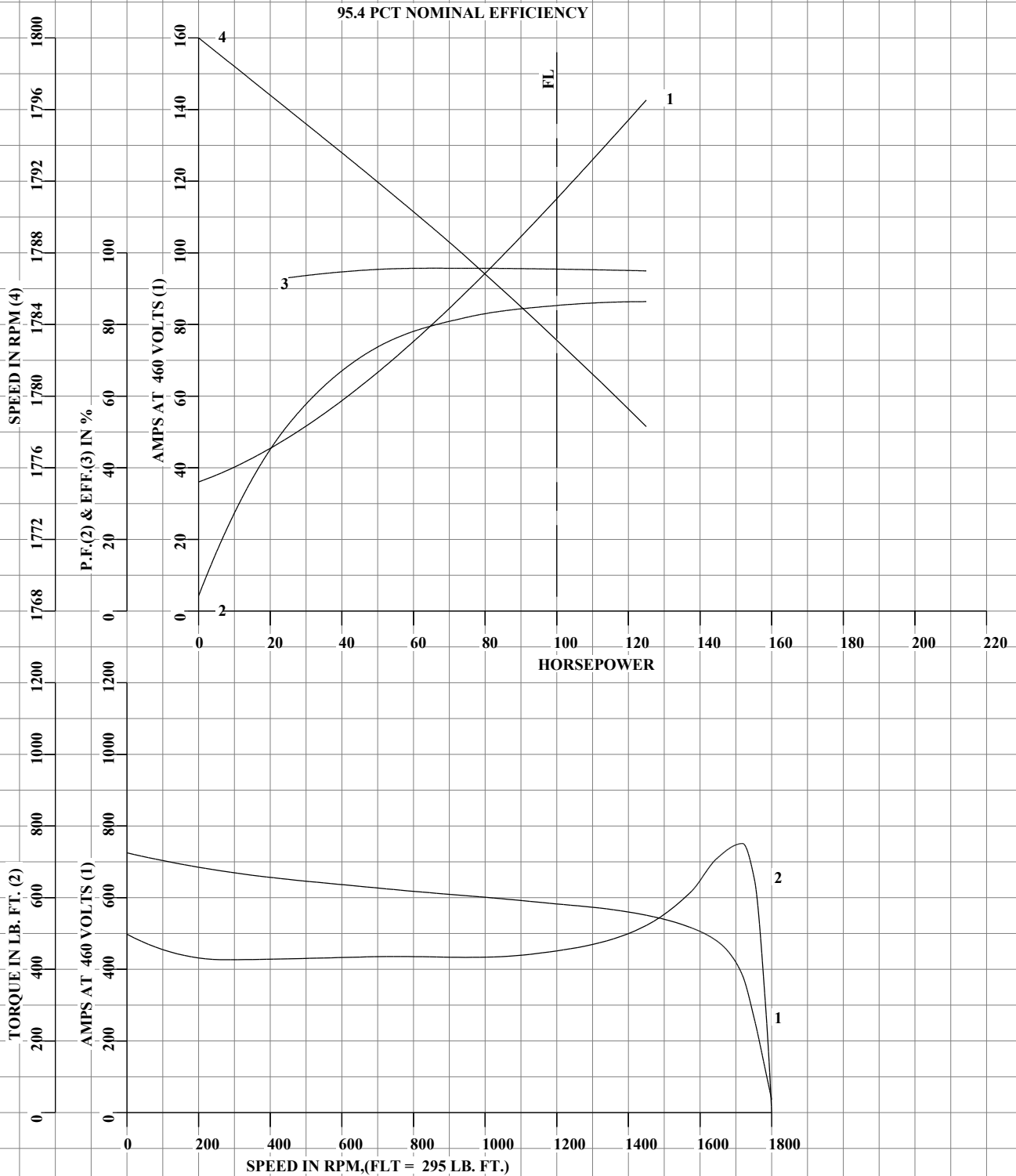
ENCLOSURE TEFC

STATOR RES. @ 25°C .0482

AMB °C / INSUL 40/F

E/S -

OHMS (BETWEEN LINES)



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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AC MOTOR
 PERFORMANCE
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ISSUE DATE 08/28/23

FRAME 405T

RPM 1785

S.F. 1.15

ROTOR 418142037CE

HP 100

VOLTS 460

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DUTY CONT

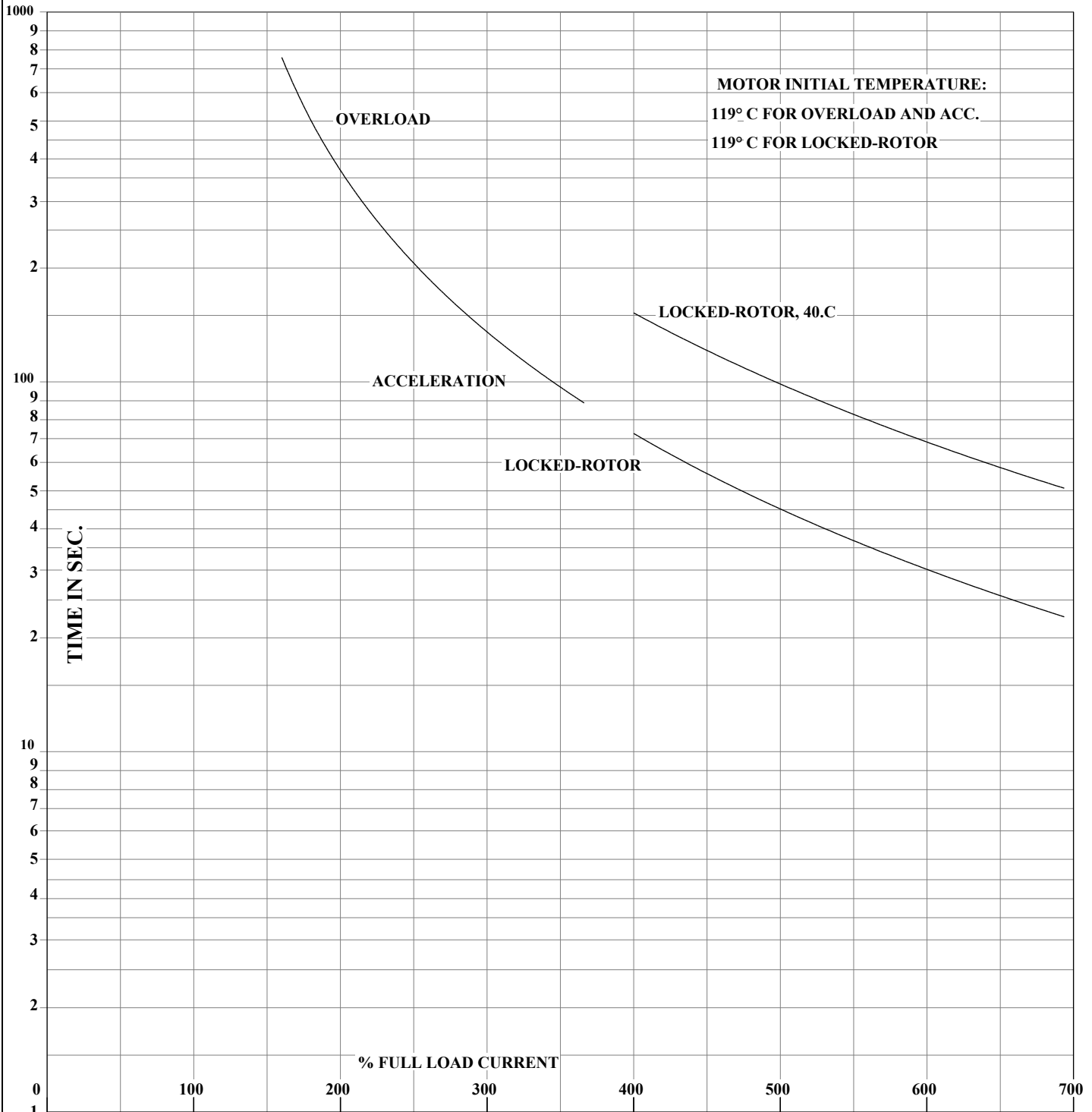
ENCLOSURE TEFC

STATOR RES. @ 25°C .0482

AMB °C / INSUL 40/F

E/S -

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE
95.4 PCT NOMINAL EFFICIENCY

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

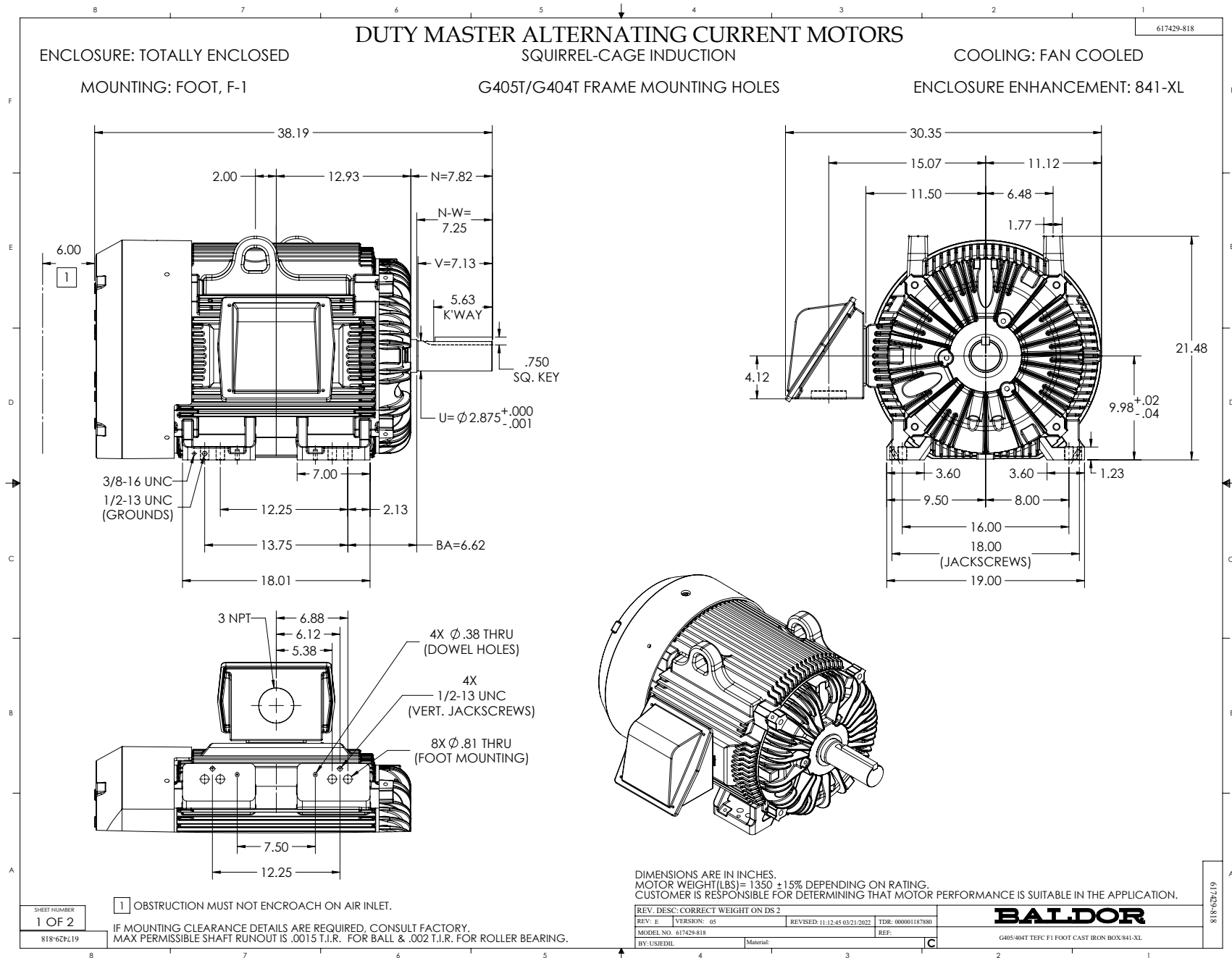


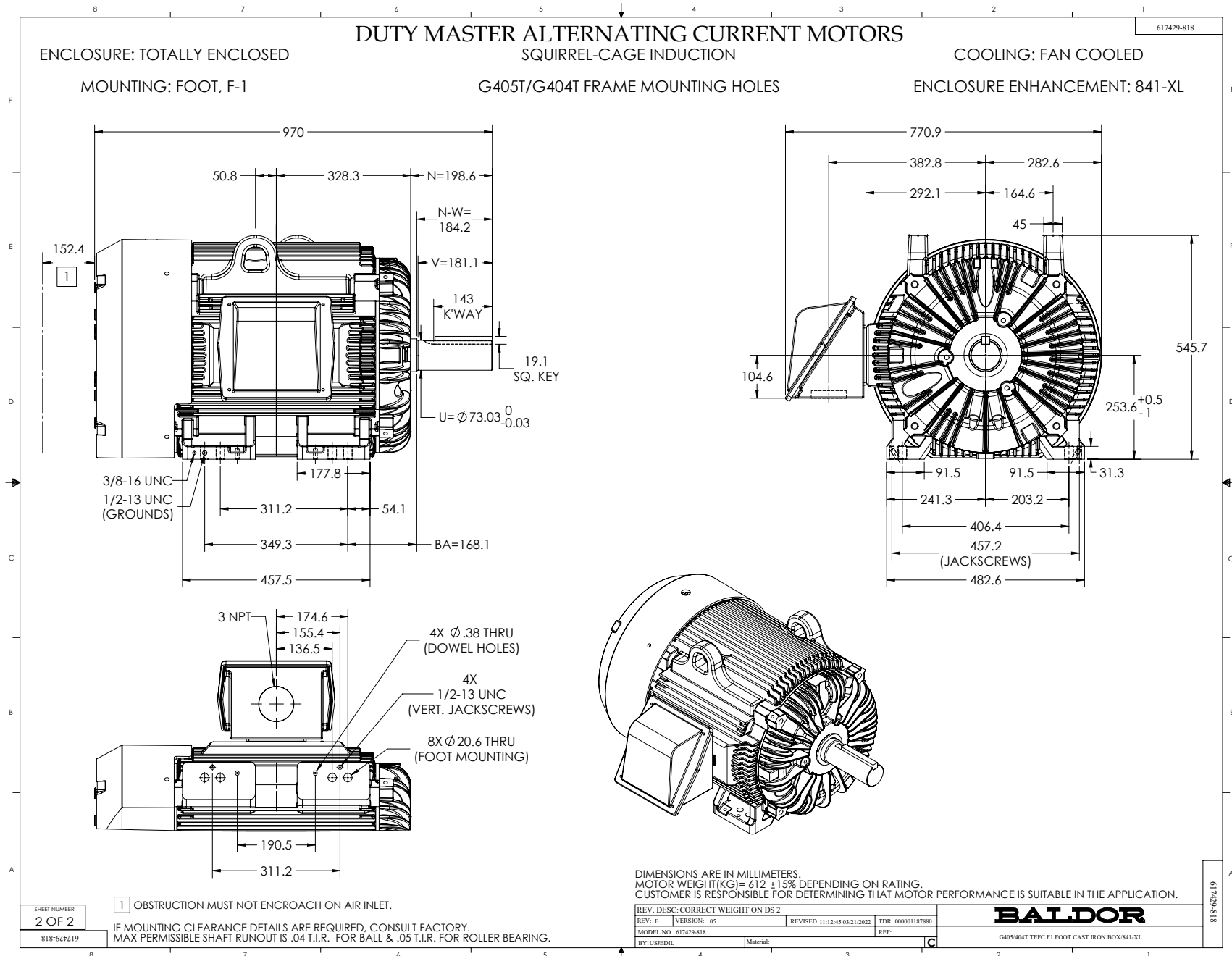
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AC MOTOR
PERFORMANCE
DATA

A40WG5476-R002

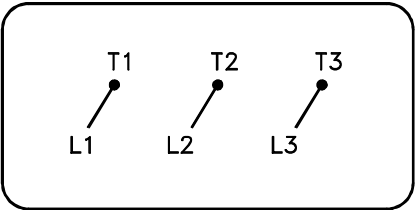
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416820-036

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