

ABB BALDOR RELIANCE III

Customer information packet

ECP49454T-4

450HP, 1785RPM, 3PH, 60HZ, L 449T, A44208M, TE

Class - None

Division - Division II

Specifications

Enclosure	TEFC
Frame	L449T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	450.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Constant Torque Speed Range	30-60
Current @ Voltage	501.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Feedback Device	NO FEEDBACK
Frame Prefix	L
Haz Area Temp Code	T2C
Heater Indicator	Heater Included, 115 V
High Voltage Full Load Amps	501.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	F
Lifting Lugs	No Lifting Lugs

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG4196
Layout	617423-352
Eff. date	10-24-2024
CD Diagram	416820-036
Poles	04
Leads	3#1 (04 per group)
Proprietary	False
Created date	10-13-2016

Motor Lead Quantity/Wire Size	12 @ 1 AWG
Motor Standards	NEMA
Motor Type	A44208M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	60.21 IN
Power Factor	87
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	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1785 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	RTD Only

Nameplate

NP3238																
CAT NO	ECP49454T-4				SPEC NO.		P44G5920									
HP	450	AMPS		501		VOLTS		460		DESIGN		B				
FRAME	L 449T		RPM		1785	HZ	60	AMB		40	SF		1.15			
D.E. BRG.DATA	6222		O.D.E. BRG.DATA				6318		PH		3	DUTY		CONT	INSUL.CLASS	P
D.E. BRG.	110BC02J30X				TYPE		P	ENCL		TEFC	CODE		F			
O.D.E. BRG.	90BC03J30X				POWER FACTOR				87		NEMA NOM EFFICIENCY				96.2	
3/4 LOAD EFF.	96.5		MAX CORR KVAR				54.0		GUARANTEED EFFICIENCY				95.4			
TEMP CODE	T2C		TEMP =		230											
CHP HZ	60-90		CT HZ		30-60		VT HZ		6-60							
INVERTER-TEMP-CODE																
SER.NO.						MOTOR WEIGHT										

ECP49454T-4 - 450HP, 1785RPM, 3PH, 60HZ, L 449T, A44208M, TE						
CUSTOMER INFORMATION PACKET	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	L449T	450	P	3/60	1785	460
AMPS	DUTY	AMB °C/ INSUL	S.F.	NEMA DESIGN	CODE LETTER	ENCLOSURE
501	CONT	40/F	1.15	B	F	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
---	418143-48-RE	---	---	.00654		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR		% EFFICIENCY
NO LOAD	0	144	1800	4.45		0
1/4	113	185	1796	60.7		93.8
2/4	225	270	1793	81.2		95.9
3/4	337	378	1789	86.8		96.3
4/4	450	501	1785	87.4		96.2
5/4	562	638	1780	86.1		95.8
SPEED TORQUE						
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.		AMPERES
LOCKED ROTOR		0	166	2196		3020
PULL UP		1130	142	1883		2653
BREAKDOWN		1727	270	3572		1818
FULL LOAD		1785	100	1324		501
AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.						
TYPICAL DATA XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 96.2 PCT. GUARANTEED MIN. EFF. 95.4 PCT.						
		DRAWN BY: <u>G. R. WEBB</u> CHECKED BY: <u>W. L. SMITH</u> APPROVED BY: <u>W. L. SMITH</u> DATE: <u>08/22/14</u>		AC MOTOR PERFORMANCE DATA	A44WG4196-R001 DATE ISSUED 06/18/19	

FRAME L449T

RPM 1785

S.F. 1.15

ROTOR 418143-48-RE

HP 450

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

TYPE P

AMPS 501

CODE LETTER F

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

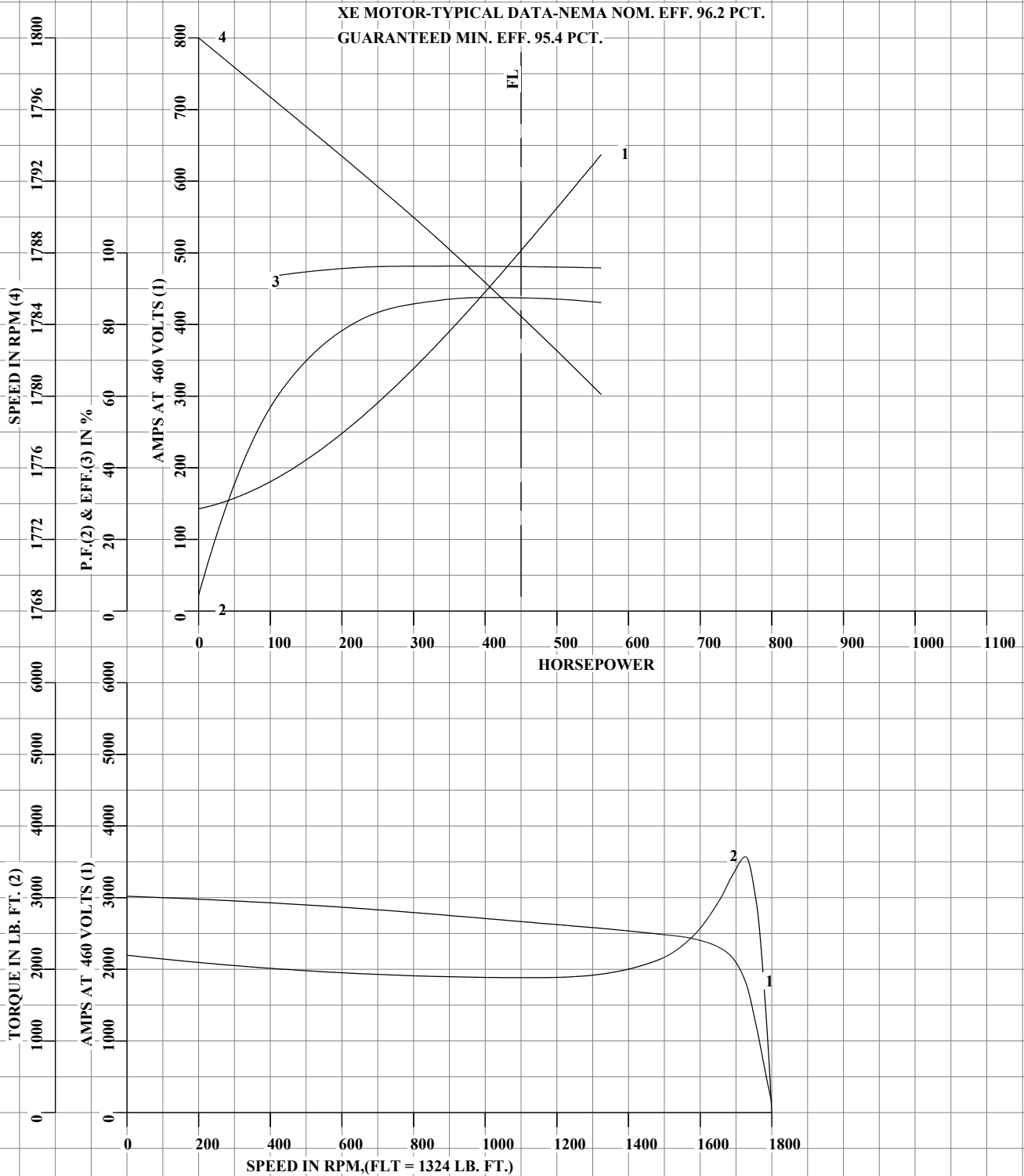
ENCLOSURE TEFC

STATOR RES. @ 25°C .00654

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
DATA

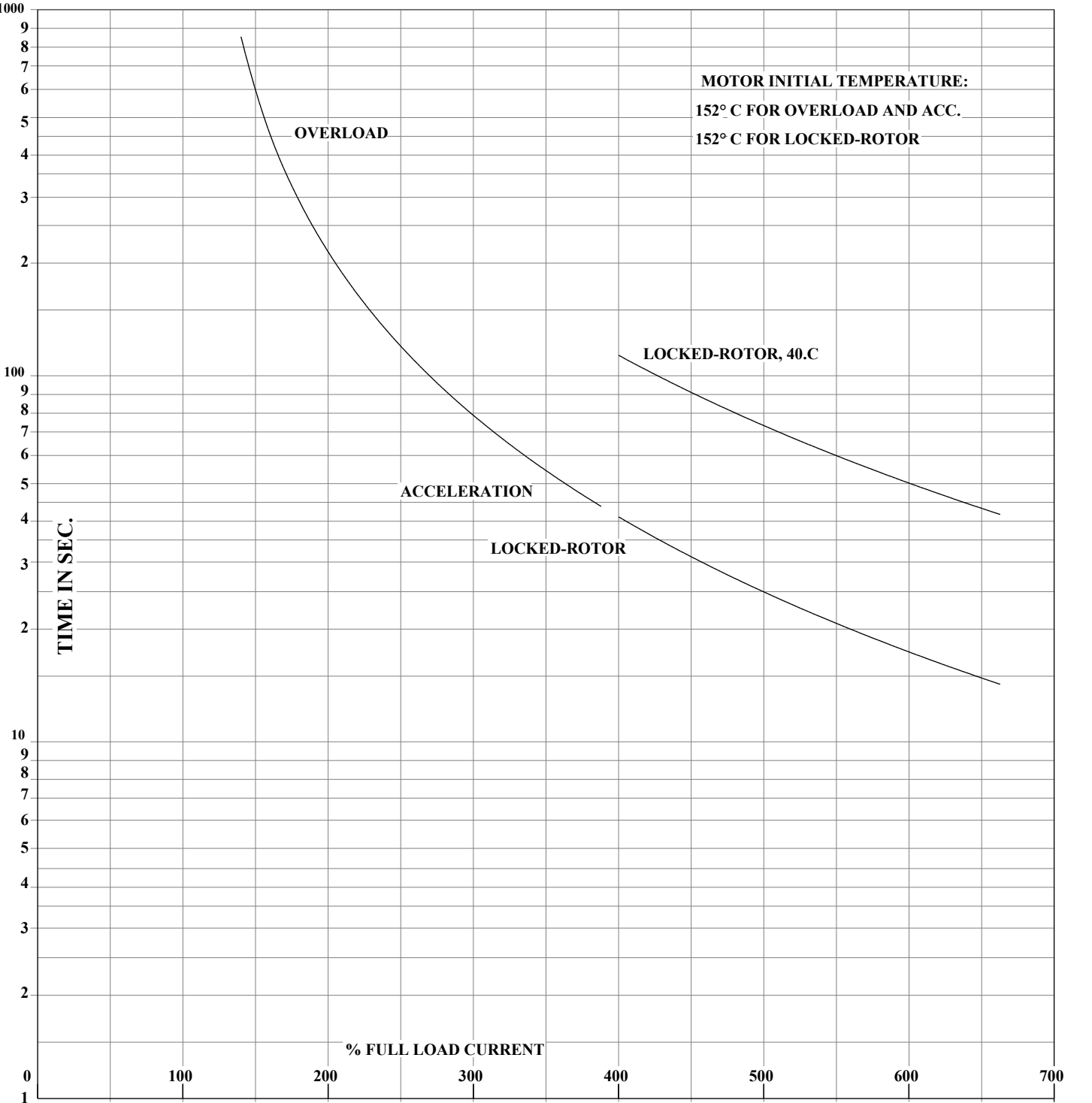
A44WG4196-R001

ISSUE DATE 06/18/19

CUSTOMER INFORMATION PACKET
RPM 1785
VOLTS 460
AMPS 501
DUTY CONT
AMB °C / INSUL 40/F

ECP4945AT-4 1.15HP, 1785RPM, 3PH, 60 HZ, L449T, A44WG4196-R001
S.F. 1.15
NEMA DESIGN B
CODE LETTER F
ENCLOSURE TEFC
E/S ---

ROTOR 418143-48-RE
TEST S.O. TYPICAL DATA
TEST DATE ---
STATOR RES. @ 25°C .00654
OHMS (BETWEEN LINES)



**THERMAL LIMIT CURVE
XE MOTOR-TYPICAL DATA-NEMA NOM. EFF. 96.2 PCT.**

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

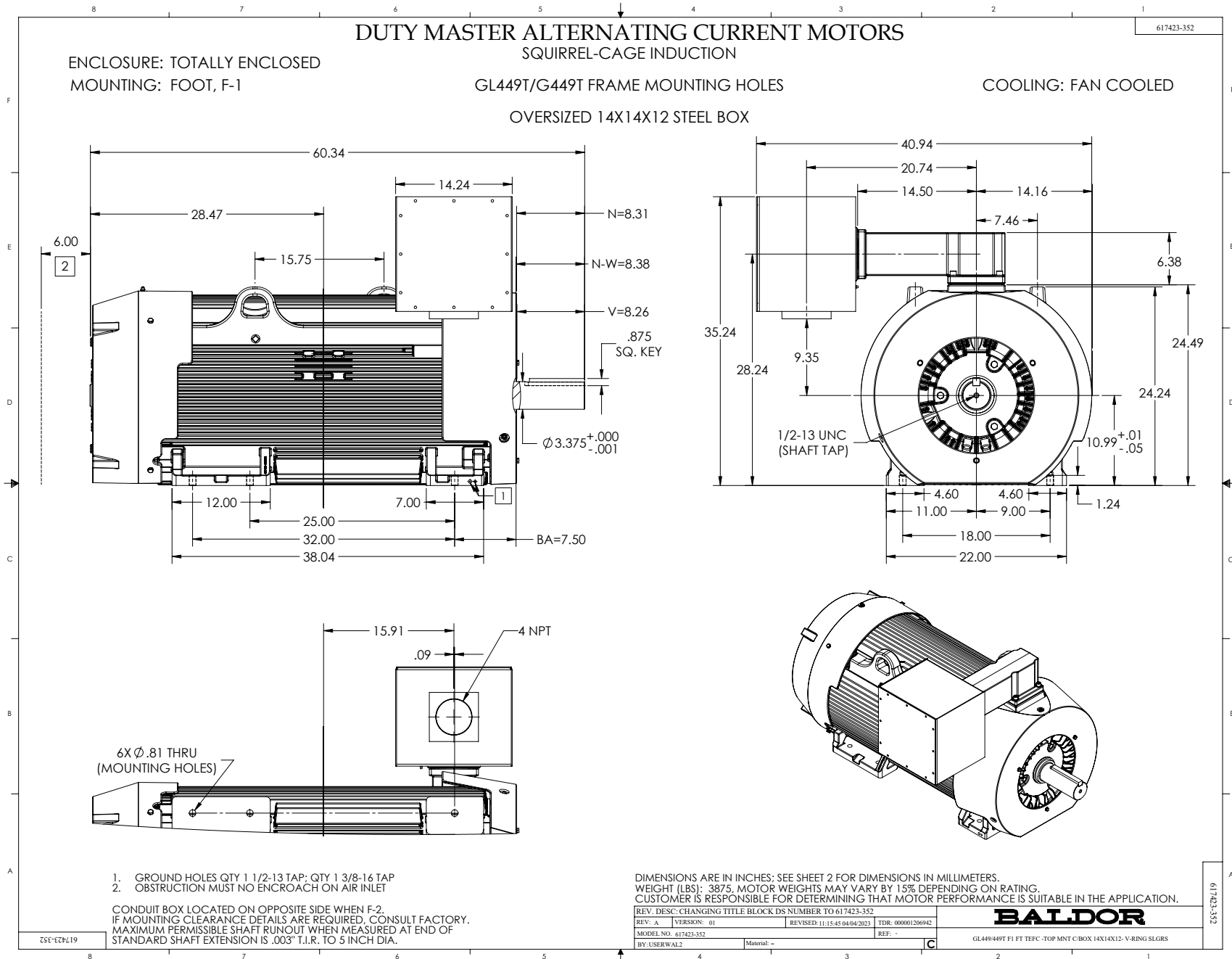


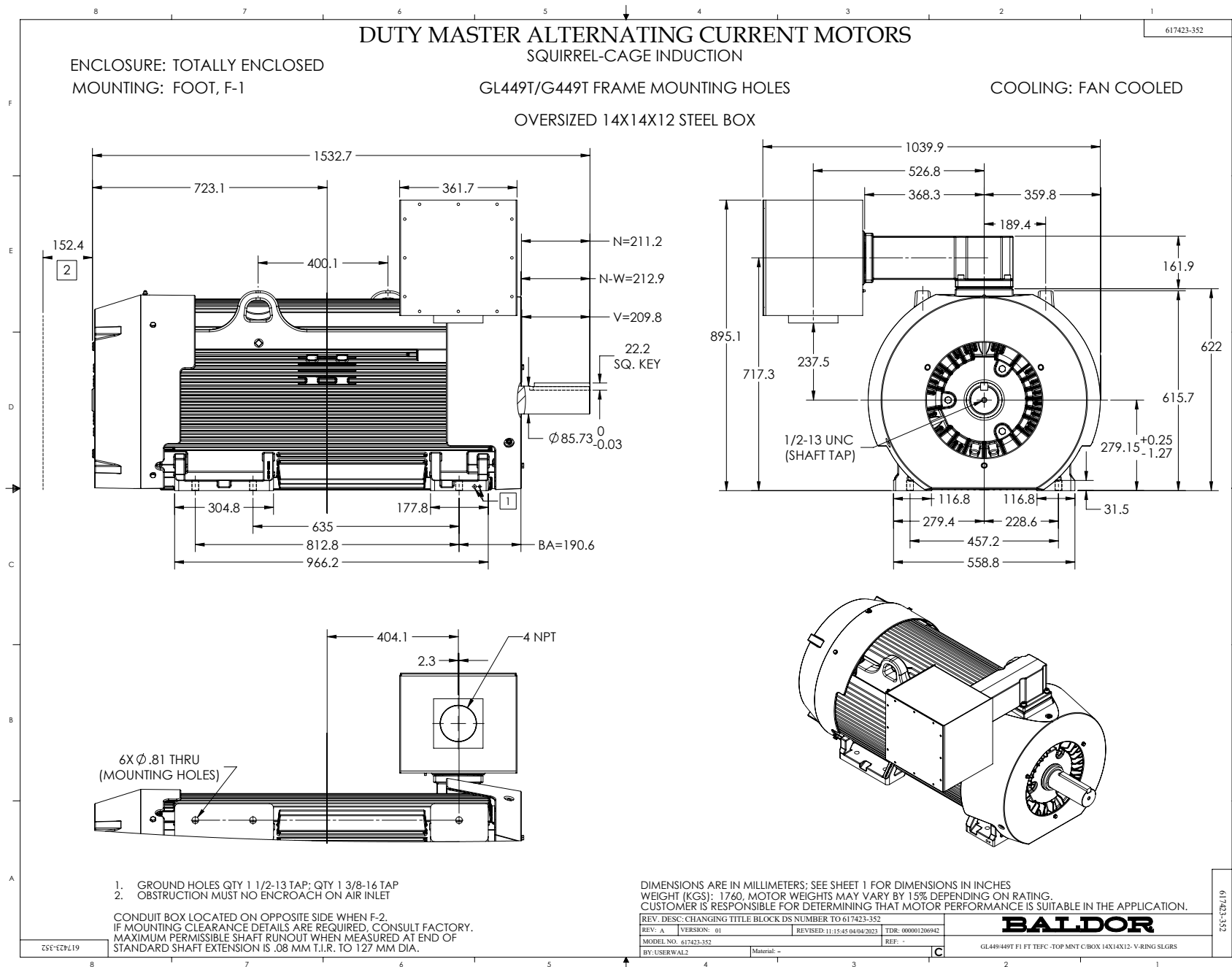
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**AC MOTOR
PERFORMANCE
DATA**

A44WG4196-R001

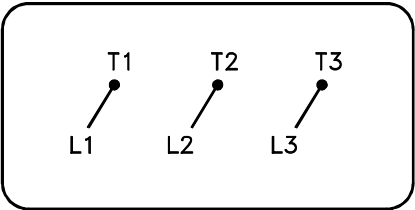
ISSUE DATE 06/18/19





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