

ABB BALDOR RELIANCE III

Customer information packet

ECP84413T-4

150HP, 3570RPM, 3PH, 60HZ, 445TS, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	445TS
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	150.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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	164.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3
Heater Indicator	No Heater
High Voltage Full Load Amps	164.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	IP56
KVA Code	G

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG3535
Layout	617434-659
Eff. date	12-11-2023
CD Diagram	416820-036
Poles	02
Leads	3#2 (02 per group)
Proprietary	False
Created date	12-12-2018

Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 2 AWG
Motor Standards	None
Motor Type	A4478M
Mounting Arrangement	F1
No Load Current	34.7 a
Number of Poles	2
Overall Length	41.22 IN
Power Factor	90
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	2.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3570 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP4566														
CAT NO	ECP84413T-4			SPEC NO.		A44-8878-3535								
HP	150	AMPS		164		VOLTS		460		DESIGN		B		
FRAME SIZE	445TS	RPM		3570		HZ		60	AMB		40	SF 1.15		
D.E. BRG.DATA	6313			O.D.E. BRG.DATA		6313			PH 3		DUTY		CONT	INSUL.CLASS
D.E. BRG.	65BC03J30X			TYPE ENCL		TEFC		CODE G						
O.D.E. BRG.	65BC03J30X			POWER FACTOR			90			NEMA-NOM-EFFICIENCY			95	
3/4 LOAD EFF.	95.3	IP 56		MAX CORR KVAR				20.0		GUARANTEED EFFICIENCY			94.1	
TEMP CODE	T3	TEMP =		200										
CHP HZ	60-75	CT HZ		10-60		VT HZ		0-60						
INVERTER-TEMP-CODE	T3													
SER.NO.				MOTOR WEIGHT										

000613007EX				
CAT NO	ECP84413T-4	SPEC NO.	A44-8878-3535	
NO. ROTOR BARS	40	GREASE TYPE	POLYREX EM	
NO. SLOTS	48	NL AMPS AT RATED VOLTAGE		34.7
5 YEAR WARRANTY		WINDING RES @25 C	.02926	OHMS
MFG. DATE		SER.NO		
	SFA 188			

Parts List

Part number	Description	Quantity
SA364142	SA A44-8878-3535	1.000 ea
RA353453	RA A44-8878-3535	1.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	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	0.540 lb
032018008CK	HHCS 3/8-16X1L PLATED	4.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018022CK	HHCS 3/8-16X2-3/4 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
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 ea
034530072BB	PIPE NIPPLE,DE - 440-BS	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
083199082RA	G28 SHORT FAN COVER W/BAFFLE ASSEMBLY	1.000 ea
089490097C	BRKT,DE	1.000 ea
410700004F	WSHR	1.000 ea
415028079E	INPRO SEAL,,625 WIDE,313 BRG	1.000 ea
415072001B	CLAMP	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea

078546004C	FAN 440 702675001D	1.000 ea
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 ea
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 ea
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 ea
032018022CK	HHCS 3/8-16X2-3/4 PLTD	3.000 ea
415915007K	GASK, 26" LAC	1.000 ea
034017013AB	LCKW 5/16 STD. PLATED	3.000 ea
034530056AB	1/8 X 7 PP NIPPLE	1.000 ea
034530056BB	P/NIP 1/4X7 SCHED 40	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
089490097C	BRKT,DE	1.000 ea
415028079E	INPRO SEAL,.625 WIDE,313 BRG	1.000 ea
415096002A	CPLG 1/8 HEX TYPE	1.000 ea
423709011C	WASHER	3.000 ea
702623012A	THERMAL BARRIER, G28	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
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
415000115H	T/LUG #2AWG-4/0AWG	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
034180024HA	KEY 5/8X5/8X3 L	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

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	445TS	150	P	3/60	3570	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
164	CONT	40/F	1.15	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
0	0	---	---	.0292		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	34.7	3600	6.89	0	
1/4	37.5	59.2	3593	63.9	92.9	
2/4	75.1	90.3	3585	81.7	95.3	
3/4	113	125	3578	87.8	95.7	
4/4	150	164	3570	89.9	95.6	
5/4	187	204	3562	90.4	95.2	
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	138	304	1081		
PULL UP	288	110	242	997		
BREAKDOWN	3461	280	618	552		
FULL LOAD	3570	100	221	164		
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA NEMA NOMINAL EFFICIENCY = 95.0 PCT.						
		DR. BY <u>CD</u> CK. BY <u>CD</u> APP. BY <u>R. MCELVEEN</u> DATE <u>1/18/11</u>		A-C MOTOR PERFORMANCE DATA A44WG3535-R003 ISSUE DATE 02/27/19		

REL S.O.

 RPM **3570**

 S.F. **1.15**

 ROTOR **0**

 FRAME **445TS**

 VOLTS **460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **150**

 AMPS **164**

 CODE LETTER **G**

TEST DATE ---

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

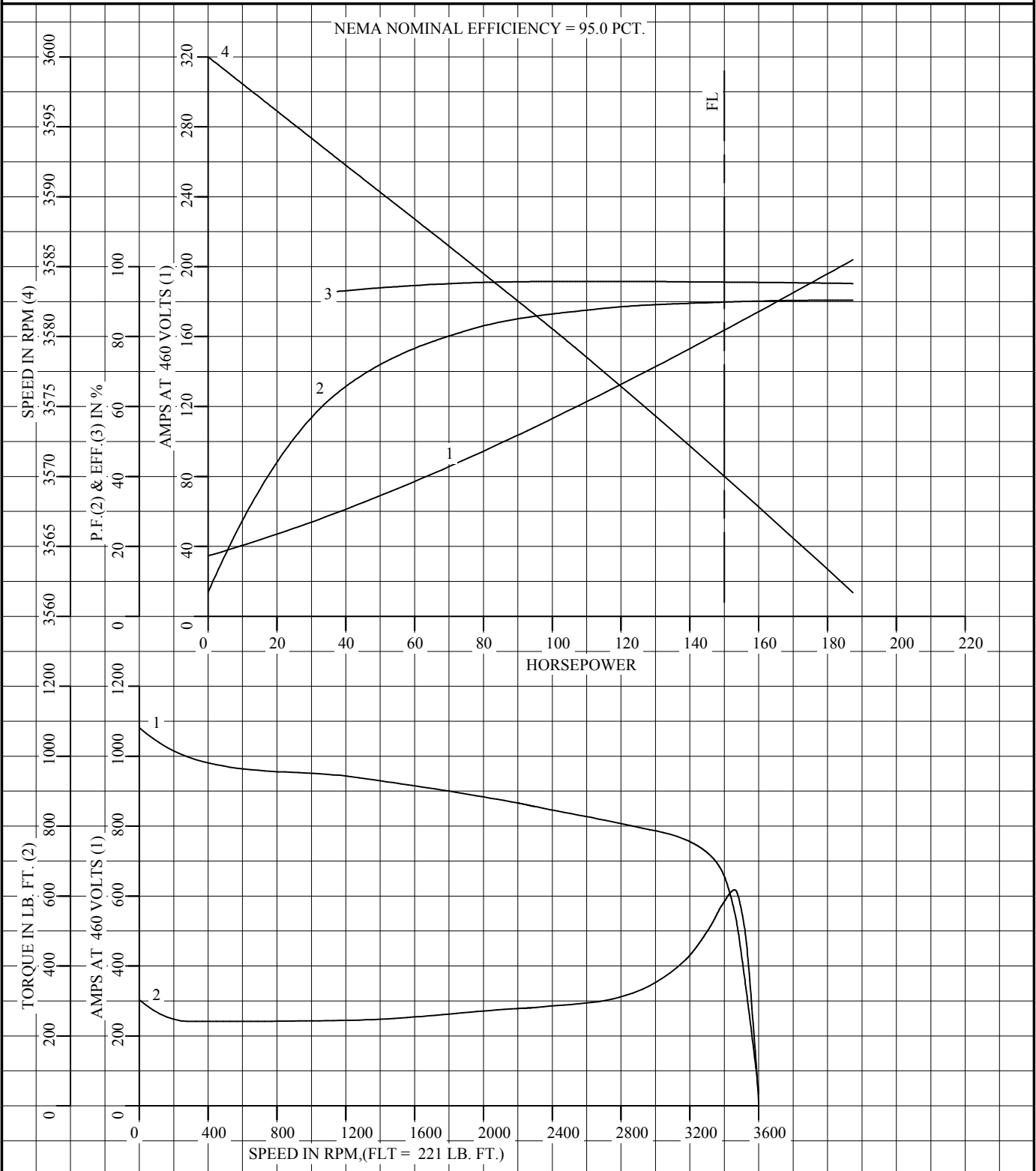
 STATOR RES. @ 25 °C **.0292**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **0**

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 CD
CK. BY CD
APP. BY R. MCELVEEN
DATE 1/18/11

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG3535-R003

ISSUE DATE 02/27/19

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REL. S.O.

FRAME **445TS**

HP **150**

TYPE **P**

PHASE/HERTZ **3/60**

RPM **3570**

VOLTS **460**

AMPS **164**

DUTY **CONT**

AMB °C/INSUL **40/F**

S.F. **1.15**

NEMA DESIGN **B**

CODE LETTER **G**

ENCLOSURE **TEFC**

E/S **0**

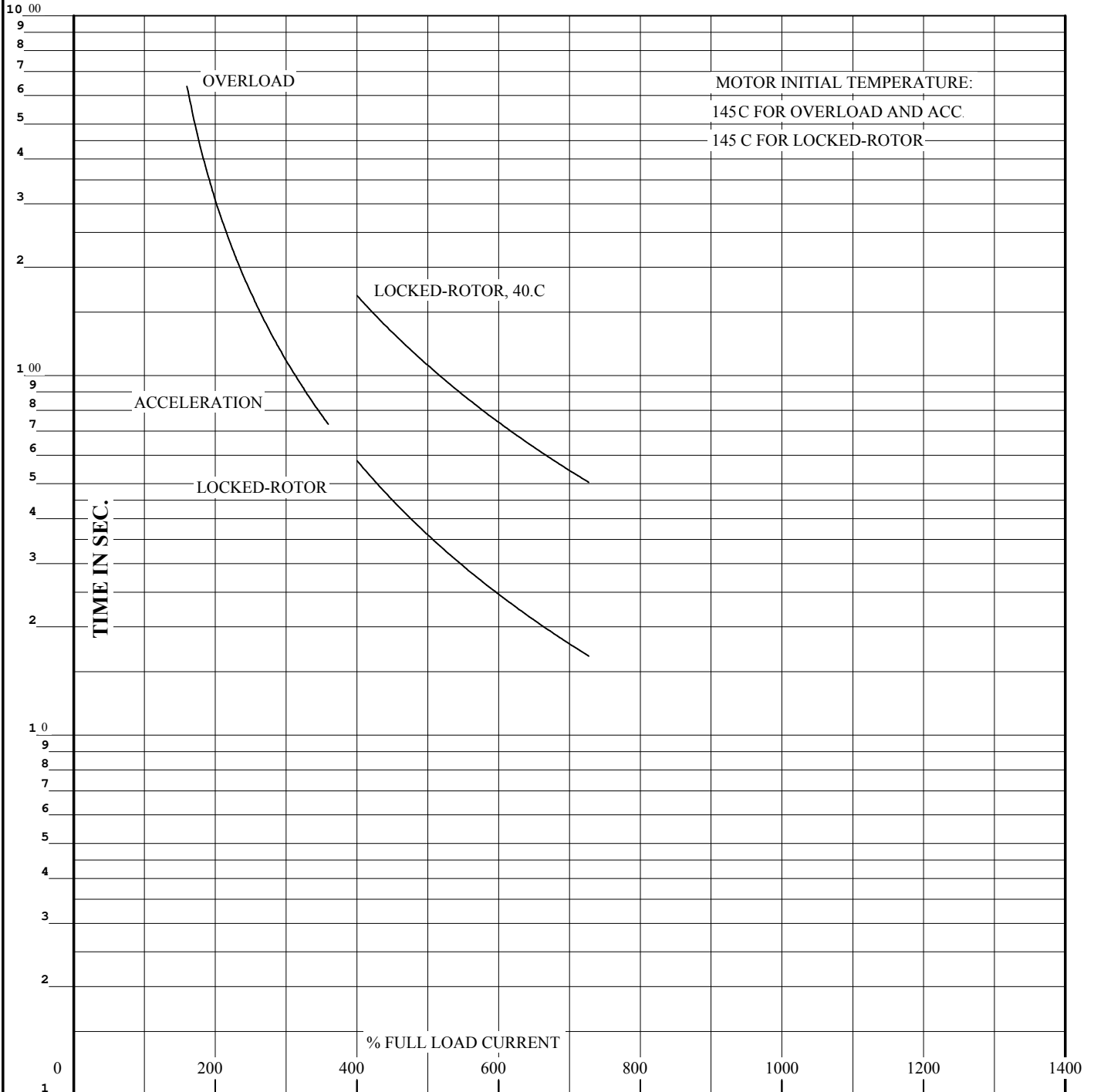
ROTOR **0**

TEST S.O. **TYPICAL DATA**

TEST DATE **---**

STATOR RES. @ 25 °C **.0292**

OHMS (BETWEEN LINES)



REMARKS:

THERMAL LIMIT CURVE

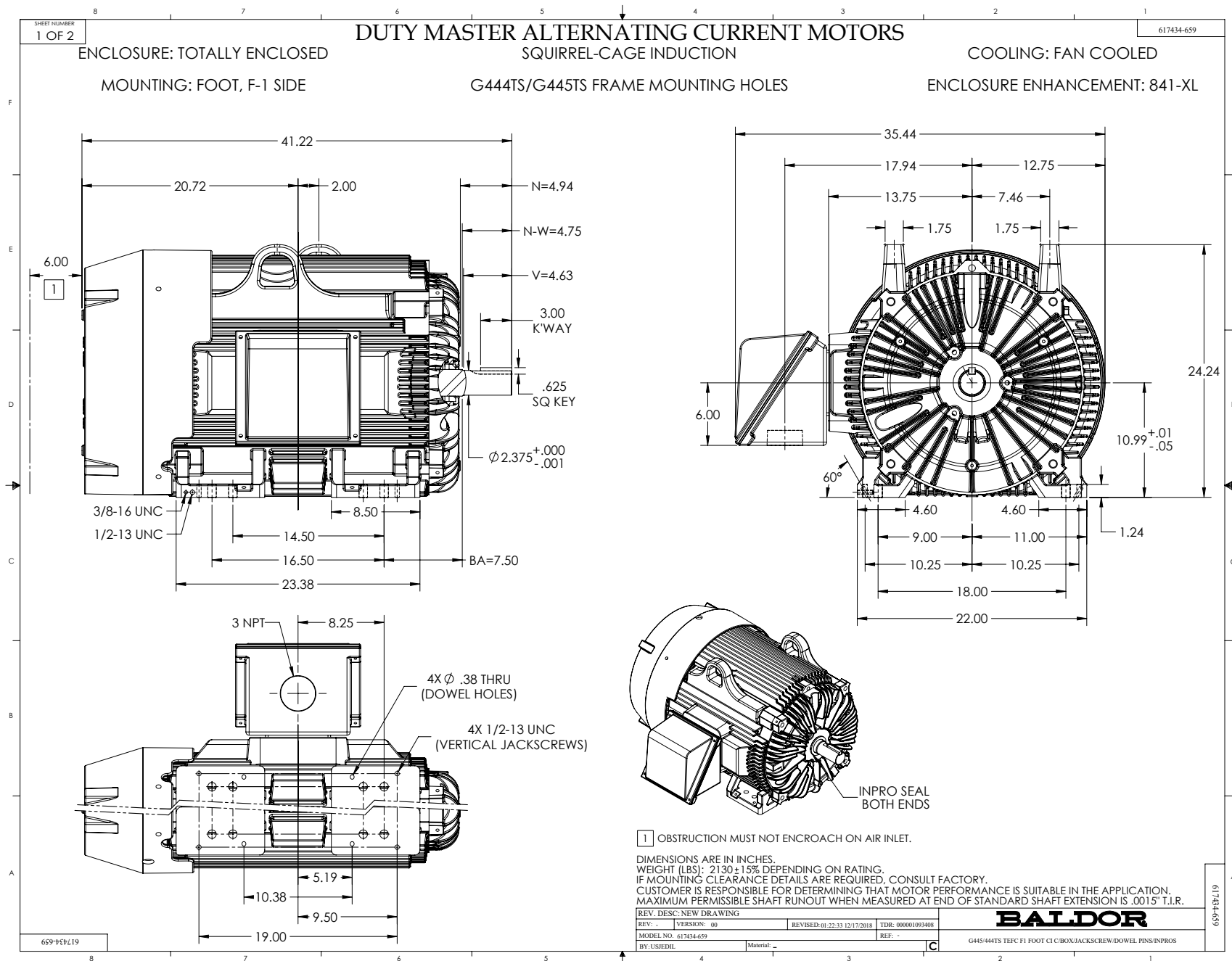
NEMA NOMINAL EFFICIENCY = 95.0 PCT.

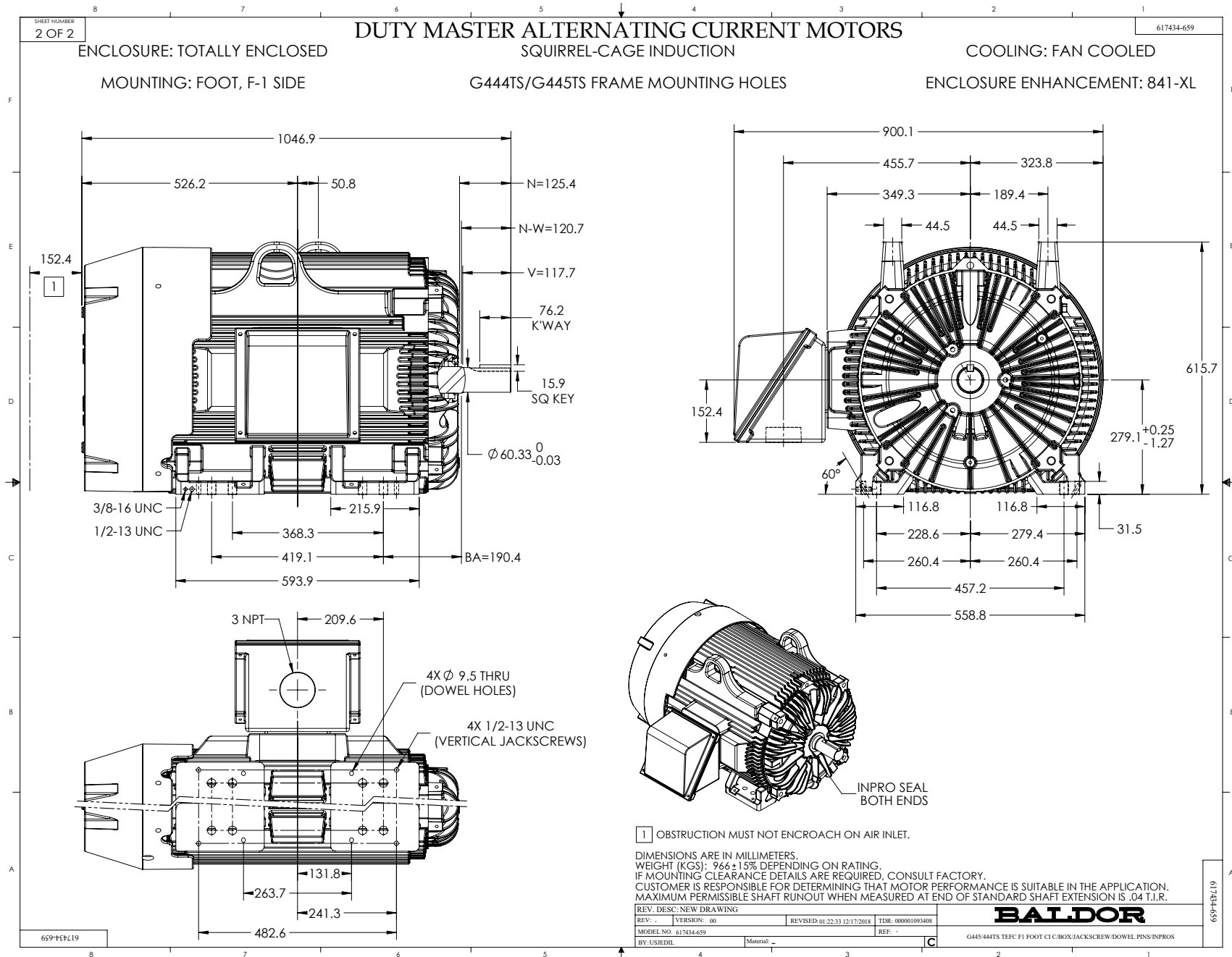
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DR. BY CD
CK. BY CD
APP. BY R. MCELVEEN
DATE 1/18/11
**A-C MOTOR
PERFORMANCE
CURVES**
A44WG3535-R003

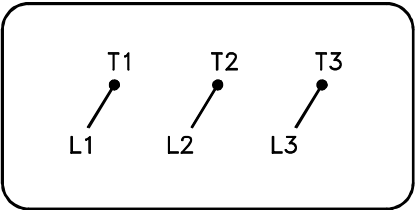
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416820-036

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