

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

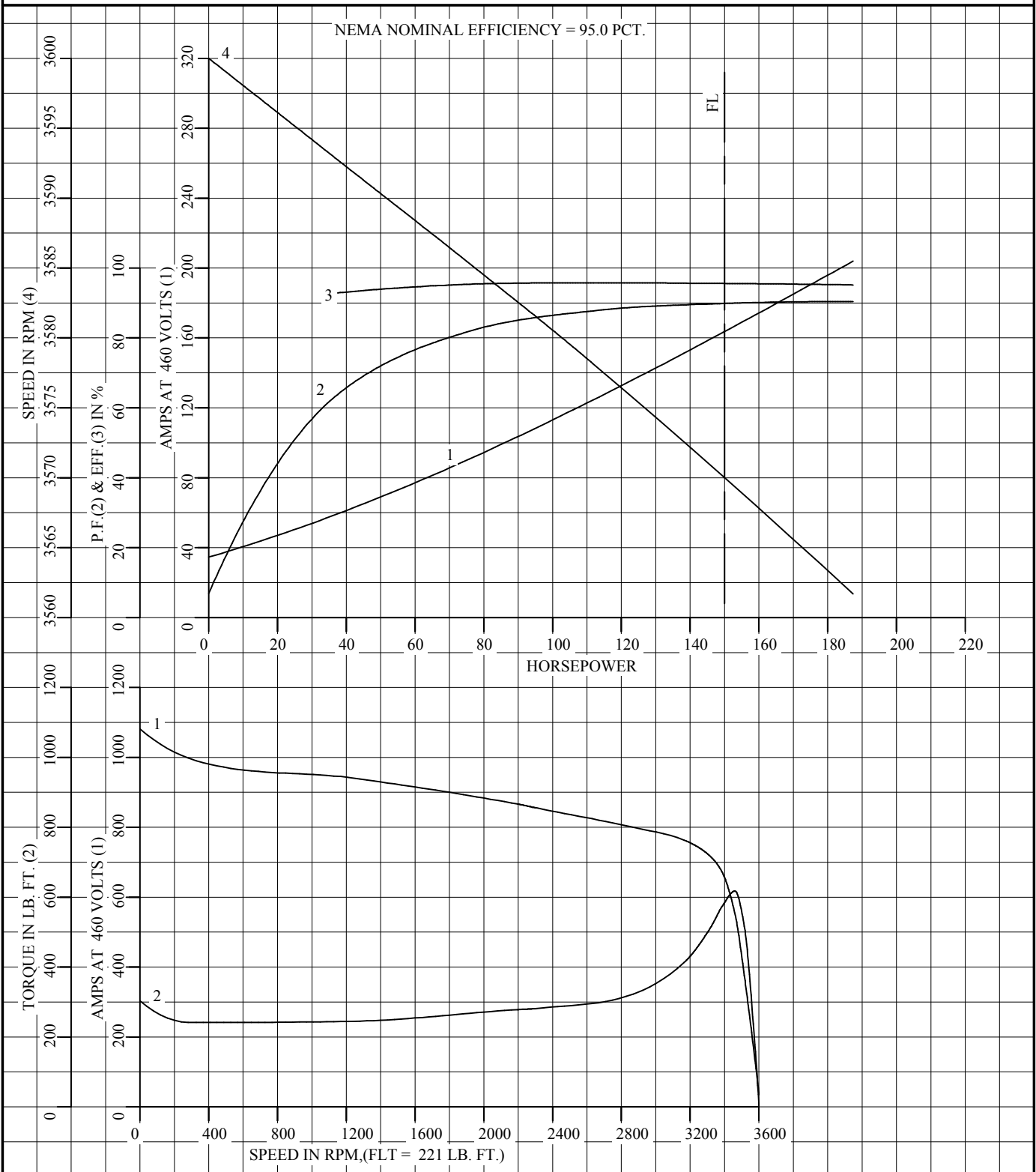
Nameplate

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			

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** Page 7 of 11

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**

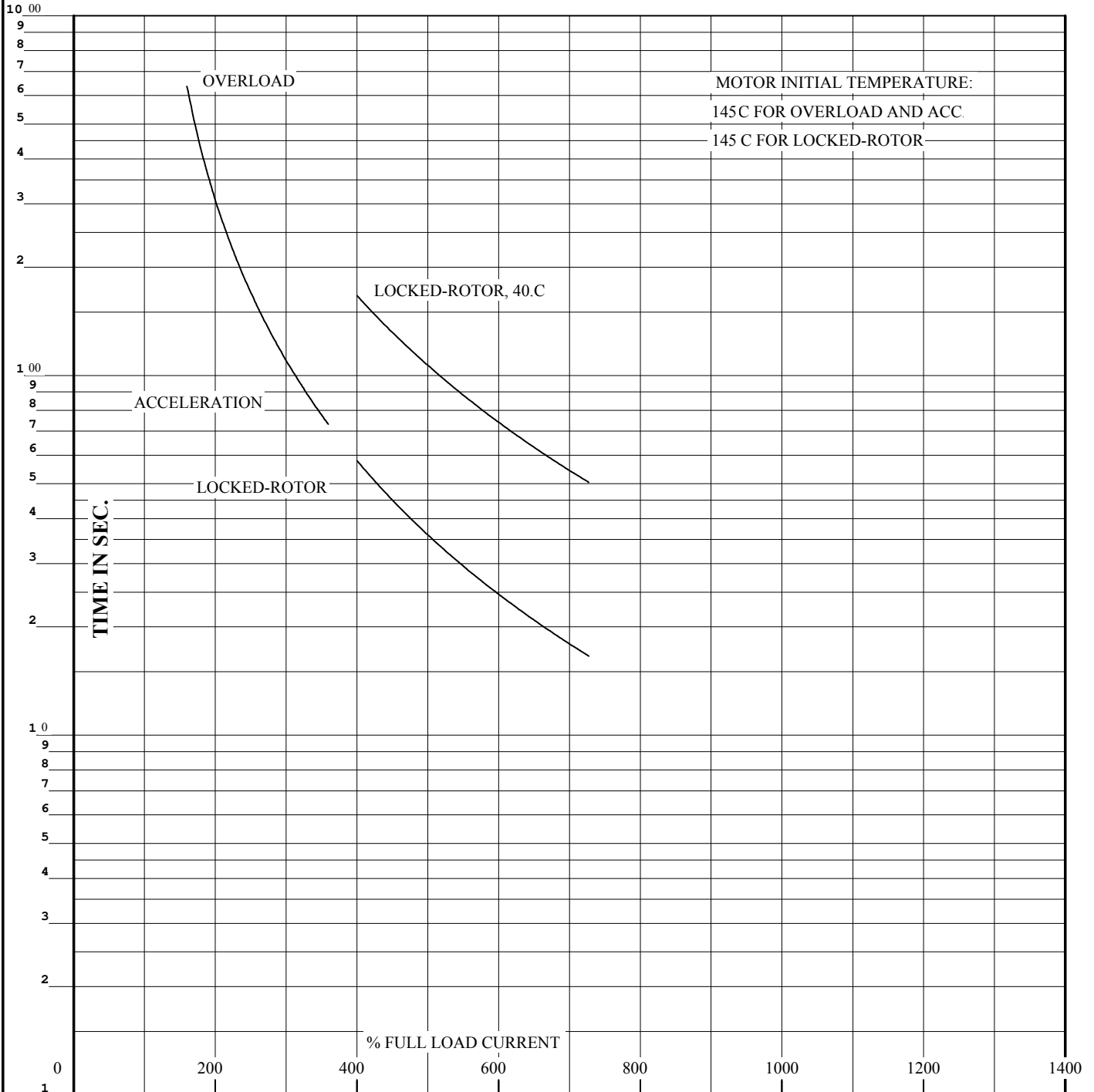
ROTOR **0**

TEST S.O. **TYPICAL DATA**

TEST DATE **---**

STATOR RES. @ 25 °C **.0292**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: NEMA NOMINAL EFFICIENCY = 95.0 PCT.

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

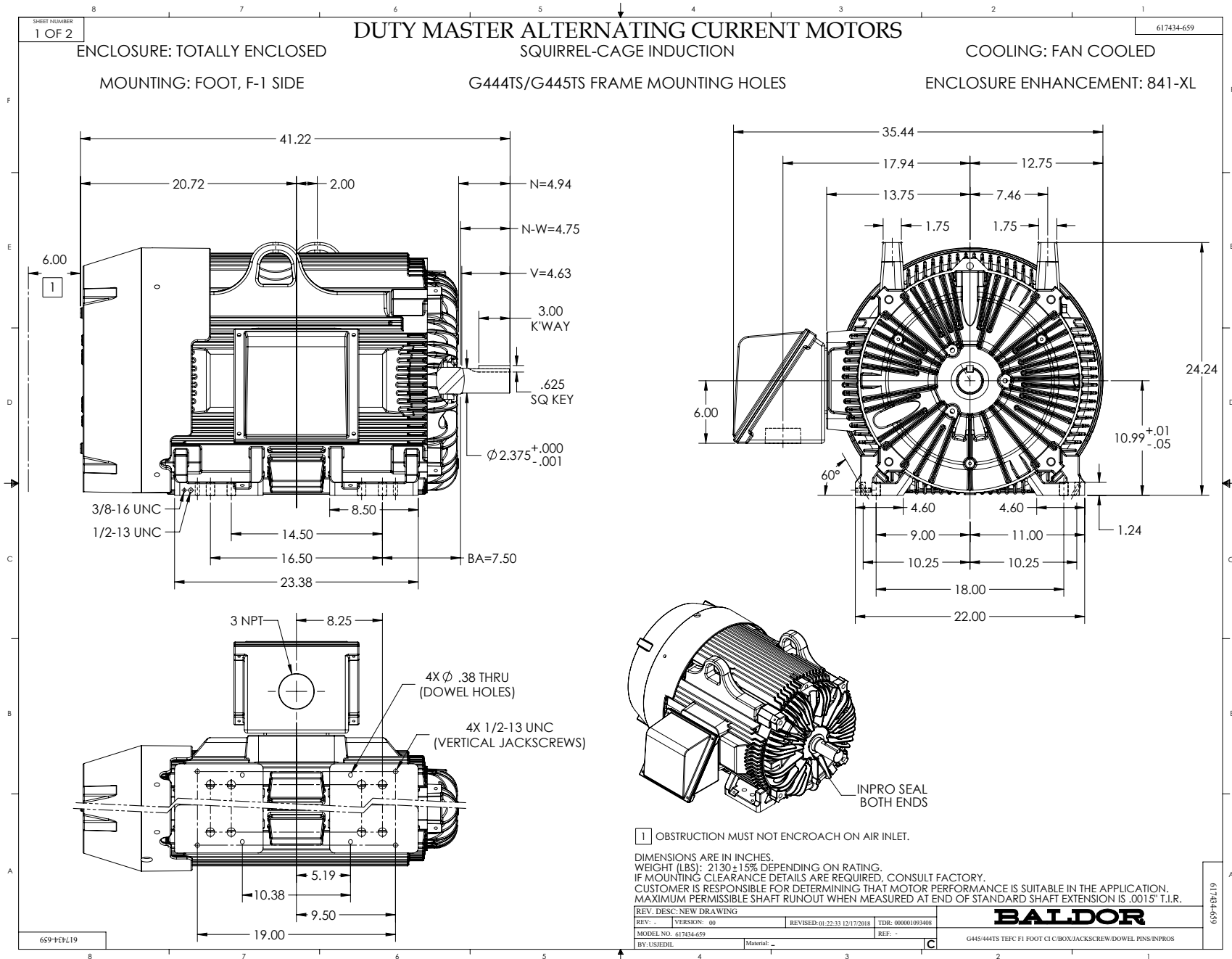
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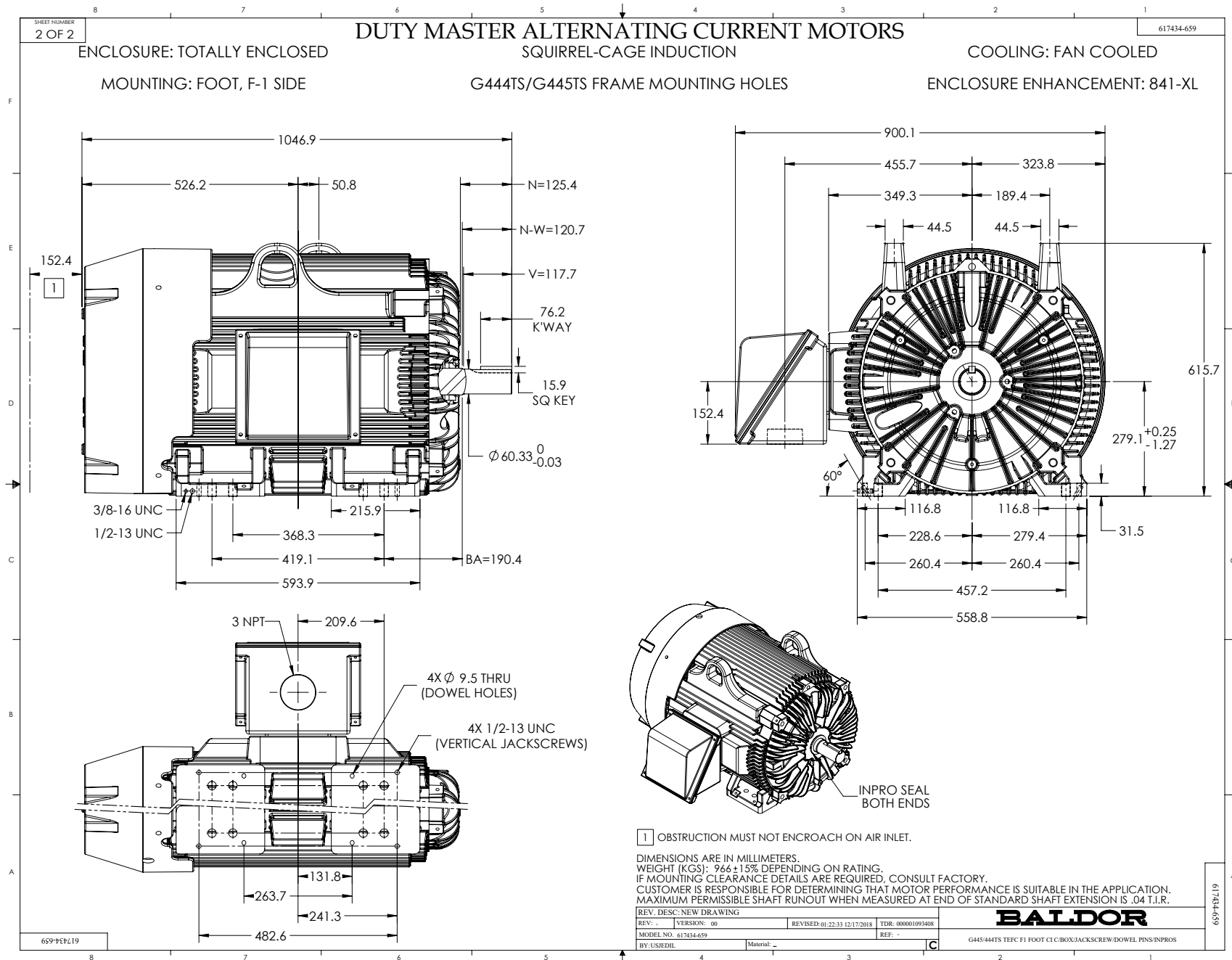
DR. BY CD
CK. BY CD
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DATE 1/18/11

**A-C MOTOR
PERFORMANCE
CURVES**

A44WG3535-R003

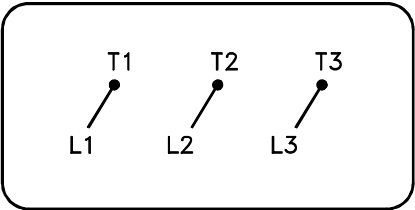
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416820-036

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