

ABB BALDOR RELIANCE III

Customer information packet

EM2583T-4

100HP, 1190RPM, 3PH, 60HZ, 444T, 1860M, OPEN

Class - None

Division - Not Applicable

Specifications

Enclosure	DP
Frame	444T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	100.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV CCSA US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	116.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	95.0 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	116.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	F
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 4 AWG
Motor Standards	NEMA
Motor Type	A44056M

Part Detail

Revision	Q
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG1481
Layout	617428-042
Eff. date	12-10-2025
CD Diagram	416820-008
Poles	06
Leads	6#4
Proprietary	False
Created date	10-19-2010

Mounting Arrangement	F1
Number of Poles	6
Overall Length	39.56 IN
Power Factor	85
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Service Factor	1.15
Shaft Diameter	3.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1185 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2377L															
CAT.NO.	EM2583T-4					SPEC NO.	P44G1771								
HP	100	AMPS	116			VOLTS		460			DESIGN	B			
FRAME	444T		RPM	1185	HZ	60	AMB	40	SF	1.15					
DRIVE END BEARING	90BC03J30X			PHASE	3	DUTY	CONT		INSUL.CLASS		F				
OPP D.E. BEARING	90BC03J30X			TYPE	P	ENCL	DP	CODE	F						
SER.NO.				POWER FACTOR			85		NEMA-NOM-EFFICIENCY			95			
						MAX CORR KVAR		20.0		GUARANTEED EFFICIENCY		94.5			
						NEMA NOM/CSA QUOTED EFF									
						MOTOR WEIGHT									

NP2496L	
MOBIL POLYREX EM	

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	444T	100	P	3/60	1185	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
116	CONT	40/F	1.15	B	F	PROT
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)		
497758	418143-079-ZE	---	---	.0586		
PERFORMANCE						
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY	
NO LOAD	0	42.9	1200	4.08	0	
1/4	25.0	50.9	1197	49.8	92.4	
2/4	50.0	68.5	1194	72.0	94.9	
3/4	75.0	90.7	1190	81.2	95.3	
4/4	100	116	1187	85.0	95.1	
5/4	125	143	1182	86.4	94.5	
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	154	680	700		
PULL UP	240	140	620	680		
BREAKDOWN	1133	242	1070	398		
FULL LOAD	1187	100	443	116		
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE REMARKS: TYPICAL DATA XE - MOTOR; NEMA NOM. EFF. = 95.0 PCT.; GUAR. MIN. EFF. = 94.5 PCT.						
		DR. BY J.J.HARRISON CK. BY W.L.SMITH APP. BY W.L.SMITH DATE 03/18/10		A-C MOTOR PERFORMANCE DATA A44WG1481-R001 ISSUE DATE 12/18/10		

FRAME 444T

RPM 1185

VOLTS 460

NEMA DESIGN B

HP 100

AMPS 116

TEST S.O. TYPICAL DATA

CODE LETTER F

TYPE P

DUTY CONT

TEST DATE ---

ENCLOSURE PROT

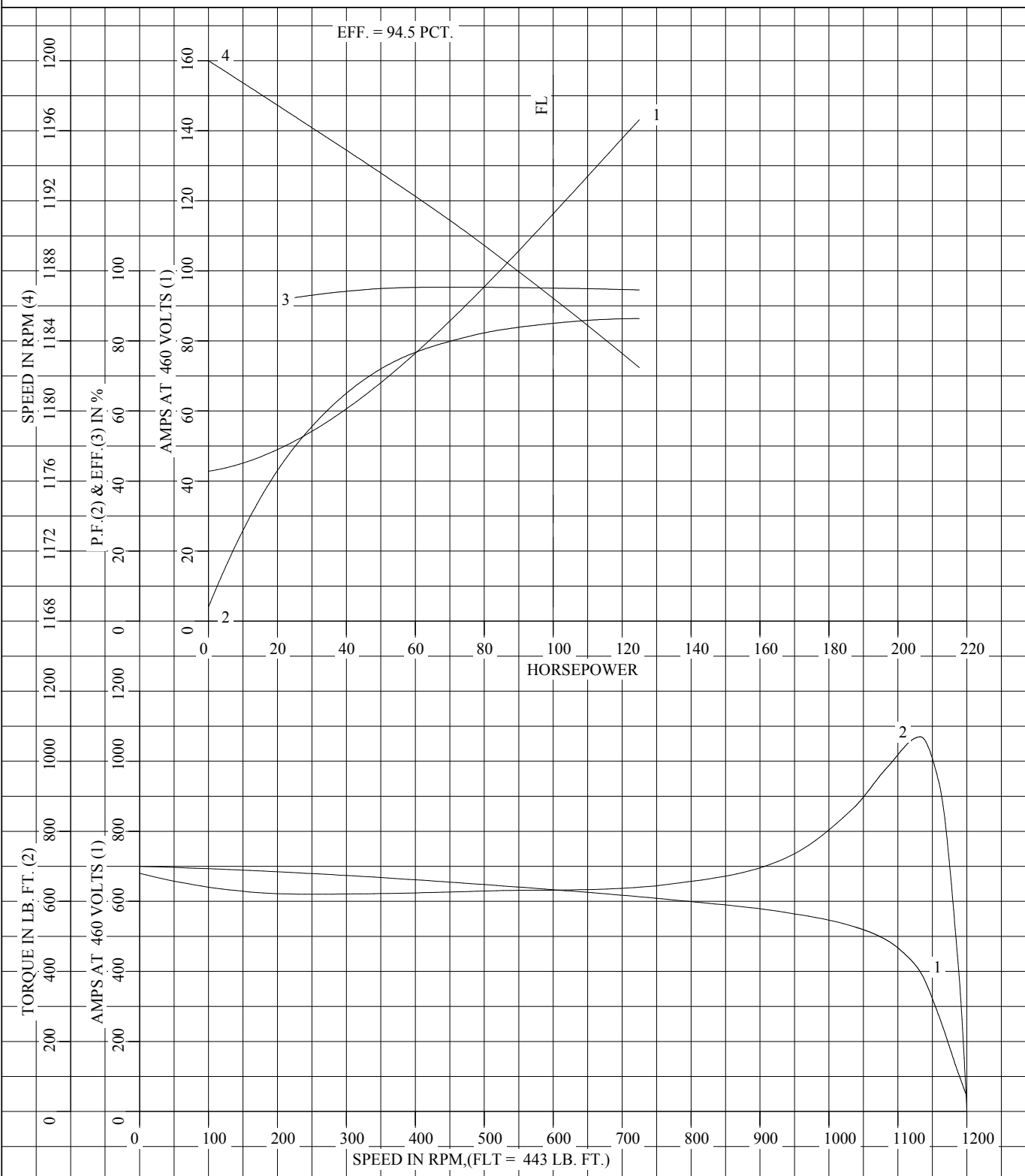
PHASE/HERTZ 3/60

STATOR RES. @ 25 °C .0586

AMB °C/INSUL 40/F

E/S 497758

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

DR. BY J.J.HARRISON
CK. BY W.L.SMITH
APP. BY W.L.SMITH
DATE 03/18/10

**A-C MOTOR
PERFORMANCE
CURVES** A44WG1481-R001
ISSUE DATE 12/18/10

REL. S.O.

RPM 1185

S.F. 1.15

ROTOR 418143-079-ZE

FRAME 444T

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 100

AMPS 116

CODE LETTER F

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE PROT

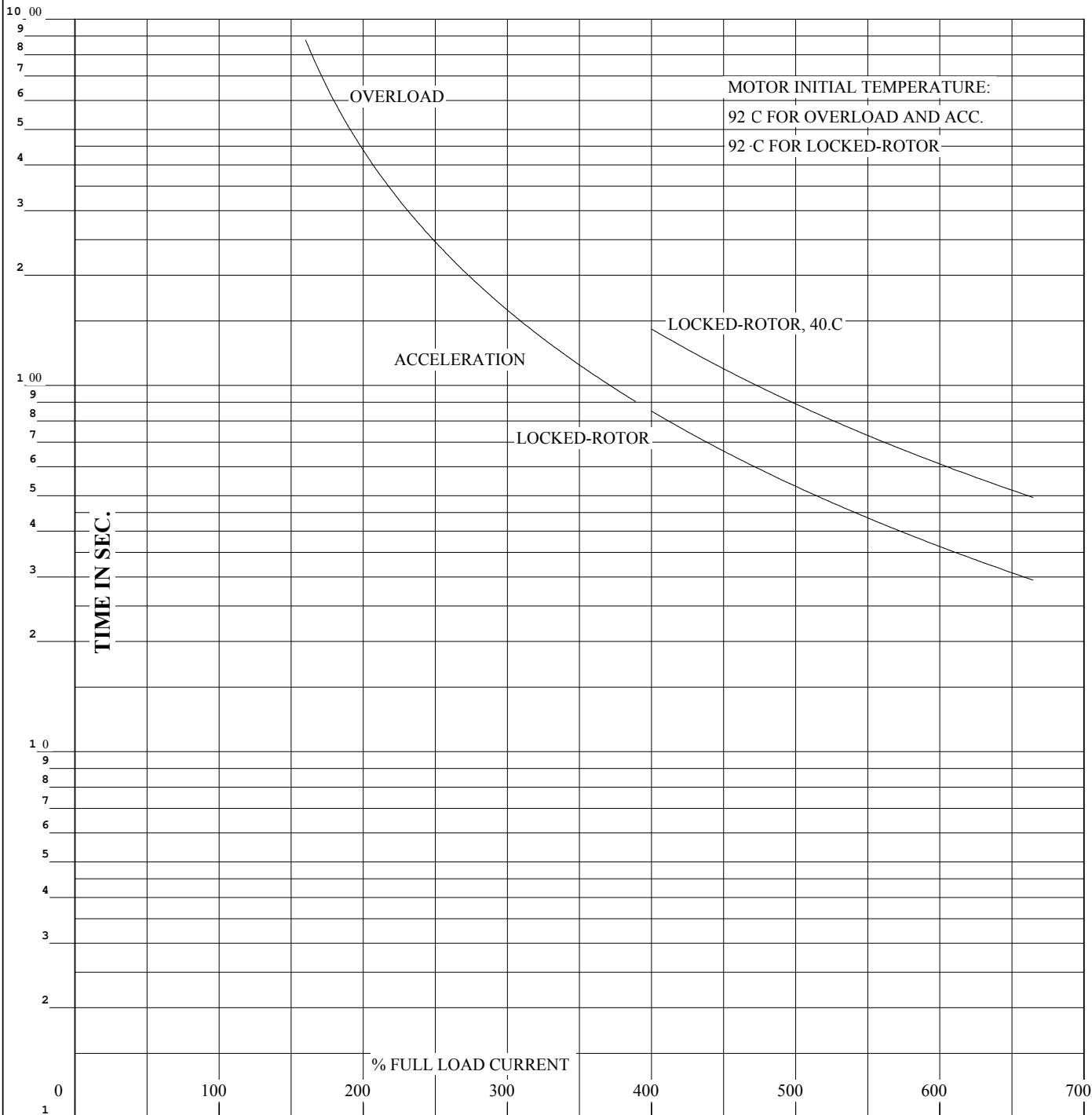
STATOR RES. @ 25 °C .0586

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 497758

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

EFF. = 94.5 PCT. ↑ CURVE

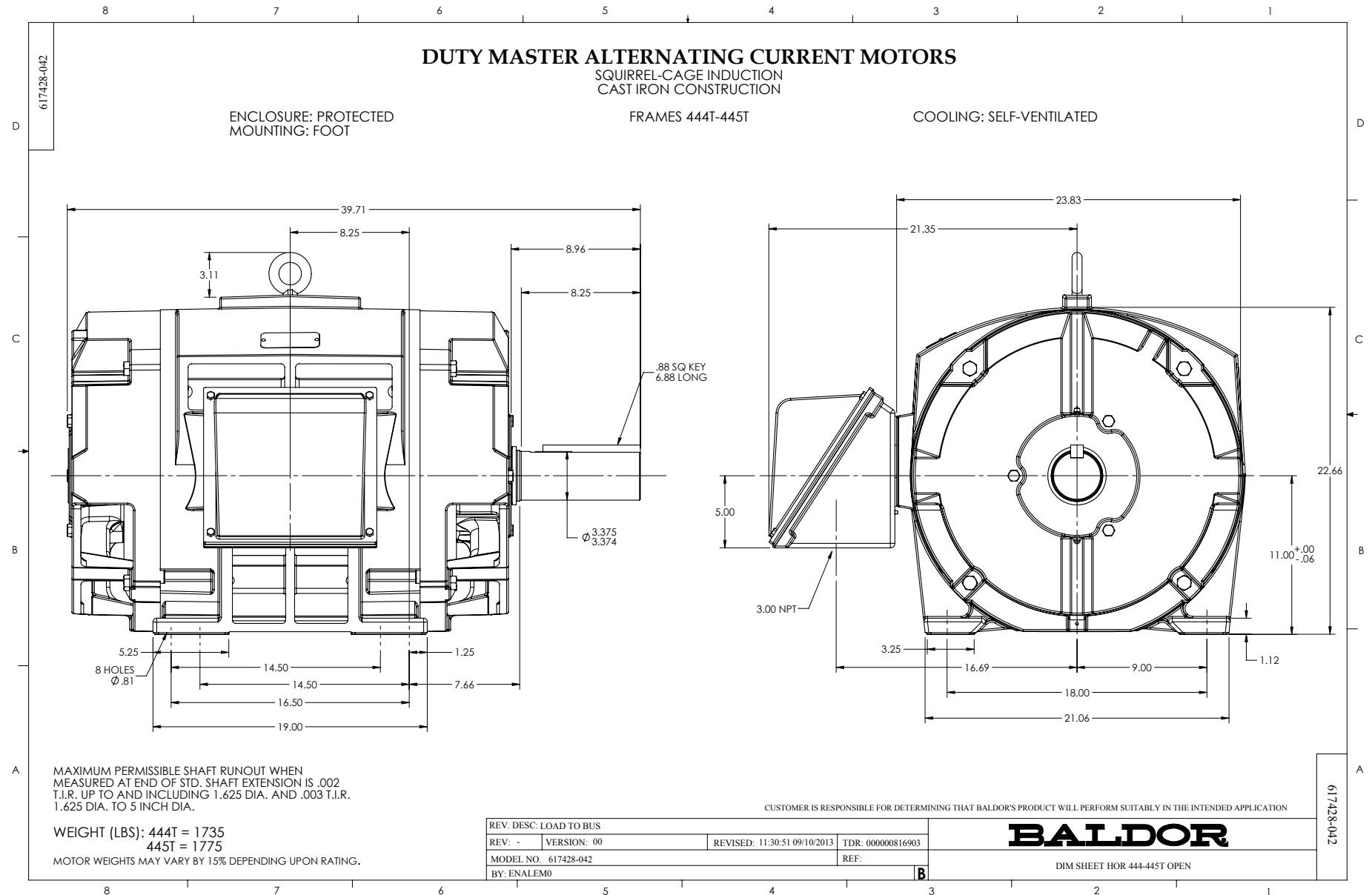
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**A-C MOTOR
PERFORMANCE A44WG1481-R001
CURVES**

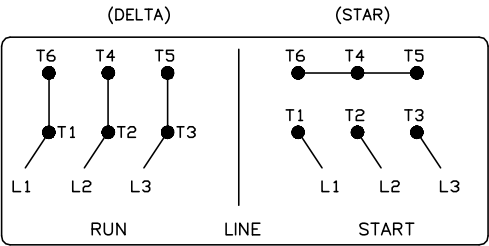
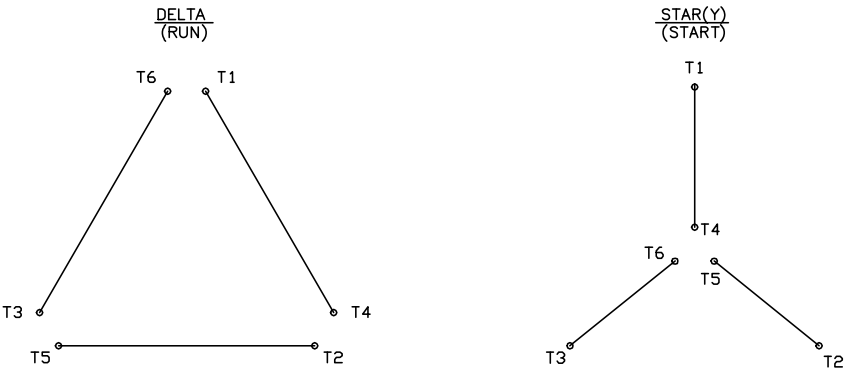
ISSUE DATE 12/18/10



416820-008

A-C MOTOR
CONNECTION DIAGRAM

STANDARD 6 LEAD Y START – DELTA RUN



(N. P. 1767-DC)

REV. DESC: ADDED T4 TO Y CONNECT DIAGRAM

REV. LTR: D

VERSION: 04

TDR: 000000847713

FILE: \RAG\00001\808

REVISED: 10: 41: 26 04/08/2014

BY: RAGJSS1

MTL: -



BALDOR

CONNECT DIAGRAM STD 6 LEAD Y START DELTA RUN

SH 1 of 1

416820-008