

ABB BALDOR RELIANCE III

Customer information packet

EM25254T-4

250HP, 1785RPM, 3PH, 60HZ, 447T, A44100M, DP, F

Class - None

Division - Not Applicable

Specifications

Enclosure	DP
Frame	447T
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	250.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	275.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	275.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	No Lifting Lugs
Motor Lead Quantity/Wire Size	6 @ 1/0 AWG
Motor Standards	NEMA
Motor Type	A44100M
Mounting Arrangement	F1

Part Detail

Revision	M
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG1484
Layout	604989-507
Eff. date	08-28-2025
CD Diagram	416820-008
Poles	04
Leads	6#1/0
Proprietary	False
Created date	10-19-2010

Number of Poles	4
Overall Length	43.12 IN
Power Factor	88
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	1785 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Nameplate

NP2377L												
CAT.NO.	EM25254T-4				SPEC NO.	P44G1775						
HP	250	AMPS	275		VOLTS	460		DESIGN	B			
FRAME	447T	RPM	1785	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	G					
SER.NO.		POWER FACTOR	88				NEMA-NOM-EFFICIENCY	96.2				
						MAX CORR KVAR	40.0	GUARANTEED EFFICIENCY	95.8			
							NEMA NOM/CSA QUOTED EFF					
						MOTOR WEIGHT						

Parts List

Part number	Description	Quantity
SA207134	SA P44G1775	1.000 ea
RA194401	RA P44G1775	1.000 ea
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 ea
000692000FF	N/P	1.000 ea
000692000VD	LABEL WARNING	1.000 ea
NP2377L	SS SUPER-E, CC, CURUS ENERGY (LASER)	1.000 ea
421948044	LABEL, MYLAR	1.000 ea
004824015A	GREASE POLYREX EM	1.156 lb
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
032018028EK	HHCS 5/8-11X3-1/2L PLTD	4.000 ea
032018036DK	HHCS 1/2-13X4-1/2 PLTD.	3.000 ea
034000012AB	WSHR 1/4 STD. PLATED	4.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
089439051A	BRKT 440 089439051WCB	1.000 ea
089439051A	BRKT 440 089439051WCB	1.000 ea
410700004A	WSHR	1.000 ea
702611001A	BAFFL 440 SUB PAINT	1.000 ea
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 ea
032018028EK	HHCS 5/8-11X3-1/2L PLTD	4.000 ea
032018036DK	HHCS 1/2-13X4-1/2 PLTD.	3.000 ea
034000012AB	WSHR 1/4 STD. PLATED	4.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
032018008BK	HHCS 5/16-18X1L PLATED	4.000 ea
032018008DK	HHCS 1/2-13X1 PLATED	4.000 ea
032018005DL	1/2-13 X 5/8 SILICON BRONZE HHCS	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea

048897010DJ	BUSH - 445	1.000 ea
067053014A	GASK 440	1.000 ea
076870000BA	CONDUIT BOX - 440 - 1/2-13 GROUND	1.000 ea
076871000A	+CBOX CVR BLKT - 449	1.000 ea
406056007A	GASKET, 440	1.000 ea
415000115H	T/LUG #2AWG-4/0AWG	1.000 ea
418150003A	GREASE FITTING CAP	1.000 ea
MG1025Y17	WILKOFAST, 789.701, SUPER E PEARL GOLD	0.375 ga
418150003A	GREASE FITTING CAP	1.000 ea
415045002A	SLGR	1.000 ea
418151014G	RETAIN RING	1.000 ea
702611001A	BAFFL 440 SUB PAINT	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 ea
034180054KA	7/8 SQ X 6.75 KEY	1.000 ea
604797056	400-447 FRAME 60 X 42	1.000 ea

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS			
	447T	250	P	3/60	1785	460			
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.			
275	CONT	40/F	1.15	B	G	DP			
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)					
433743	418143047XE	---	---	.0174					
PERFORMANCE									
LOAD	HP	AMPERES	RPM	% POWER FACTOR	% EFFICIENCY				
NO LOAD	0	67.3	1800	4.09	0				
1/4	62.6	93.8	1796	65.8	94.9				
2/4	125	145	1792	83.6	96.5				
3/4	187	208	1788	87.5	96.6				
4/4	250	275	1784	88.2	96.3				
5/4	313	345	1780	88.4	95.9				
SPEED TORQUE									
		RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES				
LOCKED ROTOR		0	149	1095	1802				
PULL UP		1360	117	864	1548				
BREAKDOWN		1723	237	1742	895				
FULL LOAD		1784	100	736	275				
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. 96.2 PCT.									
		DR. BY W. L. SMITH		A-C MOTOR PERFORMANCE A44WG1484-R001 DATA					
		CK. BY J. J. HARRISON							
		APP. BY J. P. TSAO							
		DATE 05/14/04							
				ISSUE DATE 12/18/10					

FRAME 447T

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 250

AMPS 275

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE DP

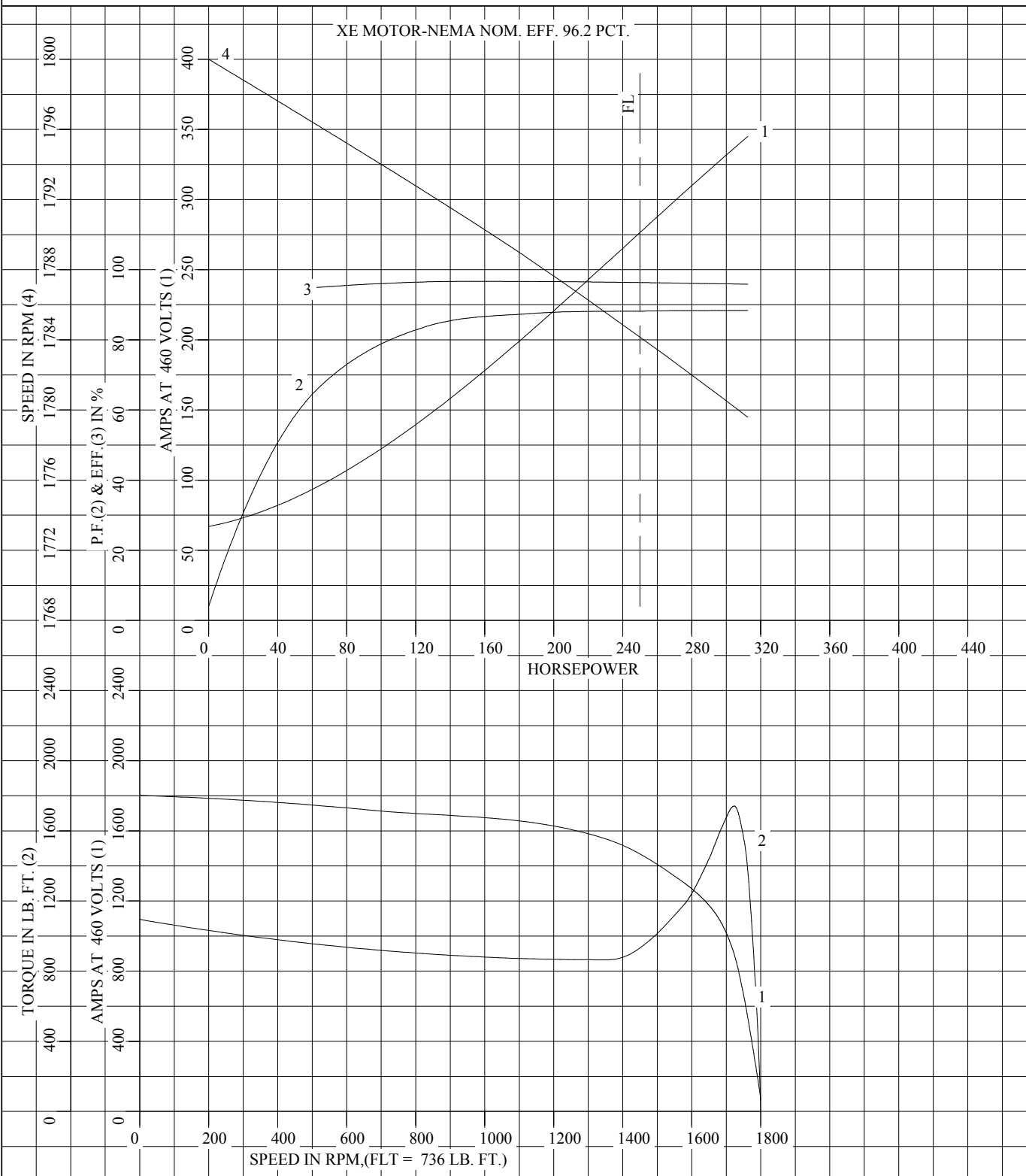
STATOR RES. @ 25 °C .0174

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 433743

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 W. L. SMITH
CK. BY J.J. HARRISON
APP. BY J. P. TSAO
DATE 05/14/04

**A-C MOTOR
PERFORMANCE CURVES** A44WG1484-R001
ISSUE DATE 12/18/10

REL. S.O.

RPM 1785

S.F. 1.15

ROTOR 418143047XE

FRAME 447T

VOLTS 460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 250

AMPS 275

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE DP

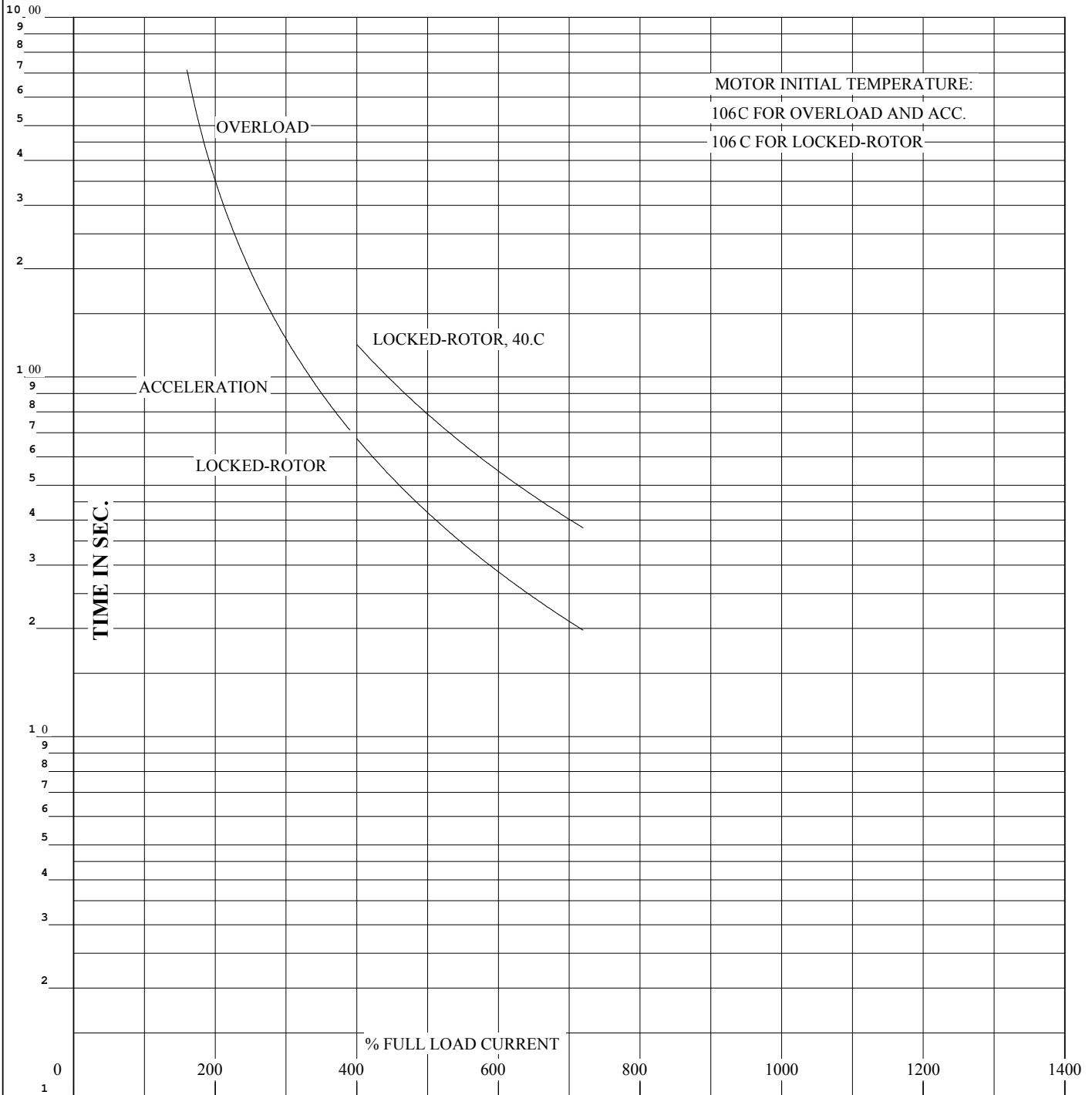
STATOR RES. @ 25 °C .0174

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 433743

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS: XE MOTOR-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.



DR. BY W. L. SMITH
CK. BY J.J.HARRISON
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DATE 05/14/04

**A-C MOTOR
PERFORMANCE A44WG1484-R001
CURVES** ISSUE DATE 12/18/10

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

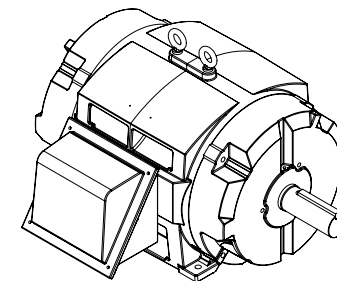
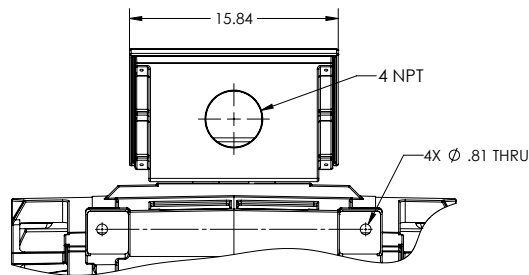
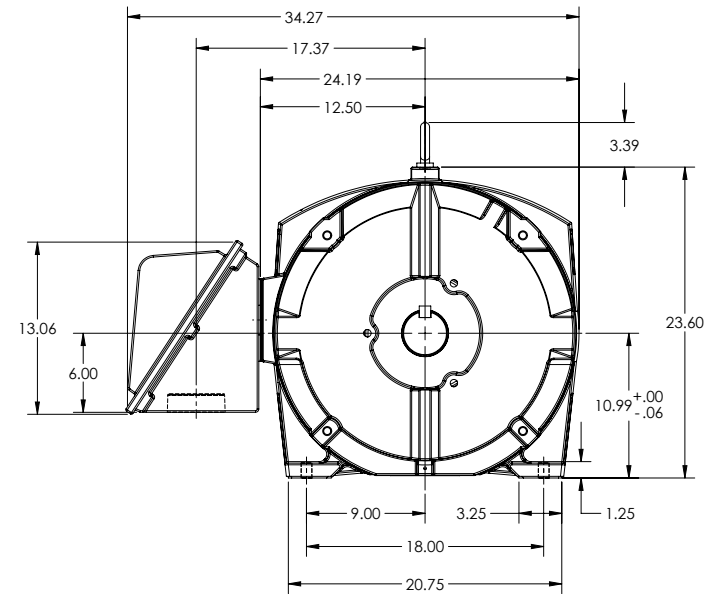
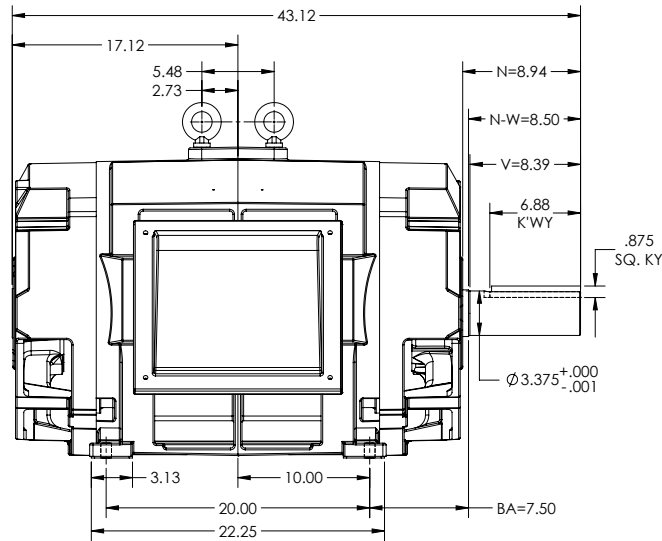
FRAME E447T

COOLING: SELF-VENTILATED

ENCLOSURE: OPEN DRIP-PROOF (PROTECTED)

MOUNTING: FOOT, F-1 SIDE,

WITH STD CAST IRON C/BOX



WEIGHT (LBS)= 1730

WEIGHT MAY VARY 15% DEPENDING ON RATING

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R.

DIMENSIONS ARE IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER
1 OF 1

L05-686F09

REV. DESC: NEW DWG	VERSION: 00	REVISED: 10-30-34 04/23/2015	TDR: 000000921402
MODEL NO. 604989-507	BY: RAGHGT		

BALDOR

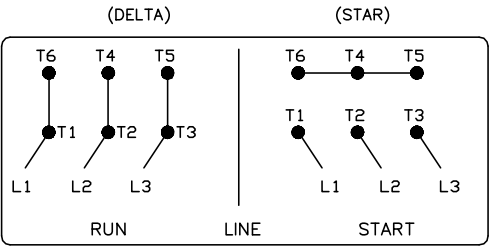
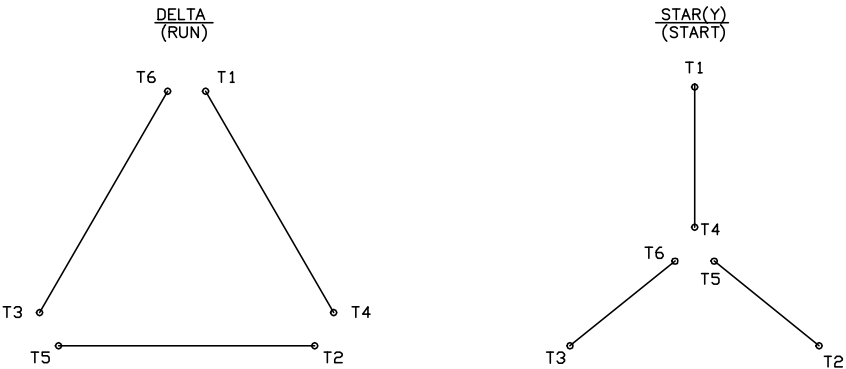
E447T PROT F-1 FT WITH CAST IRON BOX

604989-507

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