

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									

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 CK. BY J. J. HARRISON APP. BY J. P. TSAO DATE 05/14/04	A-C MOTOR PERFORMANCE A44WG1484-R001 DATA 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

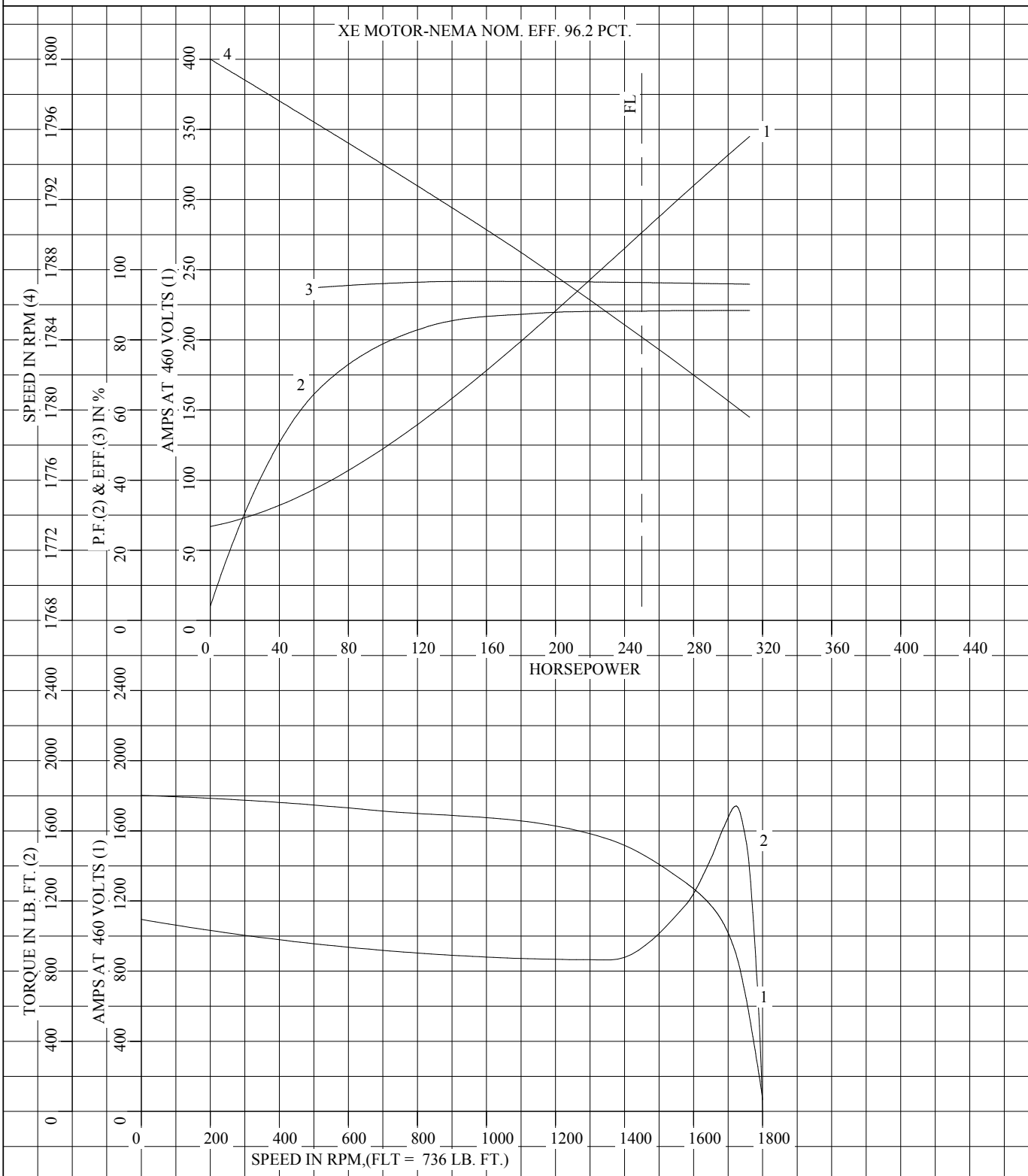
STATOR RES. @ 25 °C .0174

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

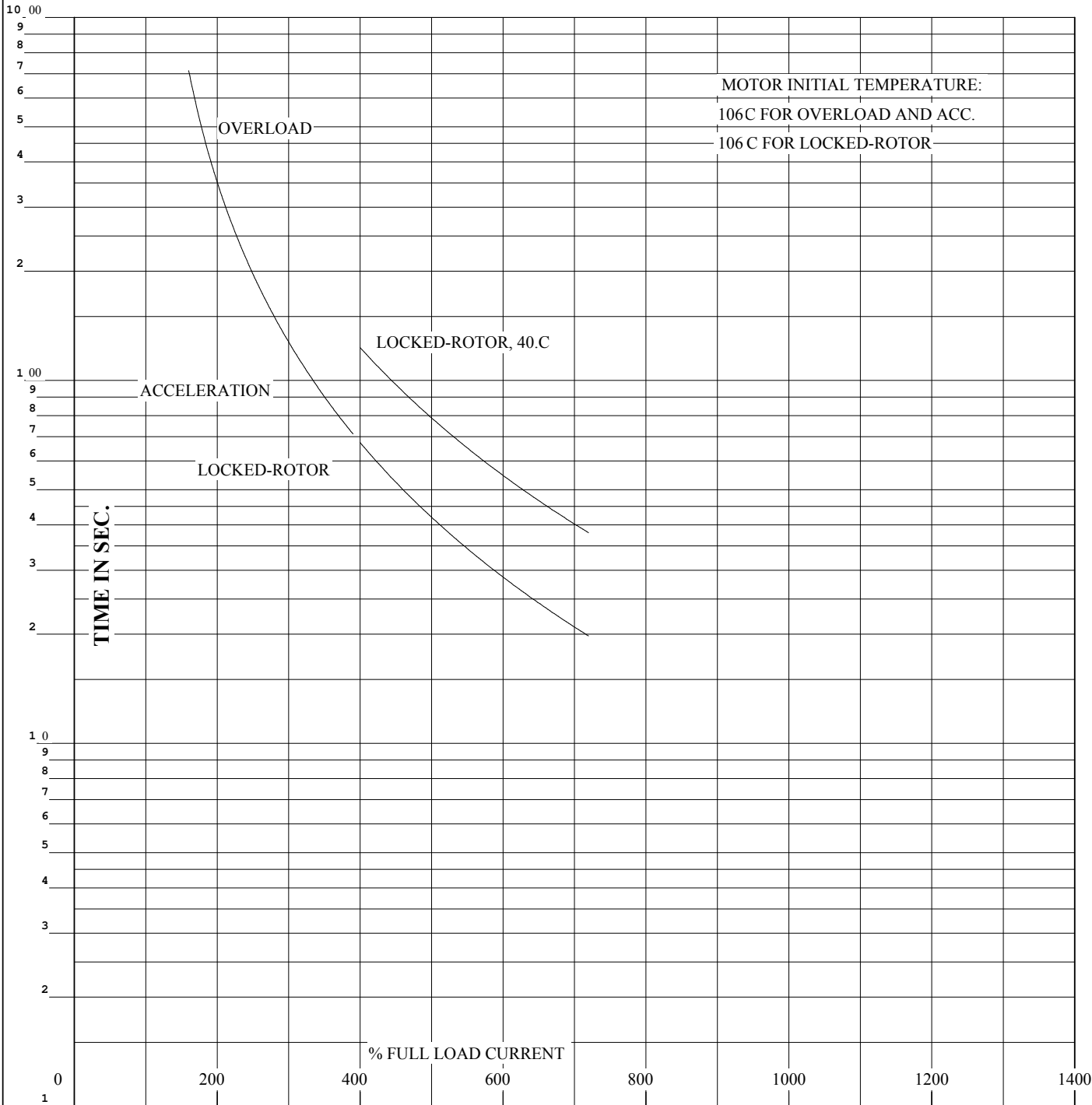
STATOR RES. @ 25 °C .0174

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
APP. BY J. P. TSAO
DATE 05/14/04

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

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

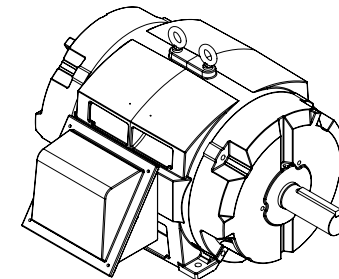
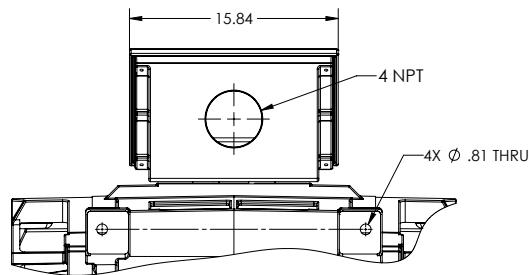
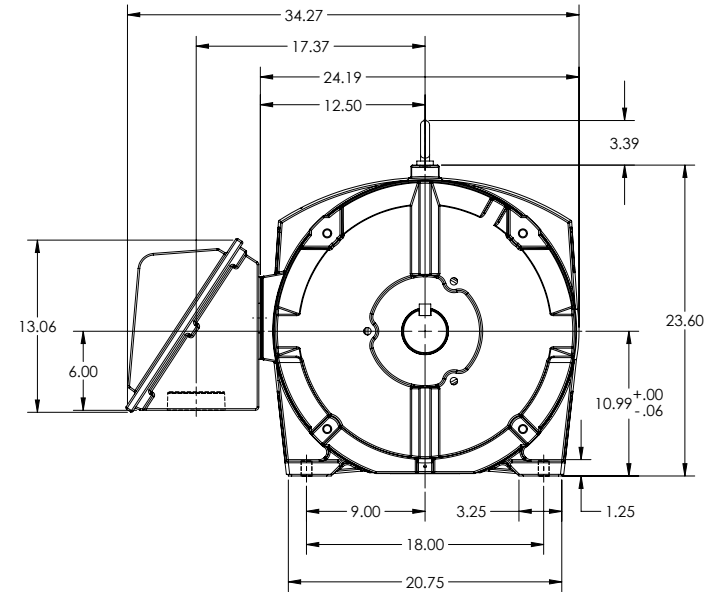
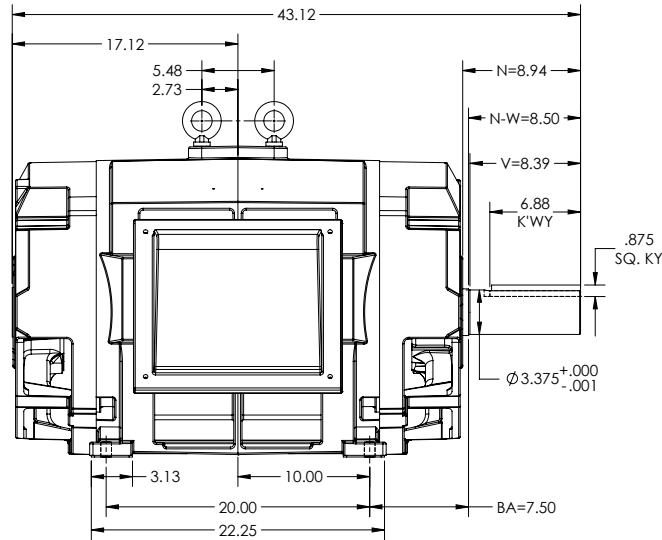
FRAME E447T

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

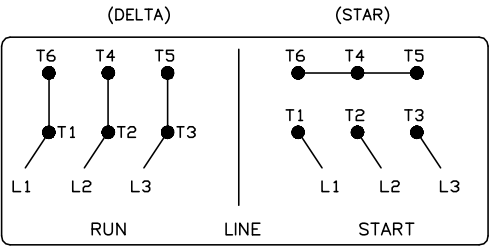
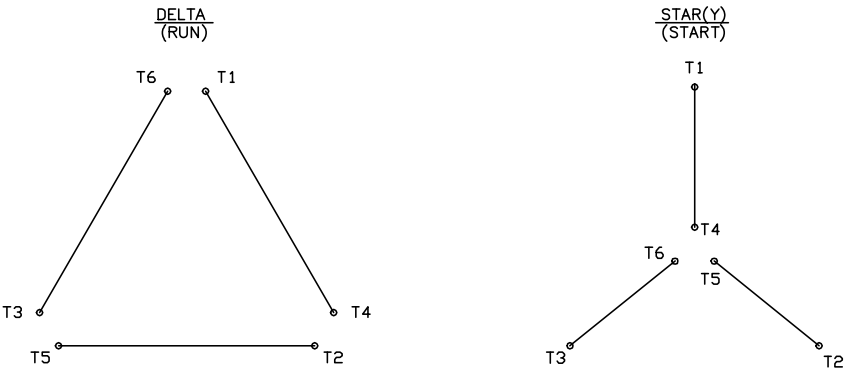
E447T PROT F-1 FT WITH CAST IRON BOX

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