



Customer information packet

EM25404T-4

400HP, 1780RPM, 3PH, 60HZ, 449T, DP, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	DP
Frame	449T
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	400.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CCSAUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	437.000 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	437.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	12 @ 1 AWG
Motor Standards	NEMA
Motor Type	A44140M

Part detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG3164
Layout	604989-505
Eff. date	03-01-2017
CD Diagram	416820-008
Poles	04
Leads	6#1 (02 per group)
Proprietary	False
Created date	11-24-2015

Mounting Arrangement	F1
Number of Poles	4
Overall Length	48.12 IN
Power Factor	89
Product Family	General Industrial
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	3.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1780 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

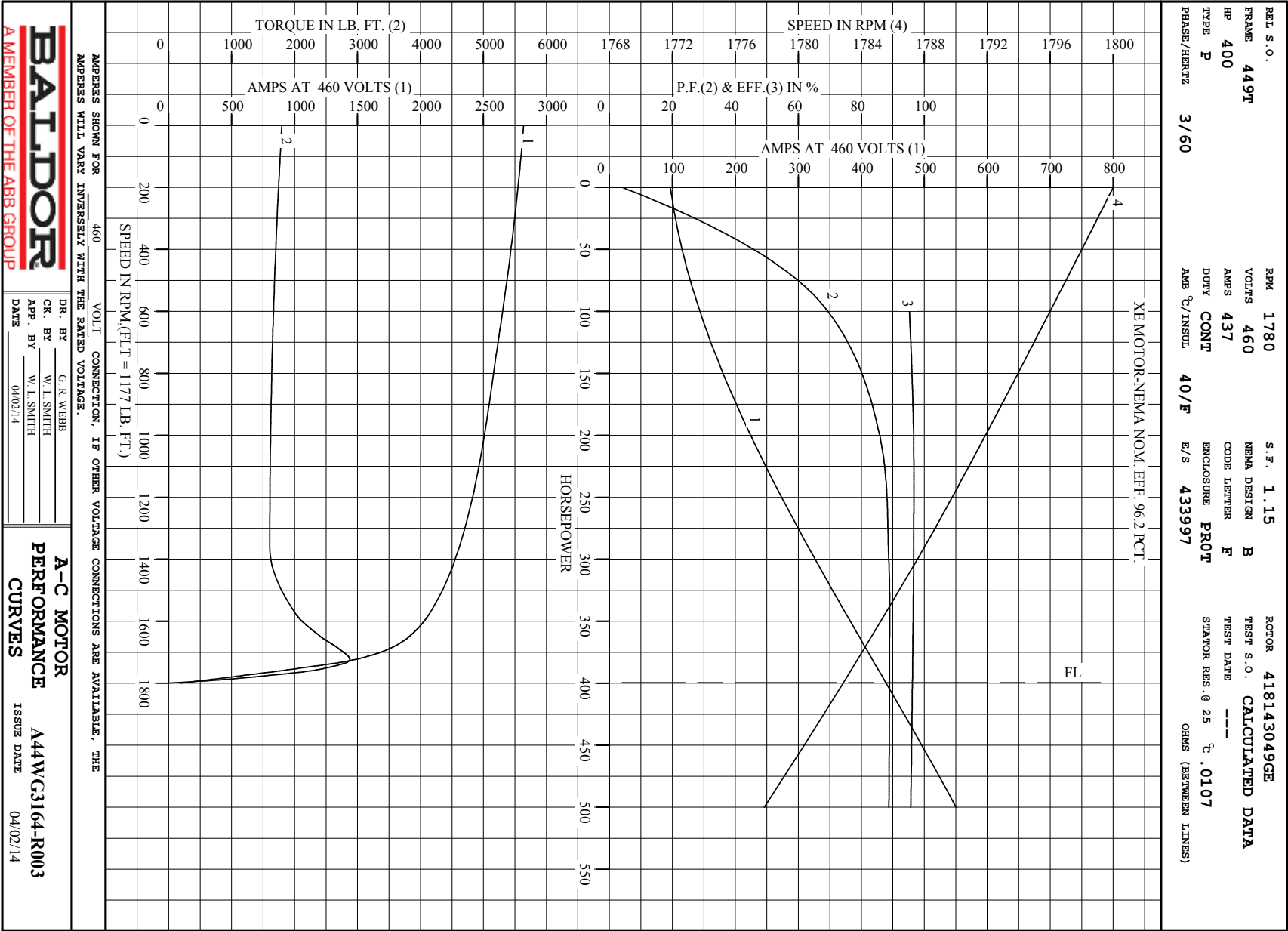
Nameplate

NP2496L	
MOBIL POLYREX EM	

NP2349L

SPEC NO.	A44-8061-3164			CAT.NO.	EM25404T-4					FRAME	449T	
HP	400	VOLTS	460		PHASE	3	DESIGN	B	TYPE	P		
RPM	1780	AMPS	437		HZ	60	AMB	40	SF	1.15		
DRIVE END BEARING	90BC03J30X		DUTY	CONT	INSUL.CLASS			F				
OPP D.E. BEARING	90BC03J30X		ENCL	DP	CODE	F						
SER.NO.				POWER FACTOR	89	NEMA-NOM-EFFICIENCY				96.2		
						MAX CORR KVAR	57	GUARANTEED EFFICIENCY		95.4		
						NEMA NOM/CSA QUOTED EFF						
										MOTOR WEIGHT	2424	

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	449T	400	P	3/60	1780	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
437	CONT	40/F	1.15	B	F	PROT
E/S	ROTOR		TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)	
433997	418143049GE		---	---	.0107	
PERFORMANCE						
LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %	
NO LOAD	0	97.7	1800	4.12	0	
1/4	100	142	1796	69.5	95.3	
2/4	200	226	1792	85.8	96.6	
3/4	300	327	1788	88.7	96.6	
4/4	400	437	1783	88.9	96.2	
5/4	500	551	1778	88.8	95.7	
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD		TORQUE LB.-FT.		AMPERES
LOCKED ROTOR	0	153		1798		2819
PULL UP	1360	136		1606		2308
BREAKDOWN	1724	245		2880		1477
FULL LOAD	1783	100		1177		437
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE						
REMARKS: CALCULATED DATA						
XE MOTOR-NEMA NOM. EFF. 96.2 PCT.						
				A-C MOTOR PERFORMANCE DATA		
DR. BY G. R. WEBB CR. BY W. L. SMITH APP. BY W. L. SMITH DATE 04/02/14				A44WG3164-R003 ISSUE DATE 04/02/14		
A MEMBER OF THE ABB GROUP						



Printed on 4/2/14 10:23 @ ragsun

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

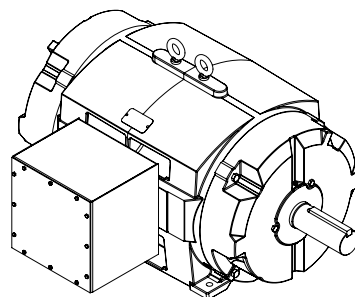
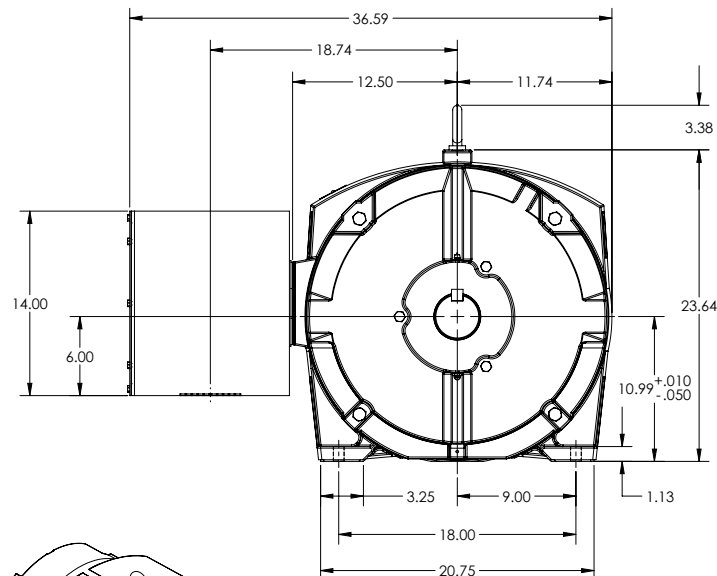
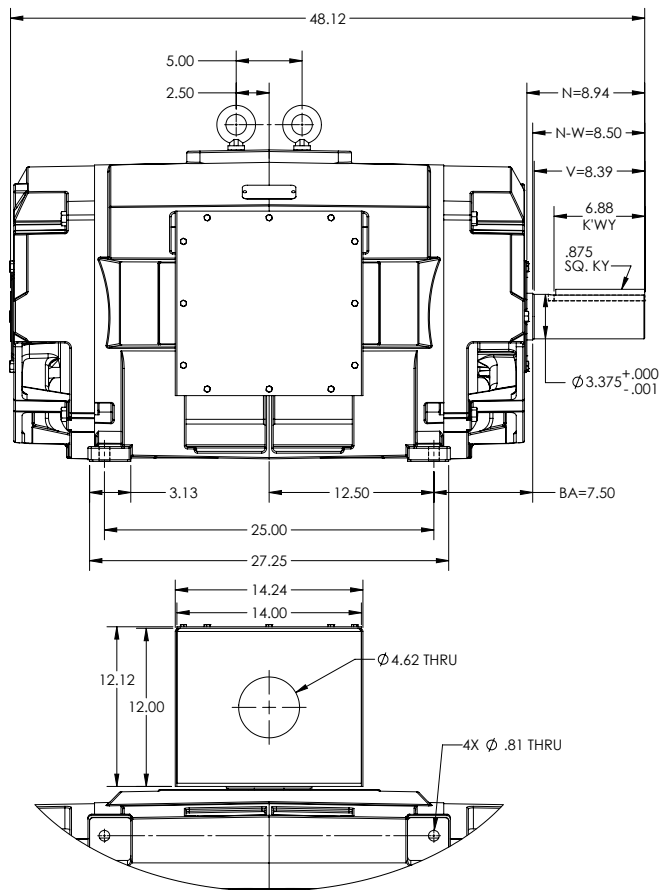
ENCLOSURE: PROTECTED; OPEN DRIP PROOF

FRAME E449T

COOLING: SELF-VENTILATED

MOUNTING: FOOT, F-1 SIDE

14X14X12 FABRICATED STEEL C/BOX



MOTOR WEIGHT: 2100 LBS
 *MAY VARY BY 15% DEPENDING ON RATING

DIMENSIONS ARE IN INCHES

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

REV. DESC: UPDATE MODEL TO ADD EXTERNAL HARDWARE PER PROD MGM

REV: B VERSION: 02

REVISED: 07-48-44 07/14/2022

TDR: 000001193529

MODEL NO. 604989-505

BY: USBUFA

BALDOR

449T PROT F-1 FT - 14X14X12 FAB STL C/BOX

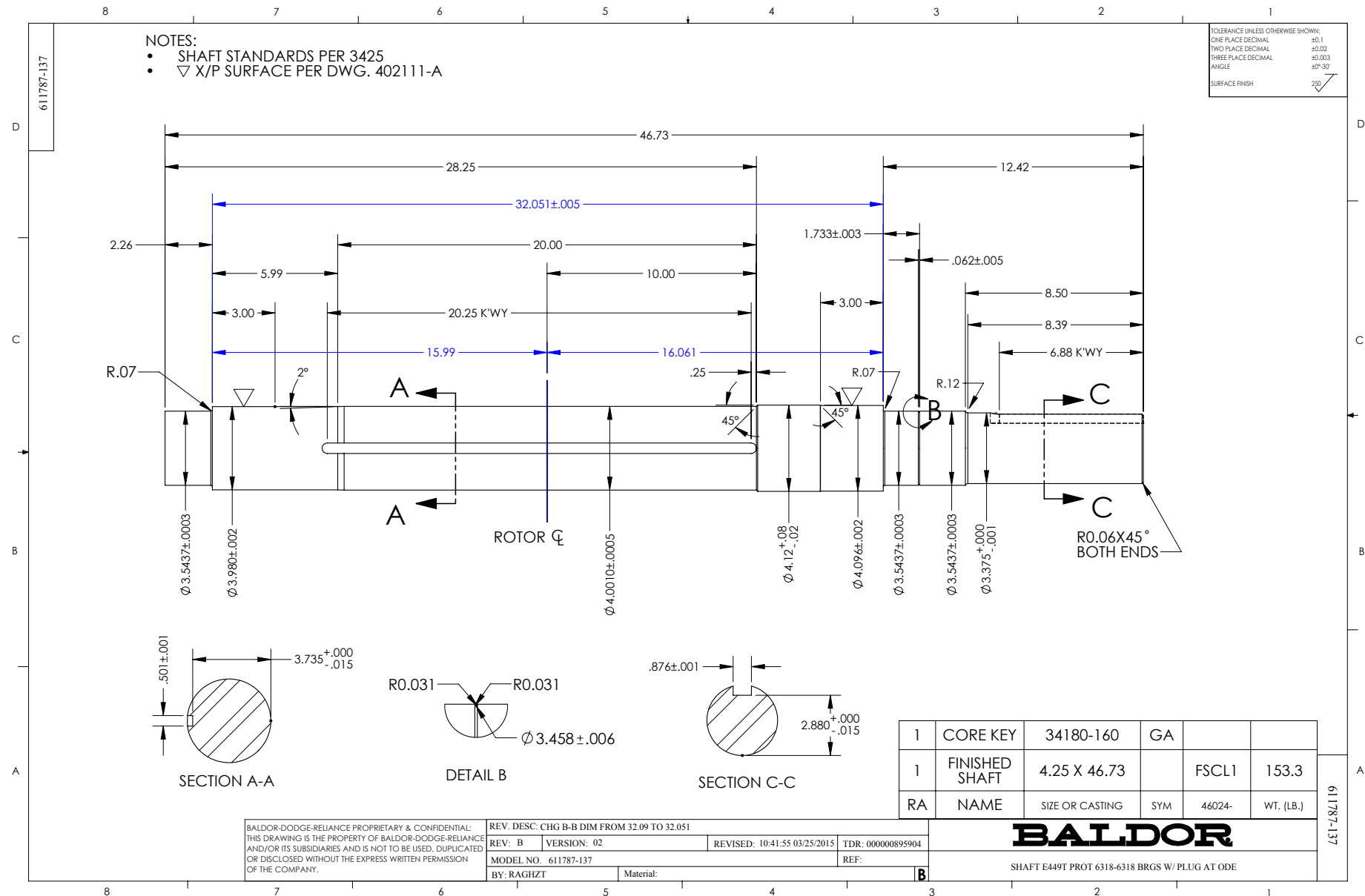
SHEET NUMBER
1 OF 1

505-686F09

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.

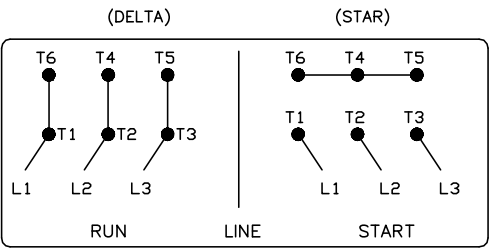
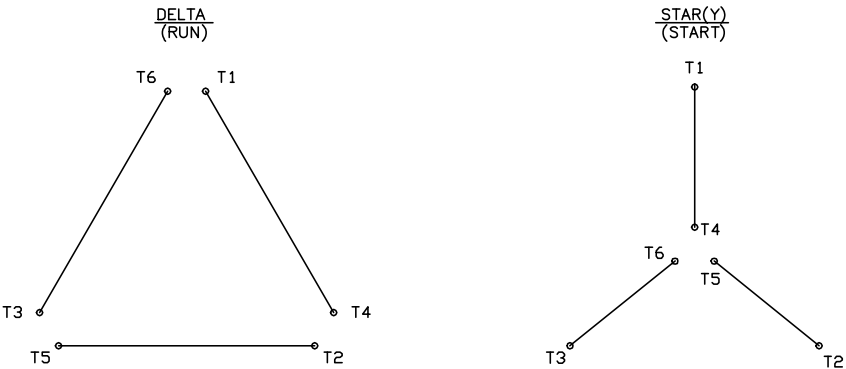
505-686F09



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