

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **EM2583T-4**

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

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	A44056M	Elec. Spec:	A44WG1481	CD Diagram:	416820-008
Enclosure:	DP	Mfg Plant:		Mech. Spec:		Layout:	611750-501
Frame:	444T	Mounting:	F1	Poles:	06	Created Date:	10-19-2010
Base:		Rotation:	R	Insulation:	F	Eff. Date:	09-26-2016
Leads:	6#4					Replaced By:	
Literature:		Elec. Diagram:					

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	1455						

Nameplate NP2496L	
MOBIL POLYREX EM	

Parts List		
Part Number	Description	Quantity
SA207463	SA P44G1771	1.000 EA
RA194730	RA P44G1771	1.000 EA
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
NP2377L	SS SUPER-E CC CSA-C US CSA-EEV (LASER)	1.000 EA
421948044	LABEL, MYLAR	1.000 EA
004824015A	GREASE POLYREX EM	1.156 LB
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	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
405851012AF	SPACE	4.000 EA
410700004A	WSHR	1.000 EA
702611001A	BAFFL 440 SUB PAINT	1.000 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	4.000 EA
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 EA
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
405851012AF	SPACE	4.000 EA
032018008BK	HHCS 5/16-18X1L PLATED	4.000 EA
032018008DK	HHCS 1/2-13X1 PLATED	4.000 EA
033512006LB	HHTTS 1/4-20X3/4 PLTD.	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
067053001C	GASK 440	1.000 EA
076863000C	+CBCST BLKT - 440	1.000 EA
076864000A	CB CVRCST BLKT - 440	1.000 EA
406056007A	GASKET, 440	1.000 EA
415000103D	T/LUG #4AWG-1/0AWG W/HOLE FOR .250 BOLT	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.250 GA
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 EA
415045002A	SLGR	1.000 EA
702611001A	BAFFL 440 SUB PAINT	1.000 EA
034180054KA	KEY 7/8X7/8X6-3/4 L	1.000 EA
NP2496L	MOTOR LUBE NAMEPLATE	1.000 EA
PK5004A09	BASE 48 X 39-1/4 STACK 2 X 4 RUUNER	1.000 EA


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	

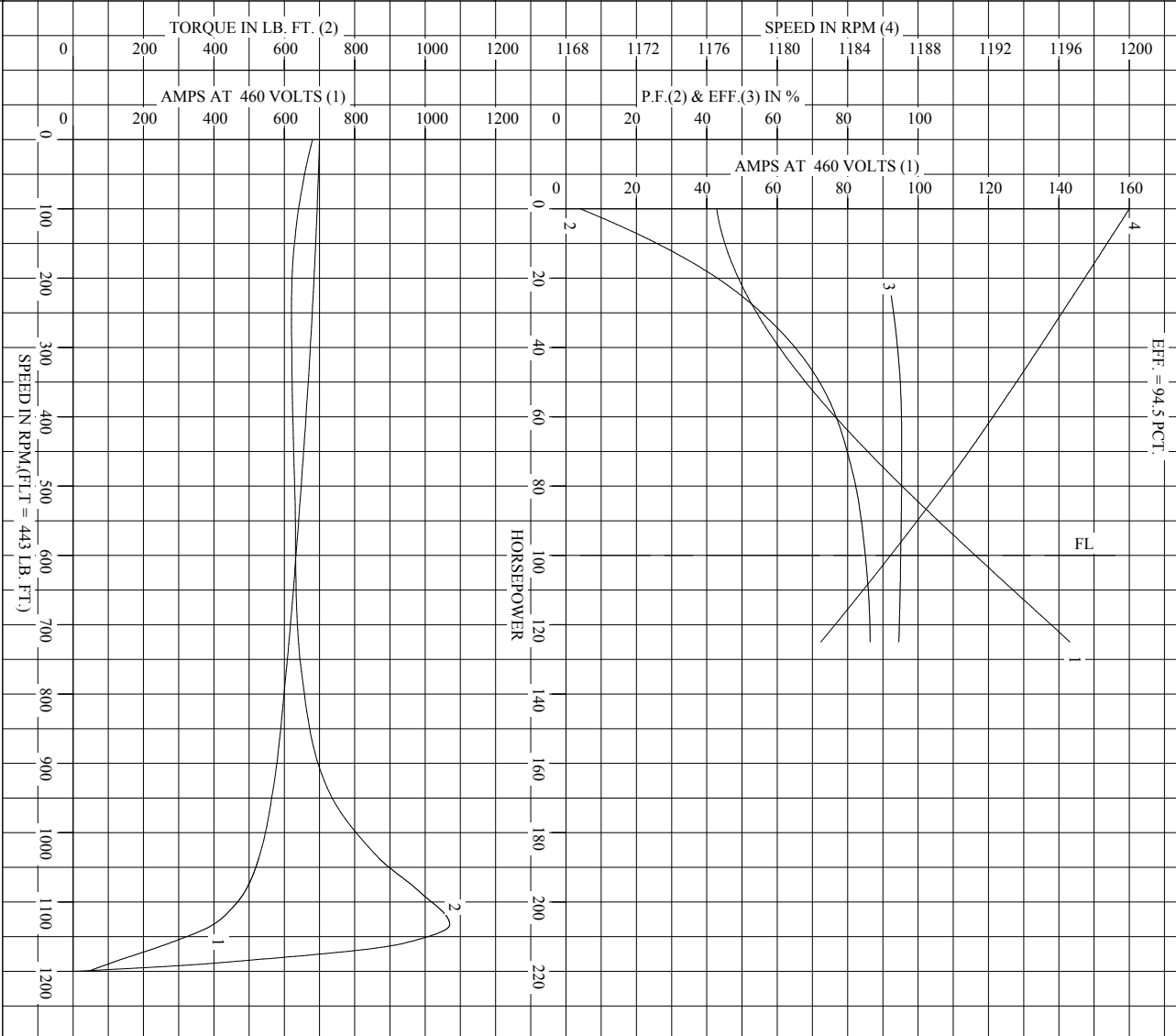
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	154	680	700		
PULL UP	240	140	620	680		
BREAKDOWN	1133	242	1070	398		
FULL LOAD	1187	100	443	116		

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	<b>A-C MOTOR                  PERFORMANCE DATA</b> A44WG1481-R001 ISSUE DATE 12/18/10
	CK. BY	W. I. SMITH	
	APP. BY	W. I. SMITH	
DATE		03/18/10	

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 DUTY CONT F CODE LETTER F  
 TYPE P DUTY CONT ENCLOSURE PROT E  
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/F E/S 497758 STATOR RES. @ 25 °C .0586  
 OHMS (BETWEEN LINES)



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

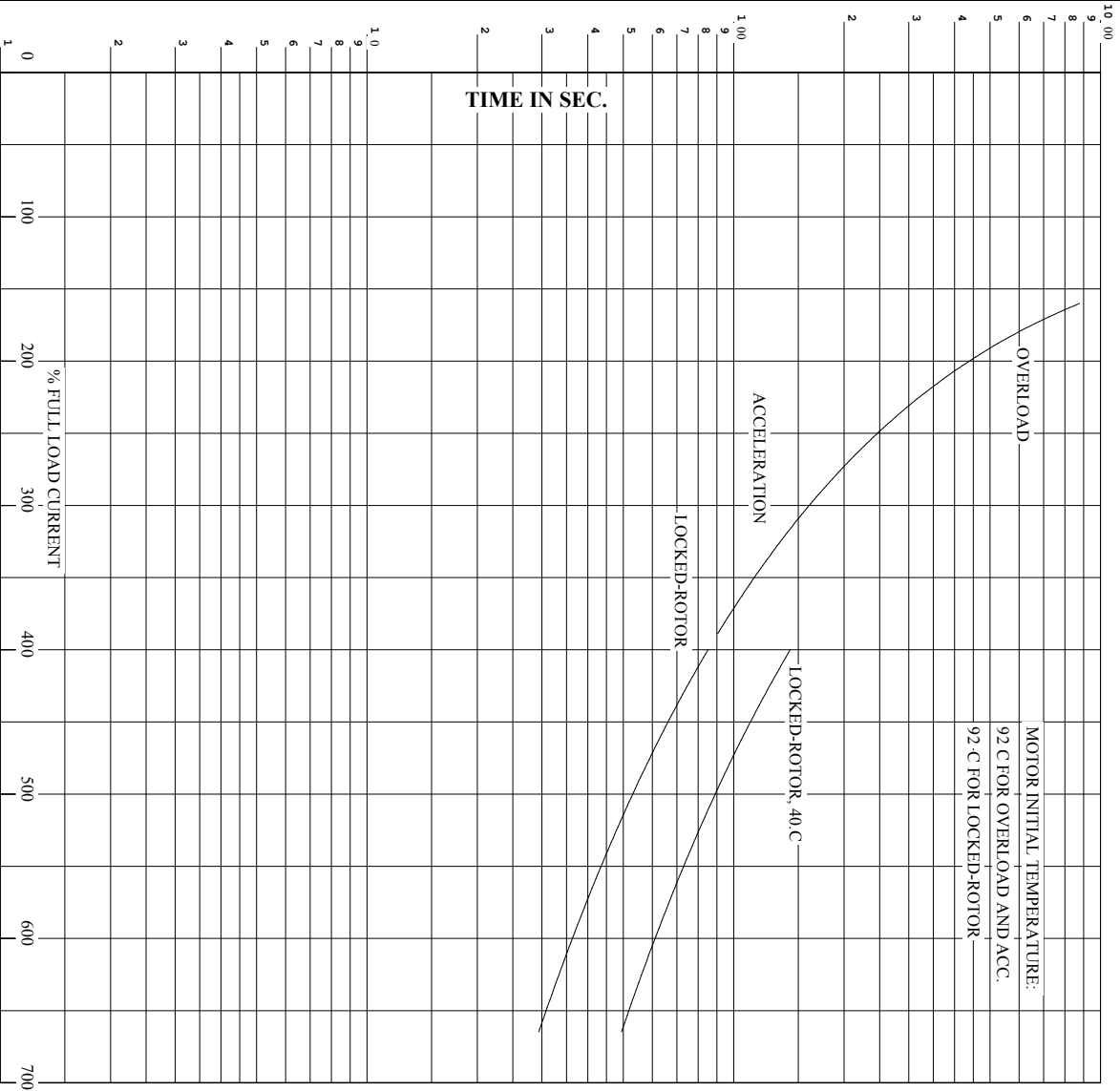
**BALDOR**

DR. BY J. 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

Printed on 12/18/10 5:56 @ psecs-motoreng

RET. 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)



REMARKS: THERMAL LIMIT CURVE  
 EFF. = 94.5 PCT. CURVE

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

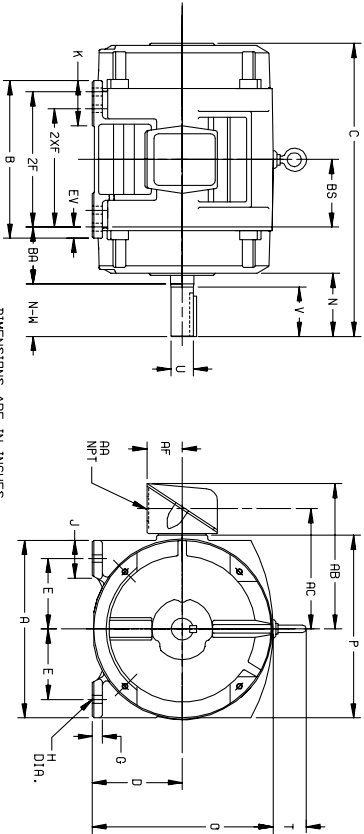


DR. BY J.HARRISON  
 CK. BY W.L.SMITH  
 App. BY W.L.SMITH  
 DATE 03/18/10

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

611750-501

**DUTY MASTER ALTERNATING CURRENT MOTORS**  
 SQUIREL-CAGE INDUCTION  
 CAST IRON CONSTRUCTION  
 ENCLOSURE: PROTECTED  
 MOUNTING: FOOT  
 FRAMES 250T THRU 440T  
 COOLING: SELF-VENTILATED



DIMENSIONS ARE IN INCHES

FRAME	A	DIG2	E	G	H	J	K	D	P	T	CAST IRON TERMINAL BOX					EV
254T-256T	12.50	6.25	5.00	6.9	5.6	2.25	3.50	12.61	12.69	2.44	1-1/4	10.25	8.25	2.50	4.25	6.2
284T-286TS	14.00	7.00	5.50	7.5	5.6	2.75	3.75	14.12	14.31	2.44	1-1/2	12.06	9.62	3.19	4.75	1.00
324T-326TS	15.75	8.00	6.25	8.8	6.9	3.12	4.00	16.10	16.42	2.44	2	14.75	11.00	3.62	5.25	1.00
364T-365TS	17.00	9.00	7.00	9.8	6.9	3.00	3.62	18.30	19.56	2.94	3	18.00	13.81	4.12	5.88	1.00
404T-405TS	19.00	10.00	8.00	11.2	8.1	3.25	4.75	20.56	21.81	2.94	3	19.00	14.81	3.12	6.62	1.12
444T-445TS	21.00	11.00	9.00	12.8	8.1	3.25	5.25	22.91	23.62	3.25	3	21.44	16.69	5.00	7.50	1.25

FRAME	SIZE	C	BS	B	ZF	2XF	N	SHAFT AND KEY			WEIGHT LBS. (3)	
								N-W(6)	U(3)	V		S.O.
254T	22.44	5.00	11.25	---	8.25	4.25	4.00	1.625	3.75	3.75	2.75	265
256T	22.44	5.00	11.25	---	8.25	4.25	4.00	1.625	3.75	3.75	2.75	275
284T	24.94	5.50	13.00	---	9.50	4.88	4.62	1.875	4.38	5.00	3.25	340
284TS	23.96	5.50	13.00	---	9.50	3.50	3.25	1.625	3.00	3.75	1.88	340
286T	24.94	5.50	13.00	---	9.50	4.88	4.62	1.875	4.38	5.00	3.25	370
286TS	23.96	5.50	13.00	---	9.50	3.25	3.25	1.625	3.00	3.75	1.88	370
324T	27.96	6.00	14.00	---	10.50	5.50	5.25	2.185	5.00	5.00	3.75	480
324TS	26.96	6.00	14.00	---	10.50	4.00	3.75	1.875	3.50	5.00	2.00	480
364T	27.96	6.00	14.00	---	10.50	5.25	2.185	5.00	5.00	3.75	5.20	520
364TS	26.96	6.00	14.00	---	10.50	4.00	3.75	1.875	3.50	5.00	2.00	520
366T	29.70	6.12	14.25	---	11.25	6.12	5.88	2.375	5.62	6.25	4.25	730
366TS	27.98	6.12	14.25	---	11.25	4.00	3.75	1.875	3.50	5.00	2.00	730
404T	34.00	6.88	16.00	---	12.25	7.62	7.25	2.875	7.00	7.50	5.00	1045
404TS	31.00	6.88	16.00	---	12.25	4.00	3.75	1.875	3.50	5.00	2.00	1045
405T	34.00	6.88	16.00	---	12.25	7.62	7.25	2.875	7.00	7.50	5.00	1085
405TS	31.00	6.88	16.00	---	12.25	4.62	4.25	2.185	4.00	5.00	2.75	1085
444T	39.95	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	8.75	6.88	1795
444TS	35.81	8.25	19.00	---	14.50	5.19	4.75	2.375	4.50	6.25	3.00	1790
445T	39.95	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	8.75	6.88	1770
445TS	35.81	8.25	19.00	---	14.50	5.19	4.75	2.375	4.50	6.25	3.00	1770

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE. CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2W-1, V-4-W-5-W-7, DR C-1 MOUNTING IS SPECIFIED.
- (2) 'P' VARIES -250T - 320T +.00, -0.3 V-4-W-5-W-7, DR C-1 MOUNTING IS SPECIFIED.
- (3) 'U' VARIES +.000, -.001 IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING. MAXIMUM PERMISSIBLE SHAFT ROUNDOFF WHEN MEASURED AT END OF SHD. SHAFT EXTENSION IS .002 I.P.R UP TO AND INCLUDING 1.625 DIA. AND .003 I.P.R. ABOVE 1.625 TO 3 INCH DIA.
- (5) MOTOR WEIGHTS MAY VARY BY 1% DEPENDING UPON RATING.
- (6) 'N'-W' VARIES +.00, -.25.

FRAME-\_\_\_\_\_ TYPE-\_\_\_\_\_ CERTIFIED FOR-\_\_\_\_\_  
 ORDER-\_\_\_\_\_ ITEM-\_\_\_\_\_ HP-\_\_\_\_\_ RPM-\_\_\_\_\_ PH-\_\_\_\_\_ HZ \_\_\_\_\_ VOLTS \_\_\_\_\_  
 SALES ORDER-\_\_\_\_\_ APPROVED BY-\_\_\_\_\_ DATE \_\_\_\_\_  
 105-057119

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: LOADED TO BUS	VERSION: 01	TDR: 000000546464
REV. LTR: A	REVISED: 03:18:49 06/22/2010	BY: RAGHZT
FILE: \\RAG\00009\279		
MTL: -		

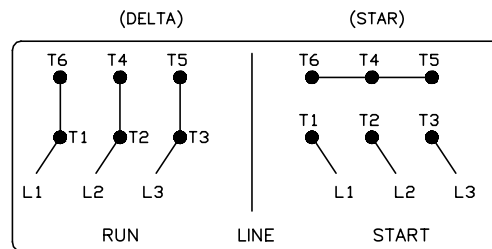
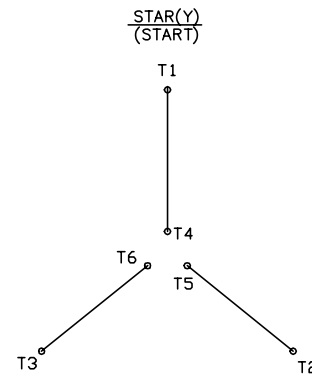
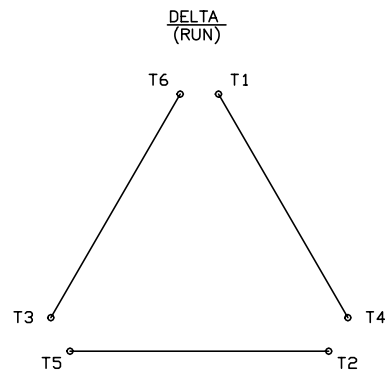
**BALDOR**  
 DIM SHT-250T-440T  
 SH 1 of 1

416820-008

# A-C MOTOR CONNECTION DIAGRAM

STANDARD 6 LEAD

Y START - DELTA RUN



< N. P. 1767-DC >

416820-008

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: -	Ⓢ □	



**CONNECT DIAGRAM STD 6 LEAD Y START DELTA RUN**

SH 1 of 1

Marketing maintained PDF of MN408:

<http://www.baldor.com/support/Literature/Load.ashx/MN408?ManNumber=MN408>

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>