

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2583T-4**

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

Part Detail							
Revision:	N	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	A44WG1481	CD Diagram:	416820-008	Mfg Plant:	
Mech. Spec:		Layout:	611750-501	Poles:	06	Created Date:	10-19-2010
Base:		Eff. Date:	07-11-2019	Leads:	6#4		

Specs			
Catalog Number:	EM2583T-4	Heater Indicator:	No Heater
Enclosure:	DP	Insulation Class:	F
Frame:	444T	Inverter Code:	Inverter Ready
Frame Material:	Iron	KVA Code:	F
Output @ Frequency:	100.000 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	1200 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 4 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Type:	A44056M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	85
Agency Approvals:	CCSA US	Pulley End Bearing Type:	Ball
	CSA EEV	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Shaft Ground Indicator:	No Shaft Grounding
Base Indicator:	Rigid	Shaft Rotation:	Reversible
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Slinger Indicator:	No Slinger
Current @ Voltage:	116.000 A @ 460.0 V	Speed Code:	Single Speed
Design Code:	B	Motor Standards:	NEMA
Drip Cover:	No Drip Cover	Starting Method:	Wye Start - Delta Run
Duty Rating:	CONT	Thermal Device - Bearing:	None

<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
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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							

Nameplate 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 (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	

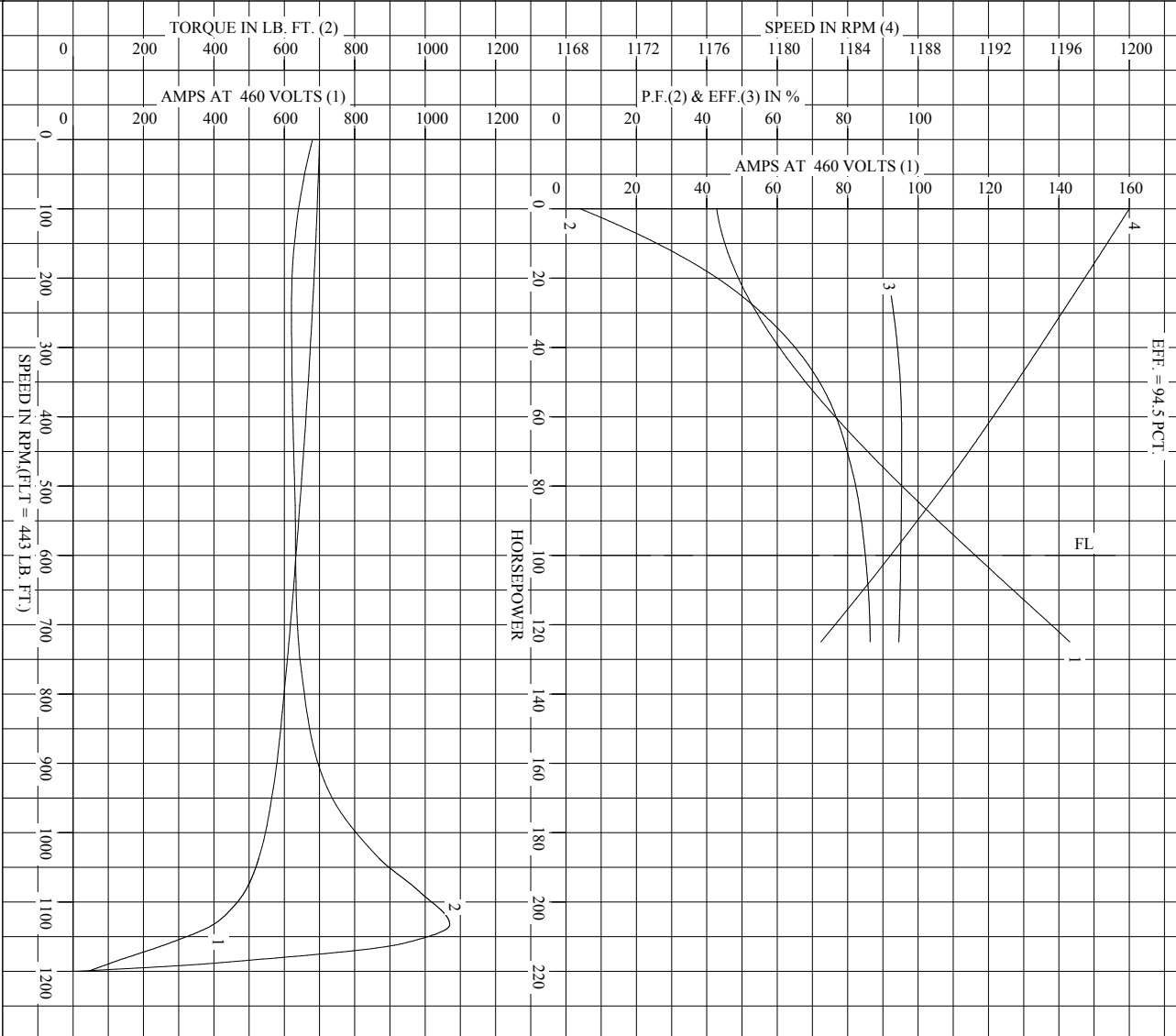
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	154	680	700		
PULL UP	240	140	620	680		
BREAKDOWN	1133	242	1070	398		
FULL LOAD	1187	100	443	116		

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>	
	CK. BY	W. I. SMITH		
	APP. BY	W. I. SMITH		
	DATE	03/18/10	ISSUE DATE	12/18/10

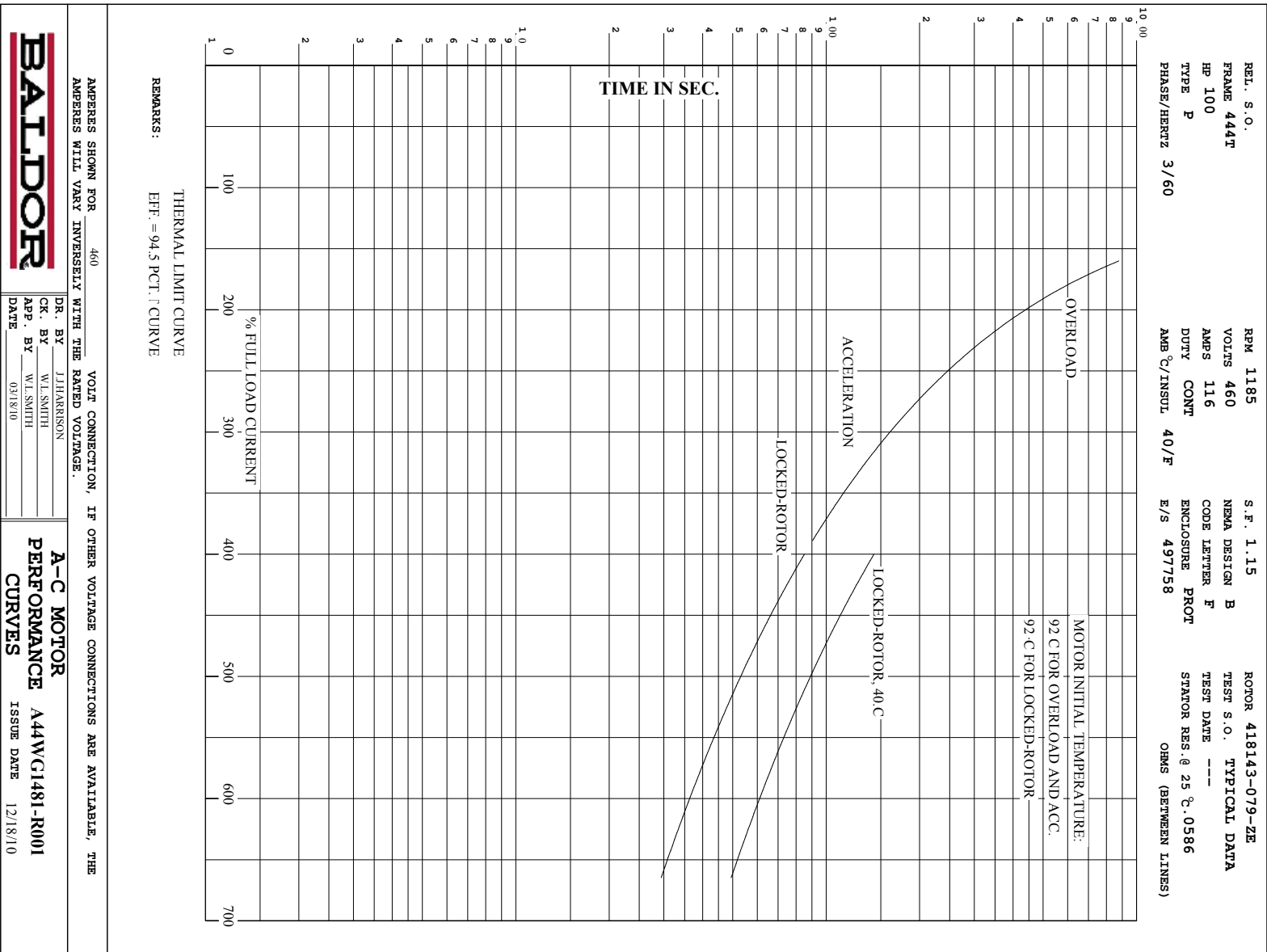
REL. S.O.	444T	RPM 1185	S.F. 1.15	ROTOR 418143-079-ZE
FRAME	444T	VOLTS 460	NEMA DESIGN B	TEST S.O. TYPICAL DATA
HP	100	AMPS 116	CODE LETTER F	TEST DATE ---
TYPE	P	DUTY CONT	ENCLOSURE PROT	STATOR RES. @ 25 °C .0586
PHASE/HERTZ	3/60	AMB °C/INSUL	40/F	E/S 497758
				OHMS (BETWEEN LINES)



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

<b>BALDOR</b>	DR. BY J. HARRISON	<b>A-C MOTOR</b>
	CK. BY W. L. SMITH	
	APP. BY W. L. SMITH	
	DATE 03/18/10	
<b>PERFORMANCE CURVES</b>		<b>A44WG1481-R001</b>
		ISSUE DATE 12/18/10

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AMPERES SHOWN FOR 460  
AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE



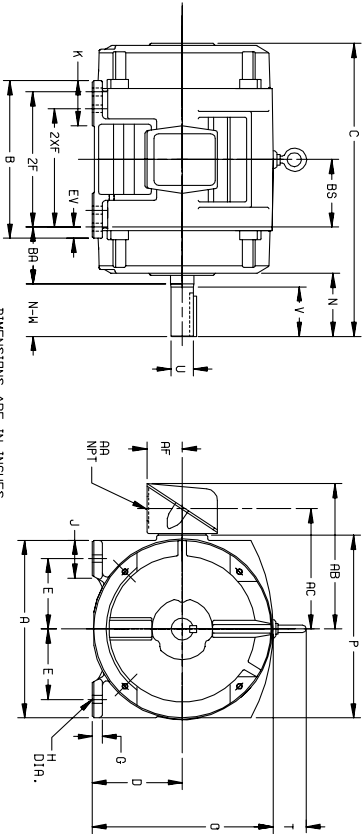
DR. BY J.HARRISON  
CK. BY W.L.SMITH  
APP. BY W.L.SMITH  
DATE 03/18/10

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



**DUTY MASTER ALTERNATING CURRENT MOTORS**  
 SQUIRREL-CAGE INDUCTION  
 CAST IRON CONSTRUCTION

ENCLOSURE: PROTECTED  
 MOUNTING: FOOT  
 FRAMES 250T THRU 440T  
 COOLING: SELF-VENTILATED



FRAME	A	DIG2	E	G	H	J	K	D	P	T	CAST IRON TERMINAL BOX						EV
254T-256T	12.50	6.25	5.00	.69	.56	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	.75	.56	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	.88	.69	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	.88	.69	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	1.12	.81	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	1.12	.81	3.25	5.25	22.91	23.62	3.25	3	21.44	16.69	5.00	7.50	1.25	

FRAME	C	BS	B	ZF	2XF	N	SHAFT AND KEY			WEIGHT LBS. (3)		
							N-W(6)	U(3)	V		S.O.	LGTH.
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	4.00	1.625	3.75	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	23.96	5.50	13.00	11.00	---	4.88	4.62	1.875	4.38	5.00	3.25	370
286TS	23.96	5.50	14.00	---	10.50	3.50	3.25	1.625	3.00	3.75	1.88	480
324T	27.96	6.00	14.00	---	10.50	5.00	5.25	2.185	5.00	5.00	3.75	480
324TS	27.96	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	12.00	---	5.00	5.25	2.185	5.00	5.00	3.75	520
364TS	27.96	6.00	14.00	12.00	---	4.00	3.75	1.875	3.50	5.00	2.00	520
364T	29.70	6.12	14.25	---	11.25	6.12	5.88	2.375	5.62	6.25	4.25	735
364TS	27.98	6.12	14.25	---	11.25	6.12	5.88	2.375	5.62	6.25	4.25	730
365T	29.70	6.12	14.25	12.25	---	4.00	3.75	1.875	3.50	5.00	2.00	770
365TS	27.98	6.12	14.25	12.25	---	5.88	2.375	5.62	6.25	4.25	775	
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	6.62	6.25	2.875	7.00	7.50	5.00	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	6.62	6.25	2.875	7.00	7.50	5.00	1085
444T	39.56	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	39.56	8.25	19.00	16.50	---	8.94	8.50	3.375	8.25	8.75	6.88	1770
445TS	35.81	8.25	19.00	16.50	---	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, -.03. 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 RUNOUT WHEN MEASURED AT END OF SHD. SHAFT EXTENSION IS .002 TIR UP TO AND INCLUDING 1825 DIA. AND .003 TIR ABOVE 1825 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: -		

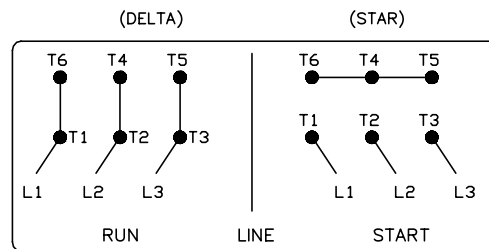
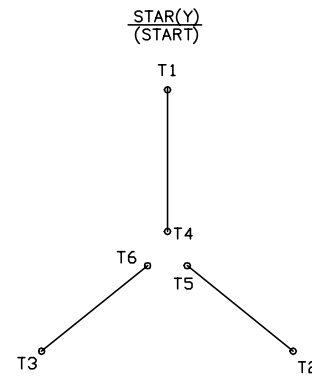
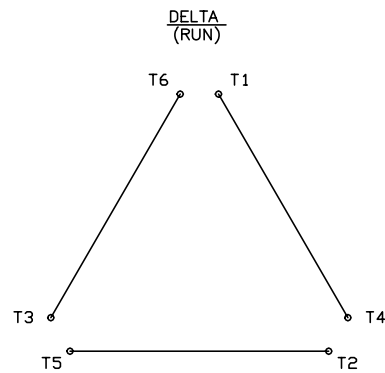
**BALDOR**  
 DIM SHT-250T-440T  
 SH 1 of 1

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: 00000847713
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