

BALDOR® • RELIANCE 

Product Information Packet

EM2583T-4

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

Part Detail							
Revision:	M	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:	01-11-2018	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 (OLD)

Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	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

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

Parts List (continued)		
Part Number	Description	Quantity
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	CBCST 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
MG1025Y17	WILKOFAS, 789.701, SUPER E PEARL GOLD	0.250 GA
418150003A	GREASE FITTING CAP	1.000 EA
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 (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

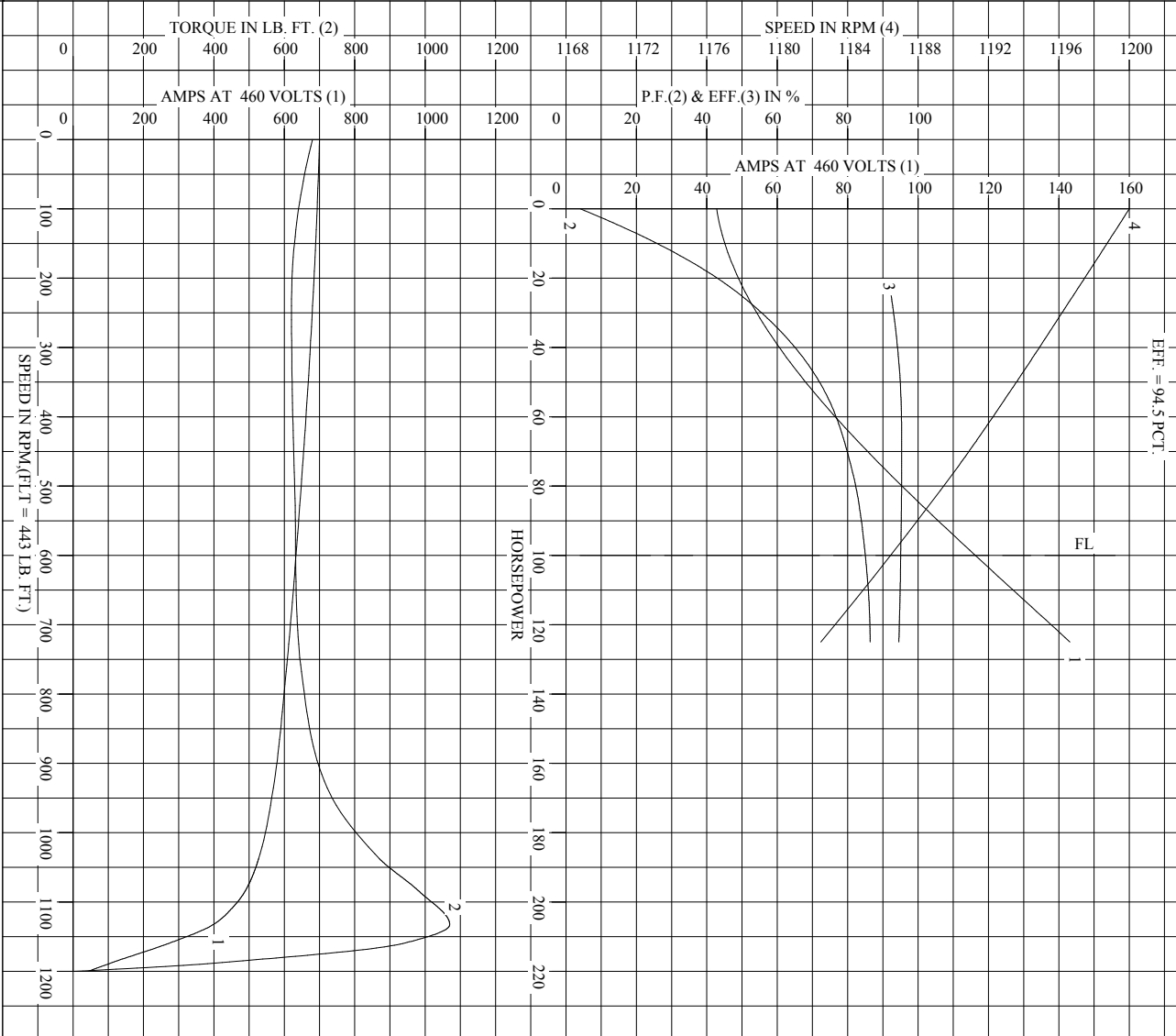
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS: TYPICAL DATA

XE - MOTOR; NEMA NOM. EFF. = 95.0 PCT.; GUAR. MIN. EFF. = 94.5 PCT.

BALDOR	DR. BY	J.J.HARRISON	A-C MOTOR	
	CK. BY	W.I.SMITH		PERFORMANCE DATA
	APP. BY	W.I.SMITH		
	DATE	03/18/10	ISSUE DATE	12/18/10

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 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)



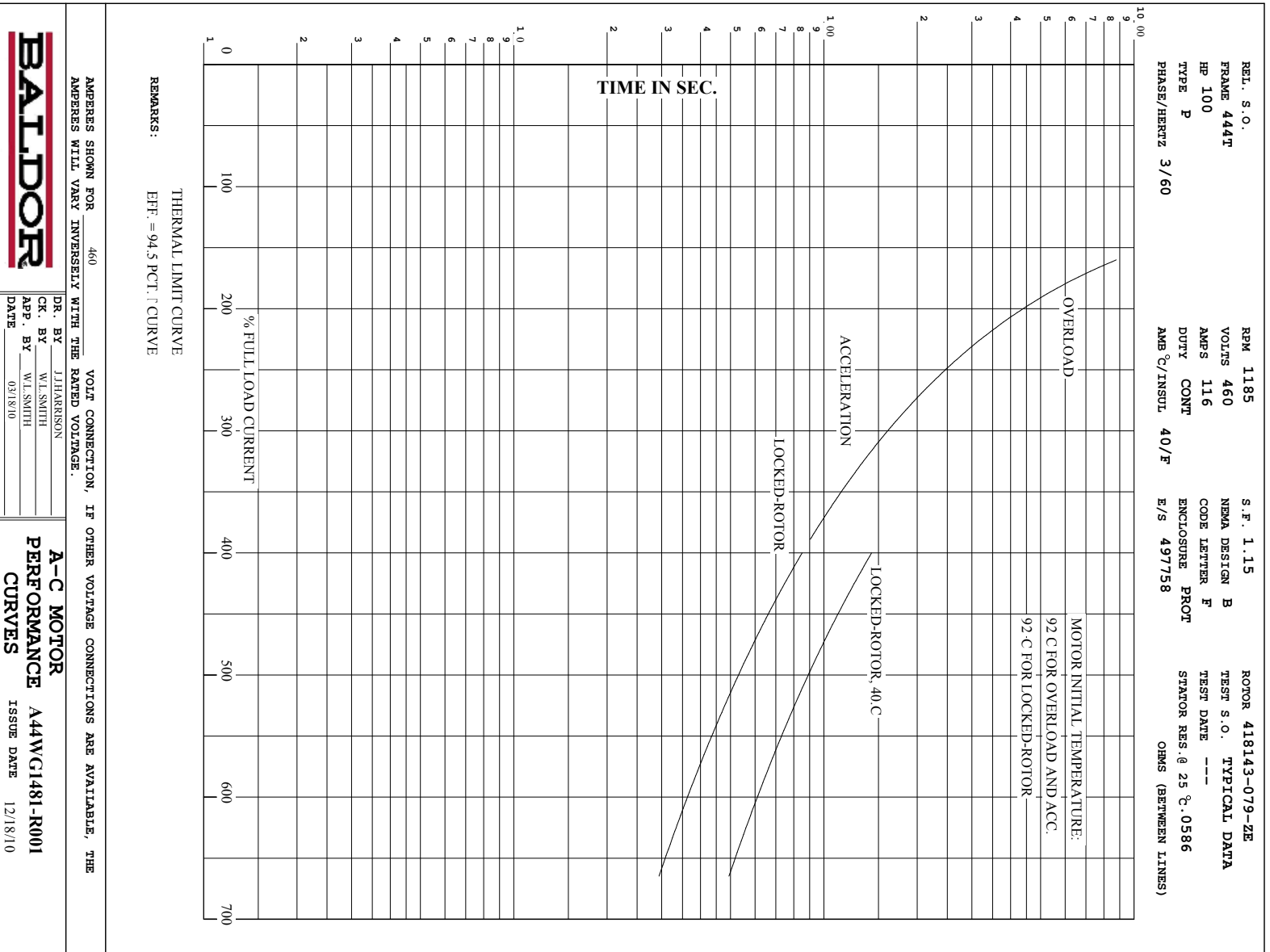
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR

DR. BY J.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 @ pscs-motoreng

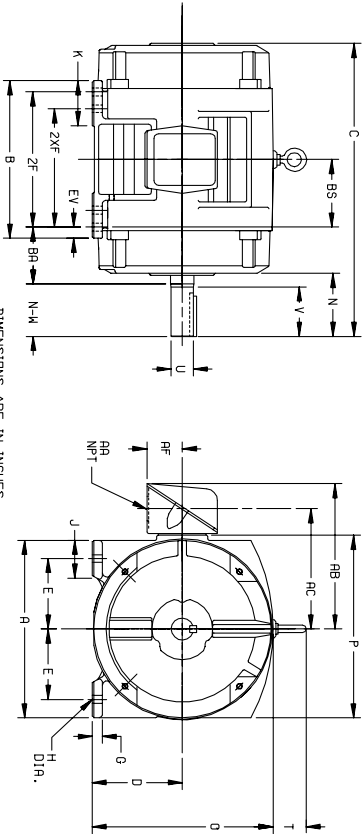


AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

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

611750-501

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



FRAME	A	DIG	E	G	H	J	K	D	P	T	CAST IRON TERMINAL BOX					
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	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	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	370
324T	27.96	6.00	14.00	---	10.50	5.00	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	---	12.00	5.00	5.25	2.185	5.00	5.00	3.75	520
364TS	26.96	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	730
364TS	27.98	6.12	14.25	---	11.25	4.00	3.75	1.875	3.50	5.00	2.00	730
365T	29.70	6.12	14.25	---	12.25	6.12	5.88	2.375	5.62	6.25	4.25	775
365TS	27.98	6.12	14.25	---	12.25	4.00	3.75	1.875	3.50	5.00	2.00	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	4.62	4.25	2.185	4.00	5.00	2.75	1045
405T	34.00	6.88	16.00	---	13.75	7.62	7.25	2.875	7.00	7.50	5.50	1085
405TS	31.00	6.88	16.00	---	13.75	4.62	4.25	2.185	4.00	5.00	2.75	1085
444T	39.956	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	39.956	8.25	19.00	---	16.50	8.94	8.50	3.375	8.25	8.75	6.88	1790
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.
- (2) 'P' VARIES -250T - 320T +.00, -.03
- (3) 'U' VARIES +.000, -.001
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 1% DEPENDING UPON RATING.
- (6) 'N'-W' VARIES +.00, -.25.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2W-1,
 V-4W-5W-7, DR C-1 MOUNTING IS SPECIFIED.
 IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT
 FACTORY.
 MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED
 AT END OF S/DL 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.

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: -		

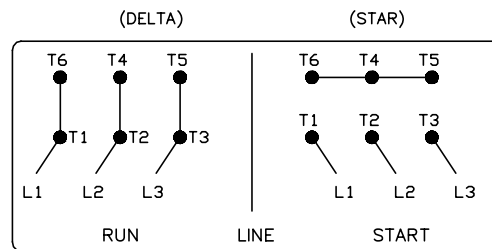
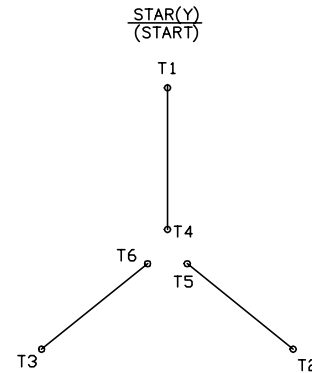
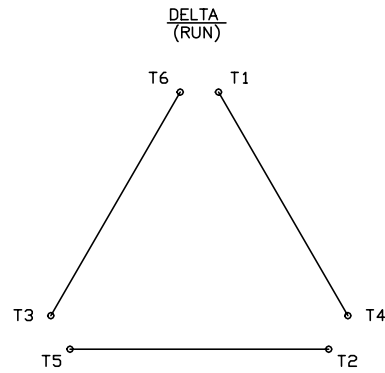
BALDOR
 DIM SHT-250T-440T
 SH 1 of 1

416820-008

A-C MOTOR CONNECTION DIAGRAM

STANDARD 6 LEAD

Y START - DELTA RUN



< N. P. 1767-DC >

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

416820-008

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>