

BALDOR® • RELIANCE 

Product Information Packet

EM44304TS-4

300HP, 1780RPM, 3PH, 60HZ, 449TS, TEFC, F1

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	A44WG2960	CD Diagram:	416820-008	Mfg Plant:	
Mech. Spec:		Layout:	617427-445	Poles:	04	Created Date:	04-09-2015
Base:		Eff. Date:	03-01-2017	Leads:	6#2 (02 per group)		

Specs			
Catalog Number:	EM44304TS-4	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	449TS	Inverter Code:	Inverter Ready
Frame Material:	Iron	IP Rating:	NONE
Output @ Frequency:	300.000 HP @ 60 HZ	KVA Code:	G
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	12 @ 2 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Type:	A44144M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	89
Agency Approvals:	CCSA US	Product Family:	General Industrial
	CSA EEV	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Base Indicator:	Rigid	Shaft Ground Indicator:	No Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Current @ Voltage:	327.000 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	B	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Wye Start - Delta Run

Feedback Device:	NO FEEDBACK	Thermal Device - Bearing:	None
		Thermal Device - Winding:	None

Nameplate NP2496L

MOBIL POLYREX EM

Nameplate NP2349L									
SPEC NO.	A44-7110-2960	CAT.NO.	EM44304TS-4	FRAME	449TS				
HP	300	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P
RPM	1780	AMPS	327	HZ	60	AMB	40	SF	1.15
DRIVE END BEARING	90BC03J30X	DUTY	CONT	INSUL.CLASS	F				
OPP D.E. BEARING	90BC03J30X	ENCL	TEFC	CODE	G				
SER.NO.		POWER FACTOR	89	NEMA-NOM-EFFICIENCY	96.2				
				MAX CORR KVAR	41	GUARANTEED EFFICIENCY	95.4		
				NEMA NOM/CSA QUOTED EFF					
				MOTOR WEIGHT	2888				

Parts List		
Part Number	Description	Quantity
SA299255	SA A44-7110-2960	1.000 EA
RA286269	RA A44-7110-2960	1.000 EA
421948044	LABEL, MYLAR	1.000 EA
NP2496L	MOTOR LUBE NAMEPLATE	1.000 EA
000613006PU	N/P (RELEASE QTY 10,000) UL CSA LABEL	1.000 EA
000692000FF	N/P	1.000 EA
000692000VD	LABEL WARNING	1.000 EA
NP2349L	SUPER-E ,SS, CSA, CSA SUPER-E	1.000 EA
089490099A	G28 BRKT 089490098WCA KB	1.000 EA
415072001B	CLAMP	1.000 EA
083199126RA	G28 MOLDED FAN COVER W/BAFFLE ASSEMBLY	1.000 EA
034180014DA	KEY 1/4X1/4X1-3/4 L	1.000 EA
078549001DA	FAN 400 078549001F	1.000 EA
004824015A	GREASE POLYREX EM	1.160 LB
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 EA
032018008CK	HHCS 3/8-16X1L PLATED	4.000 EA
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 EA
034630002AB	CPLG 1/4" PLATED	1.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
410700004A	WSHR	1.000 EA
034017014AB	LCKW 3/8 STD. PLATED	4.000 EA
034530072BB	PIPE NIPPLE,DE - 440-BS	1.000 EA
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 EA
034690005AB	PPLG 3/4 PLATED	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
034690002AB	PPLG 1/4" PLTD.	1.000 EA
034690001AB	1/8" NPT SQHDPLG	1.000 EA
032620016LA	SOCKET SET SCREW-449	3.000 EA
702623022A	G28 AIR DEFLECTOR DRIVE END -- PLASTIC	1.000 EA
418151014G	RETAIN RING	1.000 EA
034630002AB	CPLG 1/4" PLATED	1.000 EA
034530072BB	PIPE NIPPLE,DE - 440-BS	1.000 EA
034690002AB	PPLG 1/4" PLTD.	1.000 EA
034690001AB	1/8" NPT SQHDPLG	1.000 EA
702623013A	THERMAL BARRIER -- G28 -- BRACKET MTD	1.000 EA
032018004BK	HHCS 5/16-18X1/2 PLATED	3.000 EA
034017013AB	LCKW 5/16 STD. PLATED	3.000 EA
089490099A	G28 BRKT 089490098WCA KB	1.000 EA
032018020FK	HHCS 3/4-10X2-1/2 PLTD.	4.000 EA
032018030DK	HHCS 1/2-13X3-3/4 PLTD.	3.000 EA
034530072AB	P/NIP 1/8X9"L Threaded both ends	1.000 EA
415096002A	CPLG 1/8 HEX TYPE	1.000 EA
032018006BK	HHCS 5/16-18X3/4 PLATED	3.000 EA
034001013AB	FLTW BAFFLE	3.000 EA
415915007G	GASK, LAC	1.000 FT
406056008A	GASKET, TERBD 440	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
MG1025Y17	WILKOFAS, 789.701, SUPER E PEARL GOLD	0.500 GA
032018008DK	HHCS 1/2-13X1 PLATED	4.000 EA

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702616012T	CONDUIT BOX	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
406099000A	PLUG - FAN COVER 320-440	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
418150003A	GREASE FITTING CAP	1.000 EA
033775004EA	DRSCR #6-1/4 304 S.S.	2.000 EA
034180024HA	KEY 5/8X5/8X3 L	1.000 EA
604797056	400-447 FRAME 60 X 42	1.000 EA
032510026D	CARRIAGE BOLT - 440	2.000 EA
034001014AB	FLAT WASHER 3/8"PLATED	2.000 EA
034001016AB	WSHR .562ID 1.375OD .109	2.000 EA
033300014AC	HEX NUT, SHIPPING - 400	2.000 EA
604799003C	PLASTIC BAG 42X32X46	1.000 EA

REL. S.O.	FRAME	HP	TYPE	PHASE/ HERTZ	RPM	VOLTS
	449T	300	P	3/60	1780	460

AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
327	CONT	40/F	1.15	B	G	FCXE

E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C OHMS (BETWEEN LINES)
-	418143047SE	---	---	.0108

PERFORMANCE						
LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %	
NO LOAD	0	69.7	1800	5.43	0	
1/4	75.1	104	1796	71.8	94.3	
2/4	150	168	1792	86.9	96.2	
3/4	225	245	1787	89.3	96.4	
4/4	300	327	1783	89.2	96.2	
5/4	375	412	1778	89.0	95.7	

SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	138	1215	2218		
PULL UP	1410	125	1104	1599		
BREAKDOWN	1726	242	2136	1096		
FULL LOAD	1783	100	883	327		

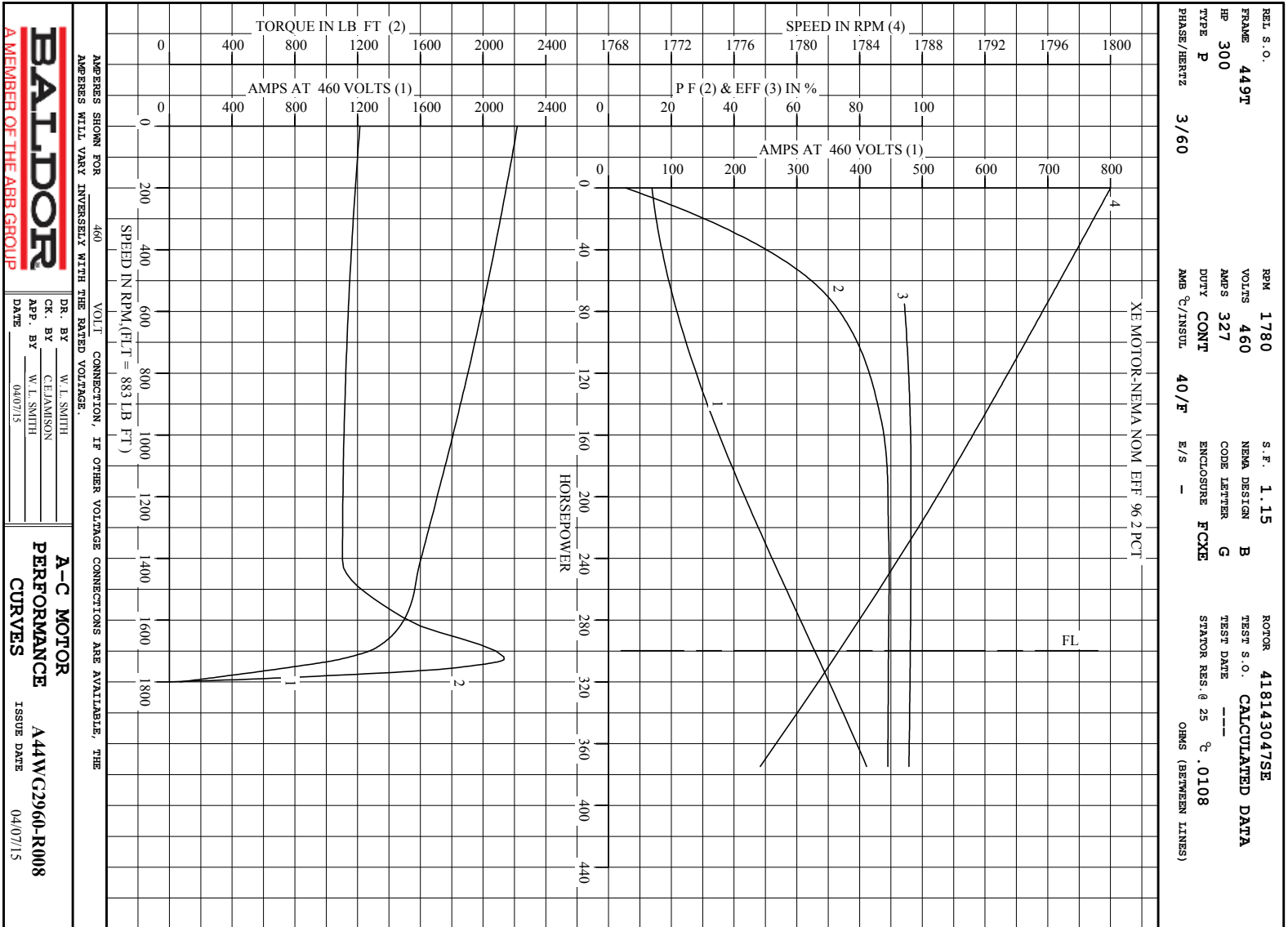
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS : CALCULATED DATA
 XE MOTOR-NEMA NOM. EFF. 96.2 PCT.



DR. BY W. L. SMITH
 CK. BY C.E. JAMISON
 APP. BY W. L. SMITH
 DATE 04/07/15

A-C MOTOR PERFORMANCE DATA
 A44WG2960-R008
 ISSUE DATE 04/07/15



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

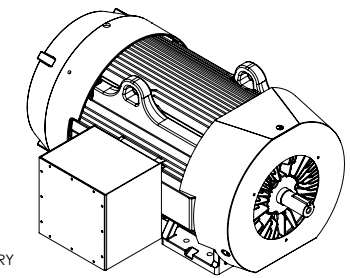
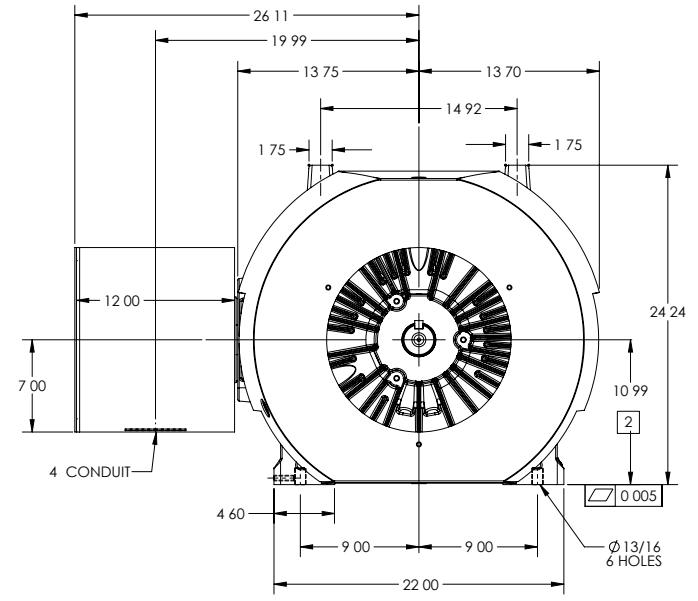
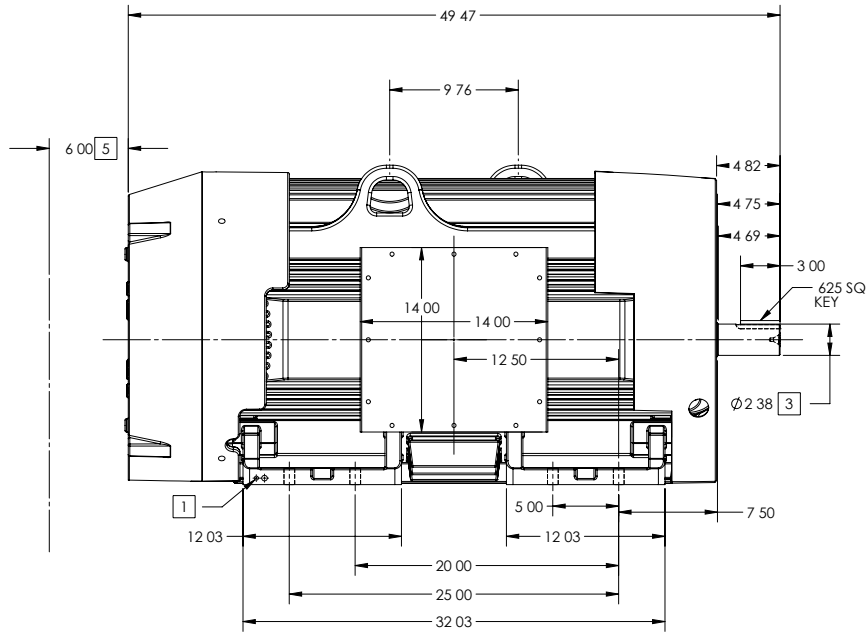
DR. BY W. L. SMITH
 CK. BY C. E. JAMISON
 APP. BY W. L. SMITH
 DATE 04/07/15

A-C MOTOR PERFORMANCE CURVES A44WC2960-R008
 ISSUE DATE 04/07/15

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DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED FRAME 449TS ABOVE NEMA RATINGS (3600 RPM MAX) COOLING: FAN COOLED
MOUNTING: FOOT INCLUDES 447TS FRAME MOUNTING HOLES



4 WEIGHT (LBS): 3080

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY

DIMENSIONS ARE IN INCHES

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

- 1 GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
- 2 VARIES + 00 - 06
- 3 VARIES + 000 - 001
- 4 MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING
- 5 OBSTRUCTION MUST NO ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2
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 TO 5 INCH DIA

SHEET NUMBER
1 OF 2
617427-445

REV. DESC	NEW DRAWING	REVISED	11 13 38 0 02 2015	TDR	00000918312
REV.	VERSION	00			
MODEL NO.	617 27- 5				
BY	RAGEC				

BALDOR
G 9TS/ 7TS-FOOTED-SIDE-CENTER CONDUIT BOX-1 XI X12

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

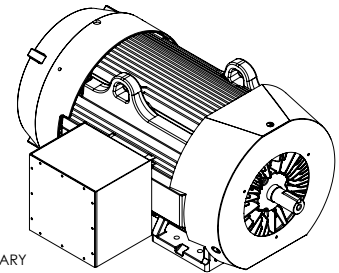
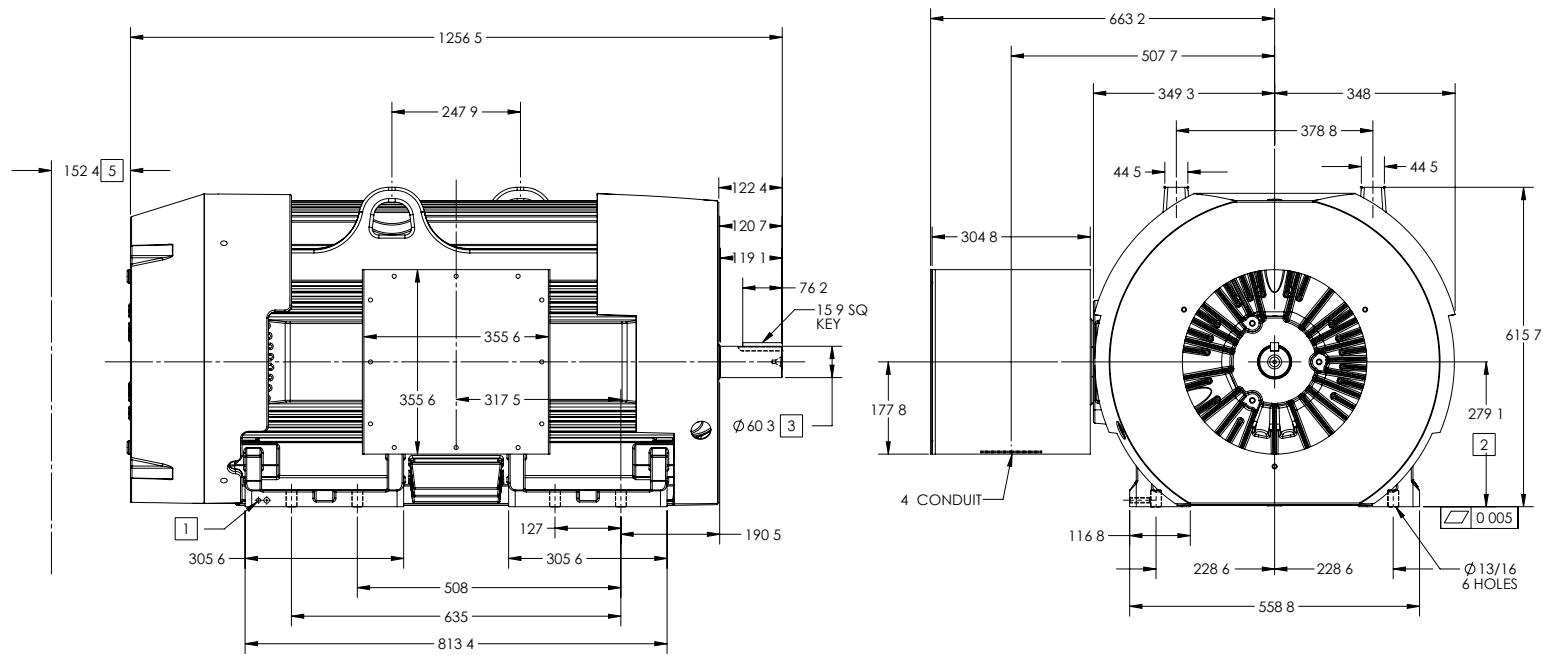
FRAME 449TS ABOVE NEMA RATINGS (3600 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447TS FRAME MOUNTING HOLES

617427-445



5 WEIGHT (KGS): 1400

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY

DIMENSIONS ARE IN MILLIMETERS

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

- 1 GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
- 2 VARIES +0 -1.5
- 3 VARIES +00 -03
- 4 MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING
- 5 OBSTRUCTION MUST NO ENCR OACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2
 IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY
 MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF
 STANDARD SHAFT EXTENSION IS .08 MM T I R TO 127 MM DIA

SHEET NUMBER
2 OF 2

544-17427-119

REV. DESC	NEW DRAWING	REVISED	11 13 38 0	02 2015	TDR	00000918312
MODEL NO.	617 27- 5	BY	RAGEC			

BALDOR

G 9TS/ 7TS-FOOTED-SIDE-CENTER CONDUIT BOX-1 XI X12

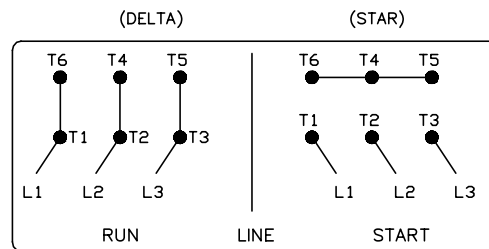
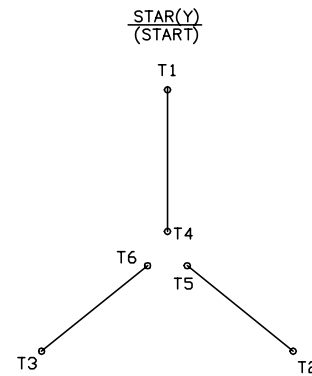
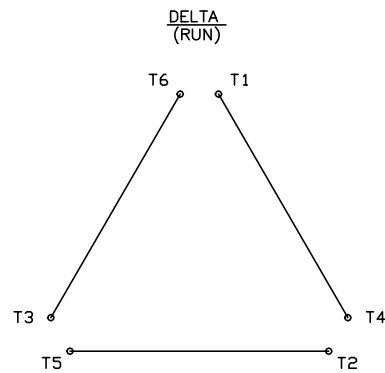
617427-445

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

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[MN408?ManNumber=MN408](#)

Marketing maintained PDF of MN416:

[MN416?ManNumber=MN416](#)