

BALDOR® • RELIANCE 

Product Information Packet

EM25454T-4

450HP, 1780RPM, 3PH, 60HZ, 449T, DP, F1

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	A44WG3143	CD Diagram:	416820-008	Mfg Plant:	
Mech. Spec:		Layout:	604989-505	Poles:	04	Created Date:	11-25-2015
Base:		Eff. Date:	03-01-2017	Leads:	6#1 (02 per group)		

Specs			
Catalog Number:	EM25454T-4	Insulation Class:	F
Enclosure:	DP	Inverter Code:	Inverter Ready
Frame:	449T	IP Rating:	NONE
Frame Material:	Iron	KVA Code:	F
Output @ Frequency:	450.000 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	12 @ 1 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:	86
Agency Approvals:	CSA EEV	Product Family:	General Industrial
	CCSA US	Pulley End Bearing Type:	Ball
Base Indicator:	Rigid	Pulley Face Code:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Ground Indicator:	No Shaft Grounding
Current @ Voltage:	507.000 A @ 460.0 V	Shaft Rotation:	Reversible
Design Code:	B	Shaft Slinger Indicator:	No Slinger
Drip Cover:	No Drip Cover	Speed Code:	Single Speed
Duty Rating:	CONT	Motor Standards:	NEMA
Feedback Device:	NO FEEDBACK	Starting Method:	Wye Start - Delta Run

Heater Indicator:	No Heater	Thermal Device - Bearing:	None
		Thermal Device - Winding:	None

Nameplate NP2496L

MOBIL POLYREX EM

Nameplate NP2349L											
SPEC NO.	A44-8067-3143			CAT.NO.	EM25454T-4			FRAME	449T		
HP	450	VOLTS	460	PHASE	3	DESIGN	B	TYPE	P		
RPM	1780	AMPS	507	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	86		NEMA-NOM-EFFICIENCY	96.2			
						MAX CORR KVAR	89		GUARANTEED EFFICIENCY		95.4
						NEMA NOM/CSA QUOTED EFF					
						MOTOR WEIGHT		2888			

Parts List		
Part Number	Description	Quantity
SA310930	SA A44-8067-3143	1.000 EA
RA298337	RA A44-8067-3143	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
702611001A	BAFFL 440 SUB PAINT	1.000 EA
089439051A	BRKT 440 089439051WCB	1.000 EA
004824015A	GREASE POLYREX EM	1.160 LB
032018028EK	HHCS 5/8-11X3-1/2L PLTD	4.000 EA
032018036DK	HHCS 1/2-13X4-1/2 PLTD.	3.000 EA
410700004A	WSHR	1.000 EA
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 EA
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 EA
034017012AB	LCKW 1/4 STD. PLATED	4.000 EA
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 EA
034000012AB	WSHR 1/4 STD. PLATED	4.000 EA
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 EA
418151014G	RETAIN RING	1.000 EA
034017012AB	LCKW 1/4 STD. PLATED	4.000 EA
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 EA
034000012AB	WSHR 1/4 STD. PLATED	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
032018005AK	HHCS 1/4-20X5/8 PLATED	4.000 EA
089439051A	BRKT 440 089439051WCB	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
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
048897010DJ	BUSH - 445	1.000 EA
702616012T	CONDUIT BOX	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	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
034180054KA	KEY 7/8X7/8X6-3/4 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	450	P	3/60	1780	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
507	CONT	40/B	1.15	B	F	PRXE
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C (OHMS (BETWEEN LINES))		
433784	418143043BR	---	---	.00749		

PERFORMANCE						
LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %	
NO LOAD	0	137	1800	3.65	0	
1/4	113	183	1795	60.7	94.8	
2/4	225	273	1791	80.1	96.4	
3/4	337	384	1786	85.1	96.5	
4/4	450	507	1780	86.3	96.2	
5/4	563	635	1774	86.7	95.7	

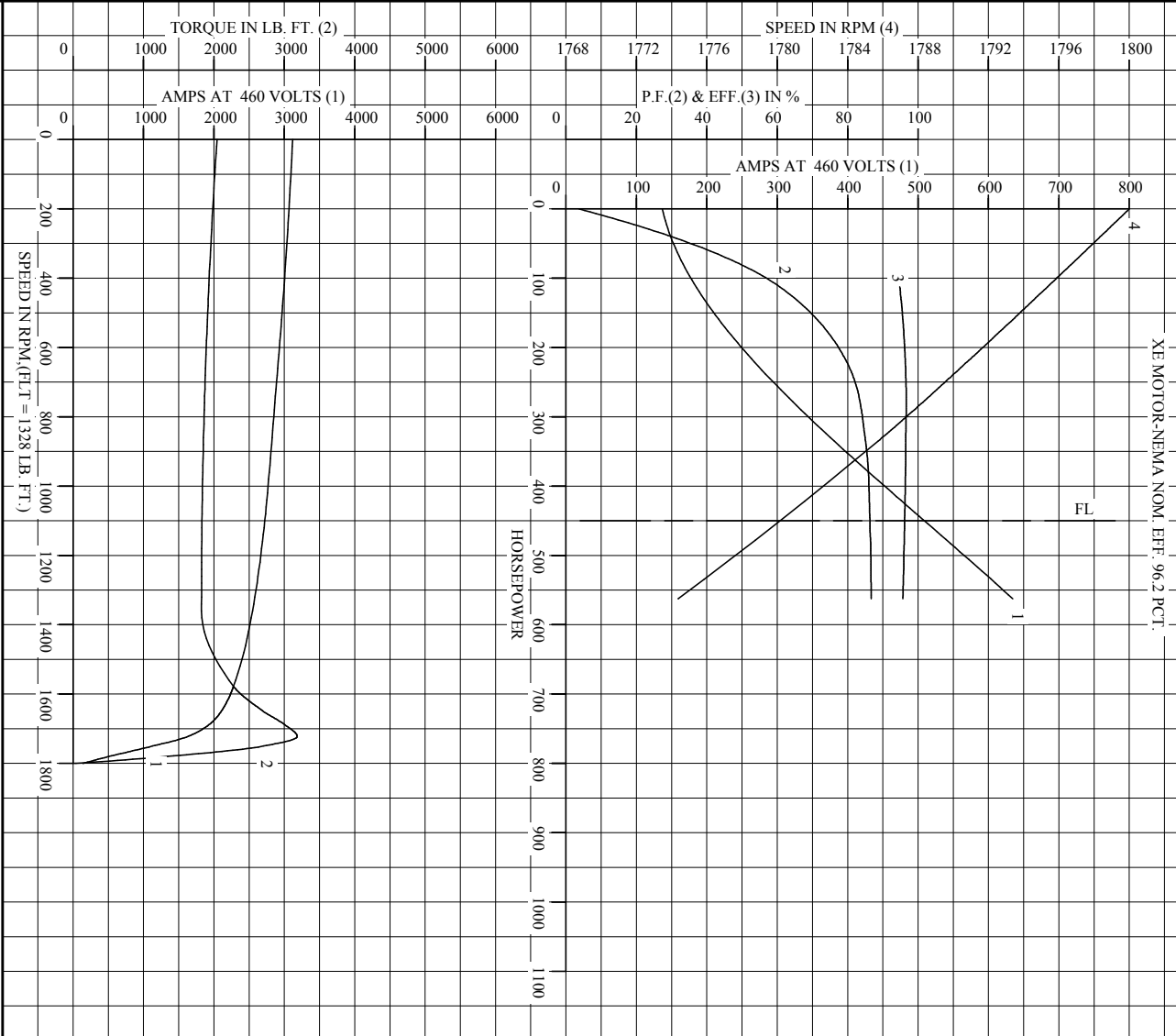
SPEED TORQUE						
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES		
LOCKED ROTOR	0	154	2044	3117		
PULL UP	1360	137	1823	2548		
BREAKDOWN	1723	240	3183	1628		
FULL LOAD	1780	100	1328	507		

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.

BALDOR	DR. BY	W. L. SMITH	A-C MOTOR
	CK. BY	R. H. KIRK	
	APP. BY	K. W. KANOUFF	PERFORMANCE DATA
	DATE	09/27/04	ISSUE DATE 09/24/04

REL. S.O. _____ RPM 1780 S.F. 1.15 ROTOR 418143043BE
 FRAME 449T VOLTS 460 NEMA DESIGN B TEST S.O. CALCULATED DATA
 HP 450 AMPS 507 CODE LETTER F TEST DATE ---
 TYPE P DUTY CONT ENCLOSURE PRXE STATOR RES. @ 25 °C .00749
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/B E/S 433784 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 W.L. SMITH
 CK. BY R.H. KIRK
 APP. BY K.W. KNOUFF
 DATE 09/27/04

A-C MOTOR PERFORMANCE CURVES A44WG3143-R001
 ISSUE DATE 09/24/04

Printed on 2/3/11 13:15 @ usmghengdev1

DUTY MASTER ALTERNATING CURRENT MOTORS
SQUIRREL-CAGE INDUCTION

604989-505

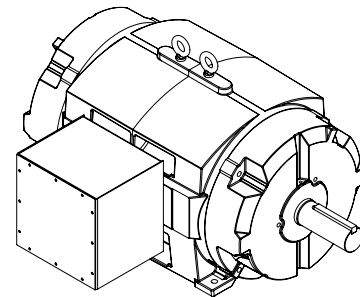
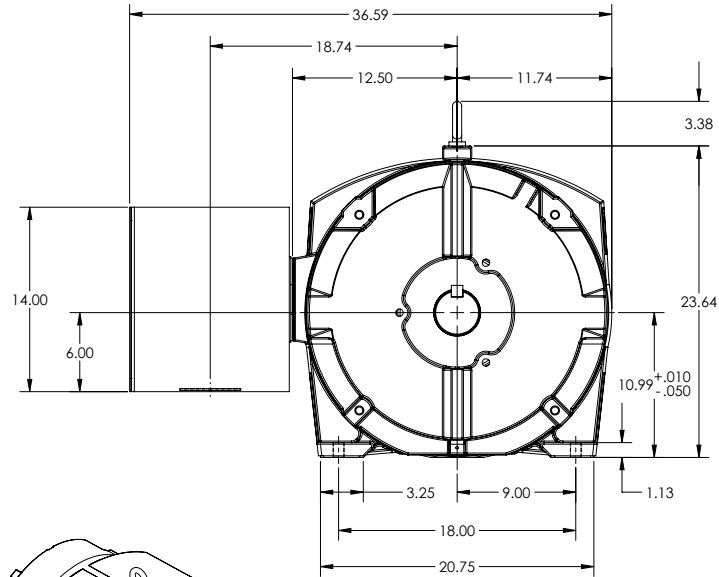
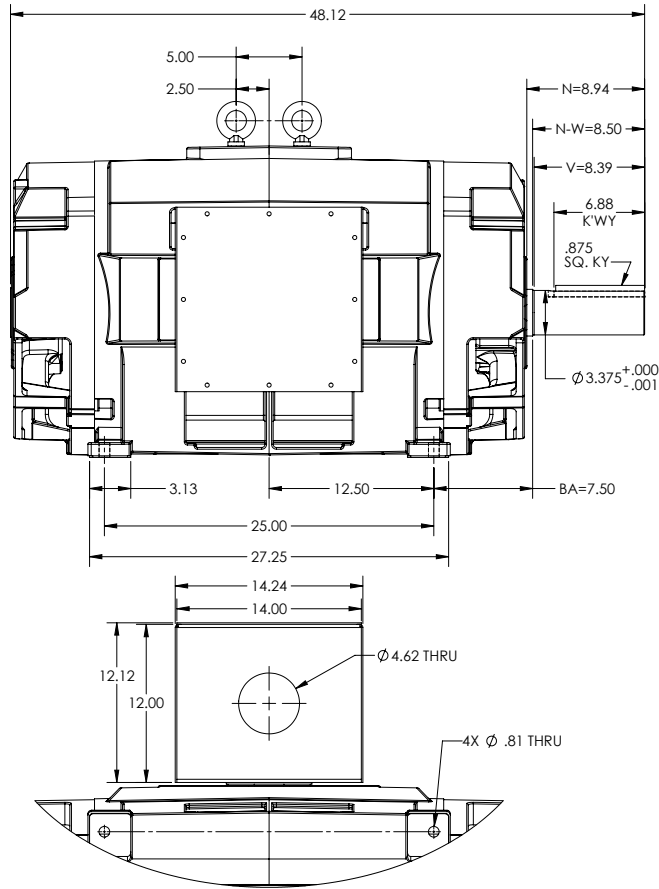
ENCLOSURE: PROTECTED; OPEN DRIP PROOF

FRAME E449T

COOLING: SELF-VENTILATED

MOUNTING: FOOT, F-1 SIDE

14X14X12 FABRICATED STEEL C/BOX



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.

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.

SHEET NUMBER
1 OF 1

505-686109

REV. A	VERSION: 01	REVISED: 11-08-13 11/19/2015	TDR: 00000953052
MODEL NO. 604989-505			
BY: USBRCHA2			

BALDOR

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

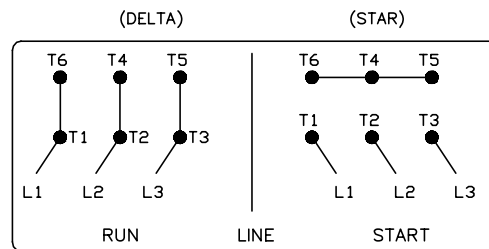
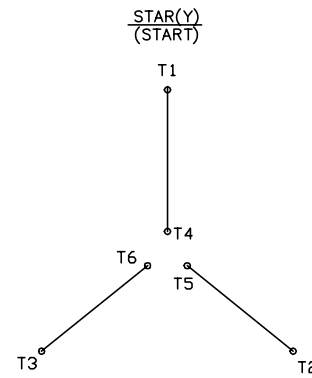
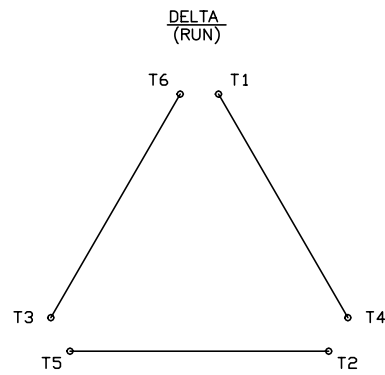
505-686109

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

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>