

**BALDOR • RELIANCE**

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# Customer information packet

## EM25452T-4

450HP, 3570RPM, 3PH, 60HZ, 449TS, DP, F1

Class - None

Division - Not Applicable

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## Specifications

Enclosure	DP
Frame	449TS
Frame Material	Iron
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	450.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA EEV CCSA US
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	494.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	96.2 %
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	494.0 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	F
Lifting Lugs	Standard Lifting Lugs
Motor Lead Quantity/Wire Size	12 @ 1 AWG
Motor Standards	NEMA

## Part detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	A44WG2693
Layout	604989-380
Eff. date	03-01-2017
CD Diagram	416820-008
Poles	02
Leads	6#1 (02 per group)
Proprietary	False
Created date	11-23-2015

<b>Motor Type</b>	A44112M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	44.31 IN
<b>Power Factor</b>	88
<b>Product Family</b>	General Industrial
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	2.375 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	3570 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Wye Start - Delta Run
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None

**Nameplate**

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NP2496L	
MOBIL POLYREX EM	

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**NP2349L**

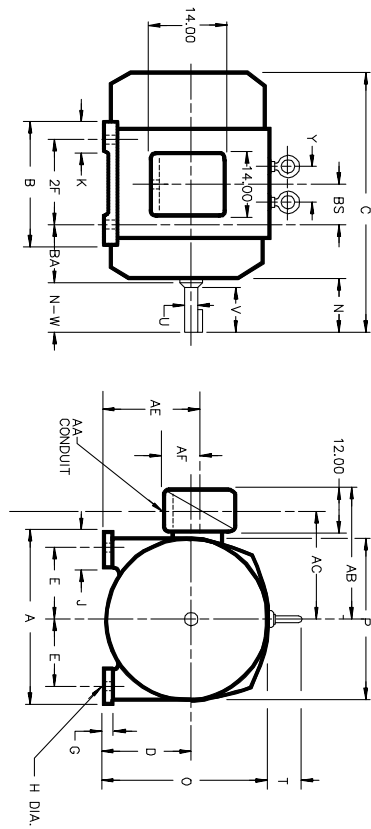
<b>SPEC NO.</b>	A44-8054-2693	<b>CAT.NO.</b>	EM25452T-4	<b>FRAME</b>	449TS
<b>HP</b>	450	<b>VOLTS</b>	460	<b>PHASE</b>	3
		<b>DESIGN</b>	B	<b>TYPE</b>	P
<b>RPM</b>	3570	<b>AMPS</b>	494	<b>HZ</b>	60
		<b>AMB</b>	40	<b>SF</b>	1.15
<b>DRIVE END BEARING</b>	65BC03J30X	<b>DUTY</b>	CONT	<b>INSUL.CLASS</b>	F
<b>OPP D.E. BEARING</b>	65BC03J30X	<b>ENCL</b>	DP	<b>CODE</b>	F
<b>SER.NO.</b>		<b>POWER FACTOR</b>	88	<b>NEMA-NOM-EFFICIENCY</b>	96.2
		<b>MAX CORR KVAR</b>	75	<b>GUARANTEED EFFICIENCY</b>	95.4
		<b>NEMA NOM/CSA QUOTED EFF</b>			
		<b>MOTOR WEIGHT</b>	2132		

## Parts list

Part number	Description	Quantity
SA310793	SA A44-8054-2693	1.000 ea
RA298190	RA A44-8054-2693	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
089438082A	BRKT 440 089438081WCB	1.000 ea
004824015A	GREASE POLYREX EM	0.540 lb
032018028EK	HHCS 5/8-11X3-1/2L PLTD	4.000 ea
032018028CK	HHCS 3/8-16X3-1/2 PLTD.	3.000 ea
410700004F	WSHR	1.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
405851012AB	SPACE	4.000 ea
032018006AK	HHCS 1/4-20X3/4L PLATED	4.000 ea
034000012AB	WSHR 1/4 STD. PLATED	4.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
405851012AB	SPACE	4.000 ea
034017012AB	LCKW 1/4 STD. PLATED 034017012AF	4.000 ea
034600001AA	BUSH 1/4TO1/8 BLACK	1.000 ea
034000012AB	WSHR 1/4 STD. PLATED	4.000 ea
032018006AK	HHCS 1/4-20X3/4L PLATED	4.000 ea
089438082A	BRKT 440 089438081WCB	1.000 ea
702611001A	BAFFL 440 SUB PAINT	1.000 ea
032018028EK	HHCS 5/8-11X3-1/2L PLTD	4.000 ea
032018028CK	HHCS 3/8-16X3-1/2 PLTD.	3.000 ea
035000001G	GREASE RELIEF FITTING, ALEMITE 317400	1.000 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
048897010DG	PLUG,ODE BRKT - 360	1.000 ea
048977006J	GRFTG - 440	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
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

**DUTY MASTER ALTERNATING CURRENT MOTORS**  
 SQUIREL-CAGE INDUCTION COOLING: SELF-VENTILATED  
 ENCLOSURE: PROTECTED TOTALLY ENCLOSED  
 MOUNTING: FOOT  
 FRAMES 445T THRU 449TS ABOVE NEMA RATINGS  
 WITH SPECIAL CONDUIT BOX



DIMENSIONS ARE IN INCHES

FRAME	A	B(D)	E	G	H	J	O	P	BA	K	T	Y (4)
445T	21.00	11.00	9.00	1.12	.81	3.25	23.62	24.25	7.50	3.25	3.25	---
445TS	21.00	11.00	9.00	1.12	.81	3.25	23.62	24.25	7.50	3.25	3.25	---
447S	21.00	11.00	9.00	1.12	.81	3.25	24.25	24.25	7.50	3.25	4.25	5.00
447TS	21.00	11.00	9.00	1.12	.81	3.25	24.25	24.25	7.50	3.25	4.25	5.00
449T	21.00	11.00	9.00	1.12	.81	3.25	24.25	24.25	7.50	3.25	4.25	5.00
449TS	21.00	11.00	9.00	1.12	.81	3.25	24.25	24.25	7.50	3.25	4.25	5.00

FRAME	C	BS	B	ZF	N	N-W	U(3)	V	LGTH	KEY	SQ. WT. (LBS)
445T	39.56	8.25	19.00	16.50	8.94	8.50	3.375	8.25	6.88	875	1410
445TS	35.81	8.25	19.00	16.50	8.19	4.78	3.375	8.25	6.88	875	1410
447T	43.06	10.00	22.50	20.00	8.94	8.50	3.375	8.25	6.88	875	1730
447TS	39.31	10.00	22.50	20.00	8.19	4.78	3.375	8.25	6.88	875	1730
449T	48.06	12.50	27.50	25.00	8.94	8.50	3.375	8.25	6.88	875	2100
449TS	44.31	12.50	27.50	25.00	8.19	4.78	3.375	8.25	6.88	875	2100

FRAME	AA	AB	AC	AF	PROT	AE
445T	4"	24.63	18.63	7.00	12.00	11.00
445TS	4"	24.63	18.63	7.00	12.00	11.00
447T	4"	24.63	18.63	7.00	12.00	11.00
447TS	4"	24.63	18.63	7.00	12.00	11.00
449T	4"	24.63	18.63	7.00	12.00	11.00
449TS	4"	24.63	18.63	7.00	12.00	11.00

- (1) SPECIAL DIMENSIONS ON THIS LINE
- (2) "D" VARIES +.00, -.06
- (3) "U" & "U" VARY +.000, -.001
- (4) 448 FRAME HAS ONE EYEBOLT

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-7, OR C-1 MOUNTING IS SPECIFIED. STANDARD DOUBLE SHAFT SUPPLIED ONLY WHEN SPECIFIED. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED CONSULT FACTORY. MAXIMUM PERMISSIBLE SHAFT RINOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003 T.I.R.

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

08C-6686409

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

REV. DESC: CHANGING TO CORRECT TITLE	VERSION: 02	TDR: 000000752338
REV. LTR: B	REVISED: 01:05:26 06/27/2012	BY: RAGRA
FILE: \RAG\00012\166		
MTL: -		



DIM SHEET PROT 445T-449TS ABV/NEMA - SPCL C/BOX - 14X14X12  
 SH 1 of 1

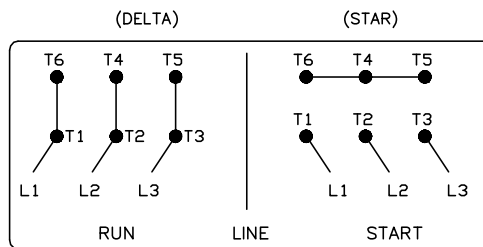
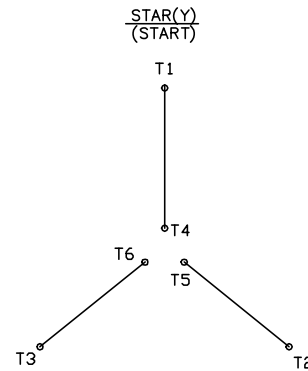
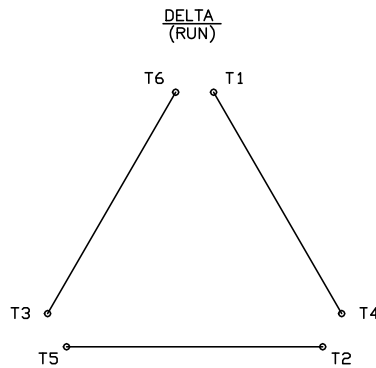


416820-008

# 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: 00000847713
FILE: \RAG\00001\808	REVISED: 10:41:26 04/08/2014	BY: RAGJSS1
MTL: -	© □	

**BALDOR**

CONNECT DIAGRAM STD 6 LEAD Y START DELTA RUN

SH 1 of 1

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