

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 449TSTFS16025

Catalog No: L468A

400 HP, General Purpose Motor, 3 phase, 3600 RPM, 460 V, 449TS Frame, TEFC
General Purpose Motors



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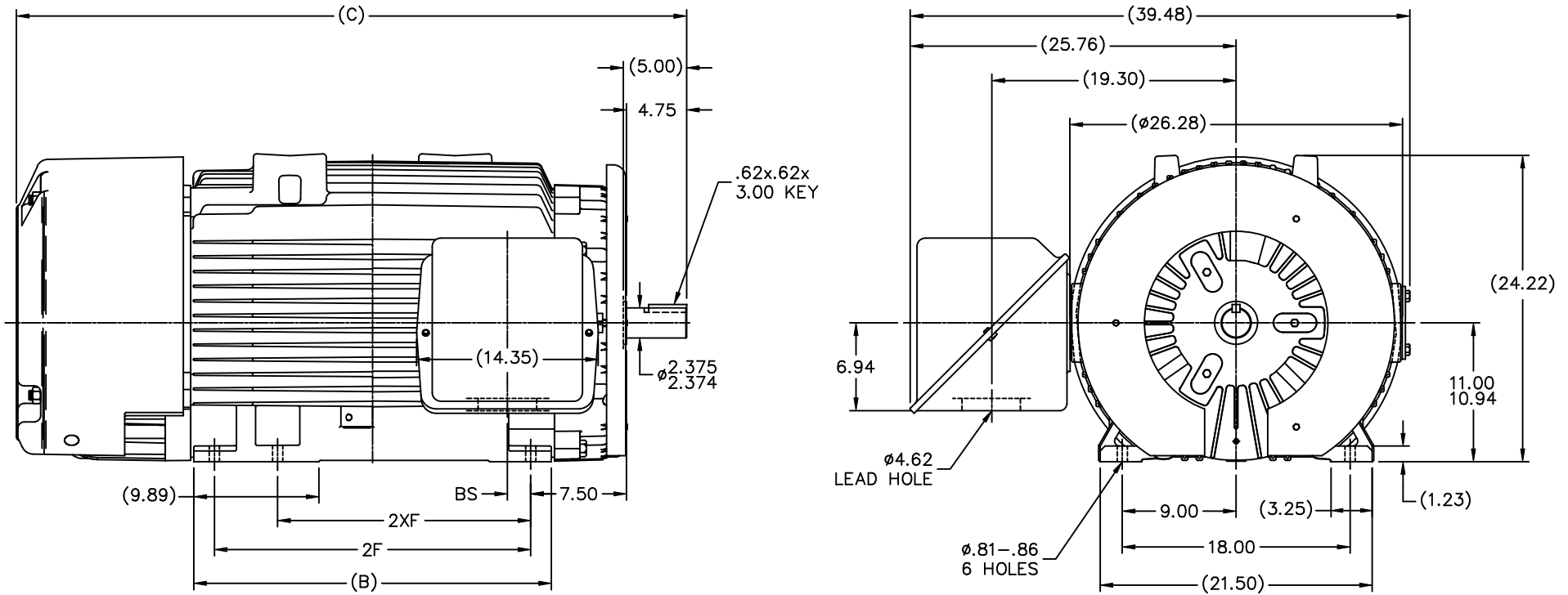
RegalRexnord

Nameplate Specifications

Output HP	400 Hp	Output KW	300.0 kW
Frequency	60 Hz	Voltage	460 V
Current	435.0 A	Speed	3575 rpm
Service Factor	1	Phase	3
Efficiency	95.8 %	Power Factor	89
Duty	Continuous	Insulation Class	H
Design Code	A	KVA Code	H
Frame	449TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6318
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.005 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	52.96 in
Frame Length	28.77 in	Shaft Diameter	2.375 in
Shaft Extension	5.00 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7300U	Outline Drawing	B-SS517112-2875



- NOTES:
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

(B-SS516690)

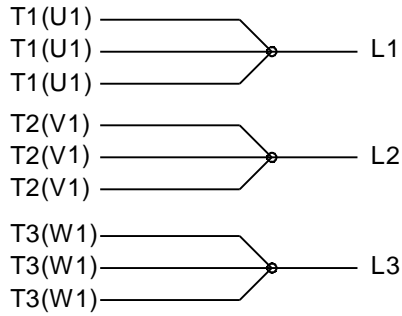
							TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN KL 04-26-1999	
							DEC.	INCHES			CHK	DJK 04-27-1999
							.X	±.1			APPD	DJK 04-27-1999
							.XX	±.03	TITLE OUTLINE		SCALE 1=8	
2 ADDED EXTERNAL BAFFLE & UPDATED C'BOX MU48433							KL	10-06-2003	447/9TS FR. - EXTENDED RATING - TEFC		REF	
1 NEW DRAWING MU24887							KL	04-27-1999	MATL.		FMF	
NO. REVISION							CHK	ANG	FINISH		PREV	
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT							RFP		CAD FILE SS517112		SIZE	DRAWING NO. PAGE OF REV.
DASH	FRAME	B	C	2F	2XF	BS	DIST WA		B	SS517112	2	
2875	447TS	28.25	52.96		20.00	1.78						
2875	449TS	28.25	52.96	25.00		1.78						

ERROR: syntaxerror
OFFENDING COMMAND: --nostringval--

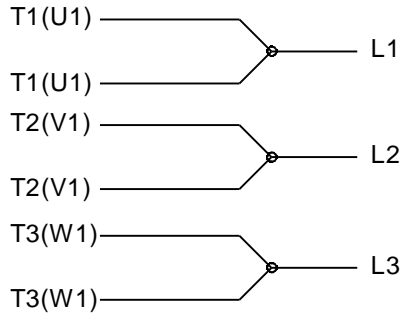
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IF MOTOR HAS 9 LEADS

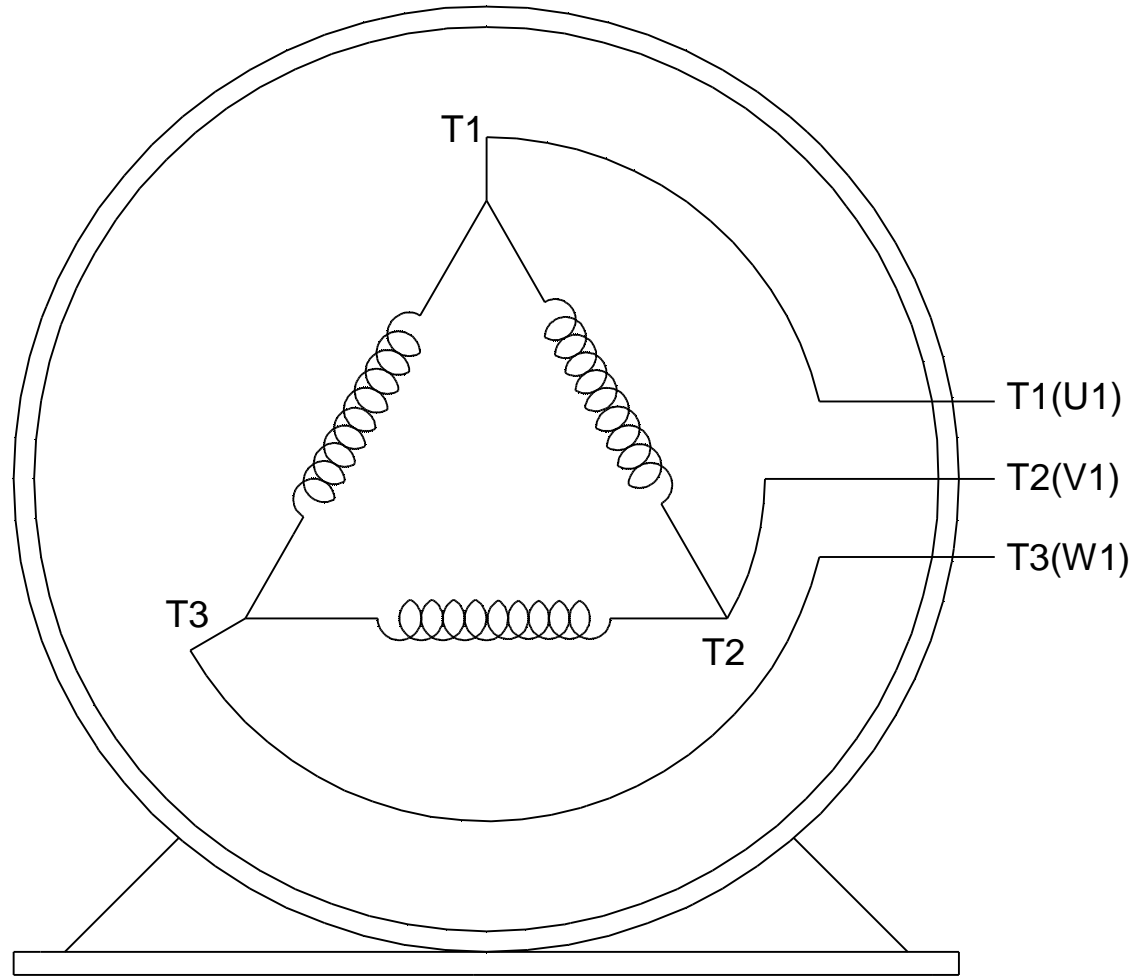
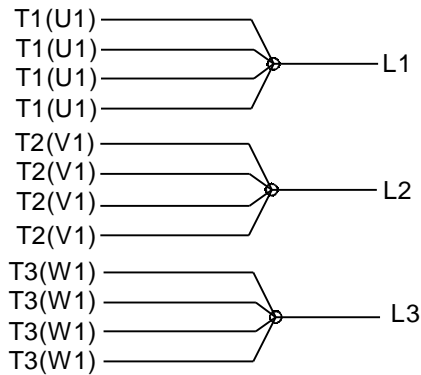


IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS



VIEW OF TERMINAL END

DRAWING REVISION L	REVISION BY AJW	DATE 05-04-2015	TOLERANCES UNLESS OTHERWISE SPECIFIED:	DRAWN BY DRS	Regal Beloit America, Inc.																					
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7' 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7' 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE 09-27-1996
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.XXX	±0.005	[±0.127]																								
.XXXX	±0.0005	[±0.0127]																								
ECO DESCRIPTION UPDATED TO SOLIDWORKS			APPROVED BY GK	DATE 09-30-1996	MATERIAL	PROCESS/FINISH																				
COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 $\sqrt{\text{INCH}}$ 5.1 $\sqrt{\text{mm}}$ mm SHOWN IN [BRACKETS]	REFERENCE	SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1																			
				THIRD ANGLE PROJECTION																						



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
 ORDER #: _____ REFERENCE MODEL #: 449TSTFS16025
 CONN. DIAGRAM: A-EE7300U CAT #: L468A
 OUTLINE: B-SS517112-2875 CUSTOMER PART #: _____
 WINDING: T449261 NONE 3 MOUNTING: F1/F2 CAPABLE
 SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
400	298	3600	3575	447/449TS	TEFC	TFN	H	A

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	460	435	ACROSS THE LINE	CONT	H	1.15	40	3300

F.L. EFF	95.8	3/4 LD EFF	95.8	1/2 LD EFF	95.4	GTD EFF	95.4	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	89.0	3/4 LD PF	86.0	1/2 LD PF	79.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
588 LB-FT	3,500	1,225 LB-FT 208%	1,900 LB-FT 323%	88

@ 3 FT.	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
82 dBA	91 dBA	61.0 LB-FT ²	0 LB-FT ²	10 SEC.	0	3250 LB.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6319	6318						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.005	0.004	0.047	0.059	2.073	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE					
	ENCODER: NONE NONE NONE					
	NONE PPR					
	BRAKE: NONE NONE NONE					
	FT-LB: NA VOLTAGE: NONE HZ:					

PREPARED BY: FAREEDA DUDEKULA
 DATE: 9/11/2018
 FORM: 3531 REV_4 2/27/06
 UL: V-INS, CONST UL REC

Data Sheet

Date: 12/3/2018
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



449TSTFS16025

Submittal

Data @ 460 V

Motor Load Data

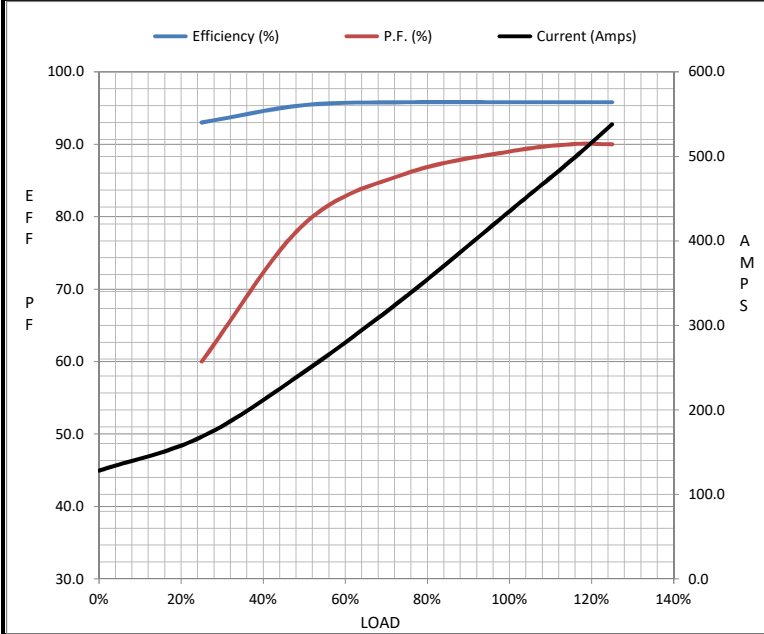
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	128	168	245	335	435	495	538	3,500
Torque (ft-lb)	0.00	146	293	440	588	677	737	1,225
RPM	3600	3595	3588	3582	3575	3,570	3568	0
Efficiency (%)		93.0	95.4	95.8	95.8	95.8	95.8	
P.F. (%)	4.5	60.0	79.0	86.0	89.0	90.0	90.0	26.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3450	3575	3600
Current (Amps)	3,500	3,250	2,100	435	128
Torque (ft-lb)	1,225	950	1,900	588	0.00

Information Block

HP	400.0			
Sync. RPM	3600			
Frame	449			
Enclosure	TEFC			
Construction	TFS			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	H			
Service Factor	1.0			
Temp Rise @ FL	88 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	61.0 Lb-Ft ²			
Ref Wdg	T449261 NONE			
Sound Pressure @ 1M	82 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS517112-2875			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0050	0.0040	0.0470	0.0590	2.0730



Speed - Torque Curve

