

PRODUCT INFORMATION PACKET

Model No: 449TSTFS6503
Catalog No: E699
250 HP, Severe Duty Motor, 3 phase, 3600 RPM, 460 V, 449TS Frame, TEFC
Severe Duty Motors



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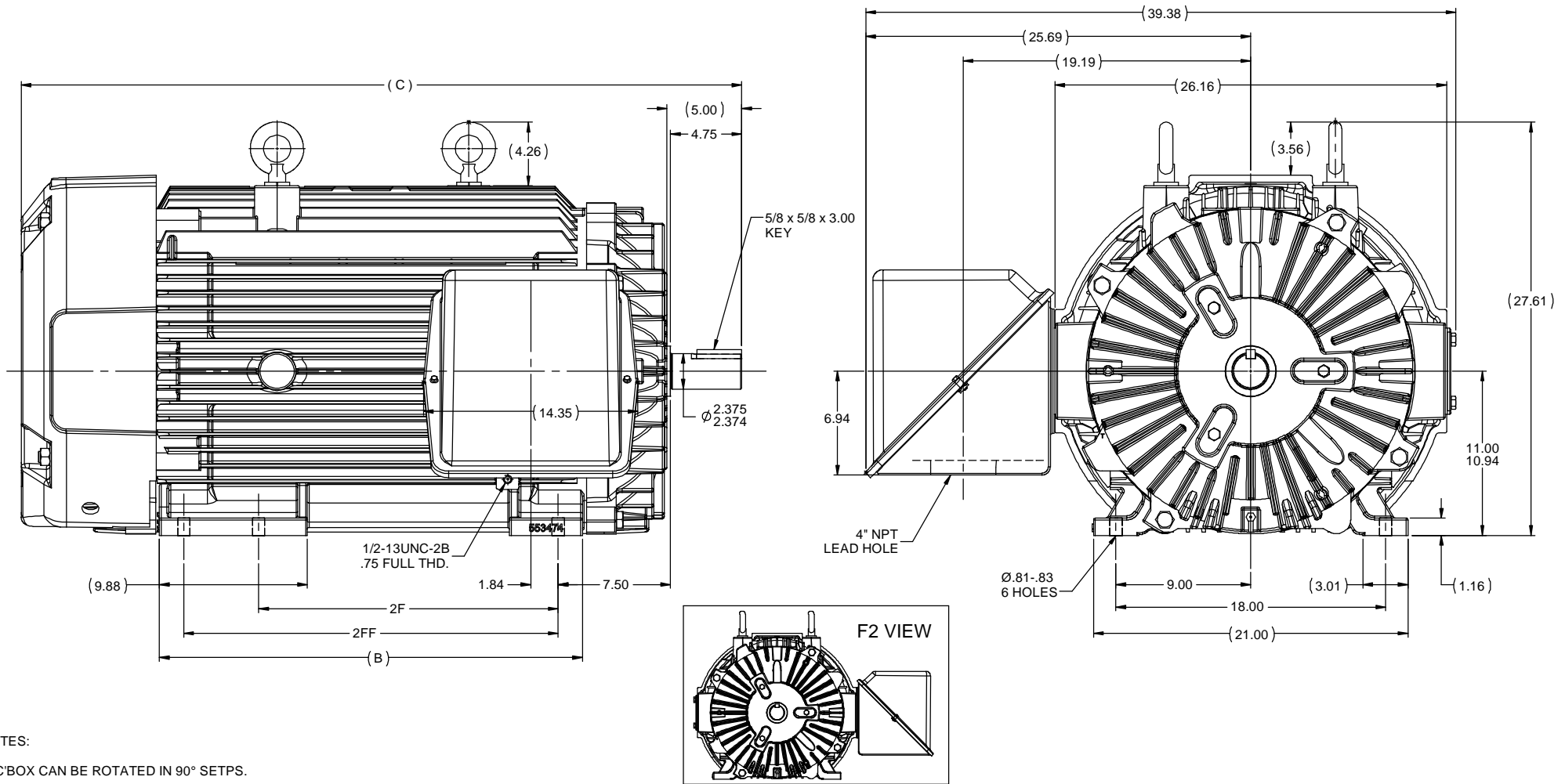
Nameplate Specifications

Output HP	250 Hp	Output KW	187.0 kW
Frequency	60 Hz	Voltage	460 V
Current	275.0 A	Speed	3575 rpm
Service Factor	1.15	Phase	3
Efficiency	95.8 %	Power Factor	89
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	449TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.0105 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	48.09 in
Frame Length	28.75 in	Shaft Diameter	2.375 in
Shaft Extension	5 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS515689-2875	Connection Drawing	A-EE7300U

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NOTES:

1. C'BOX CAN BE ROTATED IN 90° SETPS.
2. NAMEPLATES TO BE READ FROM C'BOX SIDE OF MOTOR.

REVISION		BY & DATE	CHK	LANG	±7'30"	FINISH	marathon [®] electric		DRAWN	BLR 06-14-1996
6	UPDATED FRAME TO CURRENT STD'S. MU108818	JJB 7/16/2012	MH		TOLERANCES UNLESS SPECIFIED				CHK	MRB 06-16-1996
5	UPDATED TO SOLIDWORKS, AND UPDATED FRAME	CJR 2/15/2012	SSW	DEC	INCHES				APPR	JL 06-16-1996
4	REVISED FAN GAURD MU76102	RJW 11-6-6	ML	X	±.1					SCALE 1:6.5
3	UPDATED C'BOX GEMETRY CN28404	DRS 11-4-02		XX	±.03			TITLE		REF
2	ADD GRD PADS&HOLES TO FRAME PER CN21725-983	KL 4-6-97		XXX	±.005			447/9TS FR. STD- TAPPED LEAD HOLE		FMF
1	NEW DRAWING CN22247	BLR 6-19-96		XXXX	±.0005					PAGE OF
NO		BY & DATE	CHK	LANG	±7'30"	FINISH	marathon [®] electric		SIZE	DRAWING NO
THIRD ANGLE PROJECTION		NETWORK FILE NAME	RFP	PREV	SS515689	FINISH	marathon [®] electric		B	SS515689
										REV
										6

DASH	FRAME	C	B	2F	2XF
2875	447TS	48.09	28.25	20.00	- - -
2875	449TS	48.09	28.25	- - -	25.00

IF MOTOR HAS 9 LEADS

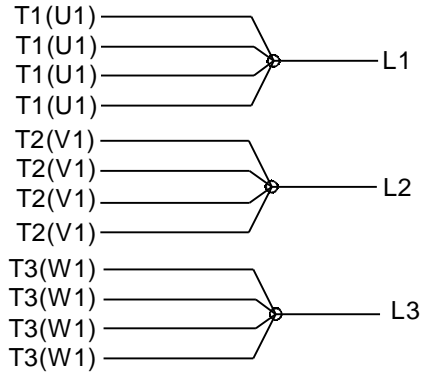


IF MOTOR HAS 6 LEADS



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]	
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.XXX	±0.005	[±0.127]																						
.XXXX	±0.0005	[±0.0127]																						
ECO DESCRIPTION UPDATED TO SOLIDWORKS			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]	APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE																			
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				REFERENCE	SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1																	

CERTIFICATION DATA SHEET

Model#: 449TSTFS6503 EZ **WINDING#:** T449271 NONE 1
CONN. DIAGRAM: A-EE7300U **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS515689-2875

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
250	187	3600	3575	447/449TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	275	LINE OR INVERTER	CONTINUOU S	H1	1.15	40	3300

FULL LOAD EFF: 95.8	3/4 LOAD EFF: 95.8	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89	3/4 LOAD PF: 87	1/2 LOAD PF: 81.5	95.4	SQ CAGE INV RATED	74

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
368 LB-FT	1825	625 LB-FT 170	1010 LB-FT 274	85

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	44.5 LB-FT^2	180 LB-FT^2	15 SEC.	1	2600 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313	6313						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

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INVERTER TORQUE: CONSTANT 2:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: NONE NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE NONE NONE - FT-LB NONE V NONE Hz

DATE: 06/21/2017 06:56:00 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/29/2017

449TSTFS6503

Customer: _____



Attention: _____

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data

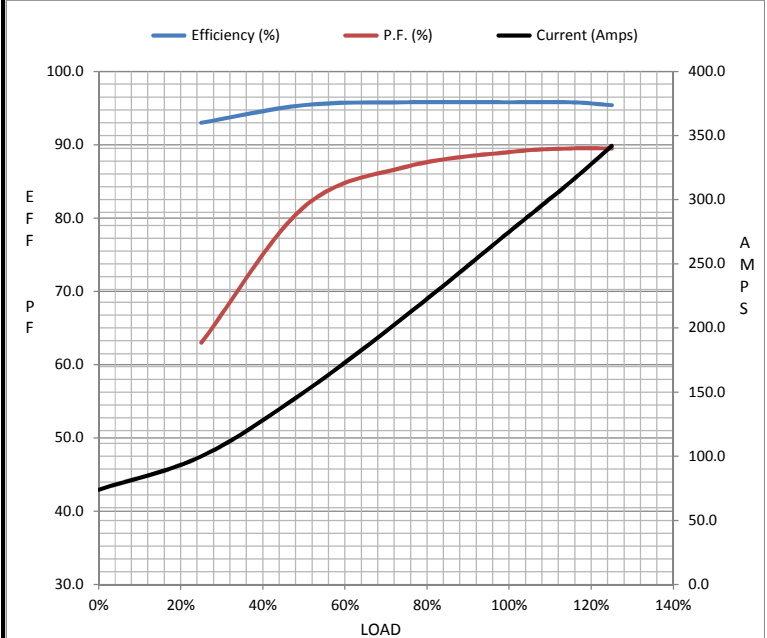
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	74.0	100	150	210	275	314	342	1,825
Torque (ft-lb)	0.00	91.5	183	275	368	423	460	625
RPM	3600	3595	3590	3580	3575	3,570	3565	0
Efficiency (%)		93.0	95.4	95.8	95.8	95.8	95.4	
P.F. (%)	5.0	63.0	81.5	87.0	89.0	89.5	89.5	26.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3430	3575	3600
Current (Amps)	1,825	1,650	1,070	275	74.0
Torque (ft-lb)	625	520	1,010	368	0.00

Information Block

HP	250.0			
Sync. RPM	3600			
Frame	449			
Enclosure	TEFC			
Construction	TFN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	85 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	44.5 Lb-Ft ²			
Ref Wdg	T449271 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS515689-2875			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0090	0.0070	0.0990	0.0840	3.5930



Speed -Torque Curve

