

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 445TSTFN6526

Catalog No: E458

XRI®-SD Severe Duty Motor, 150 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 445TS Frame, TEFC



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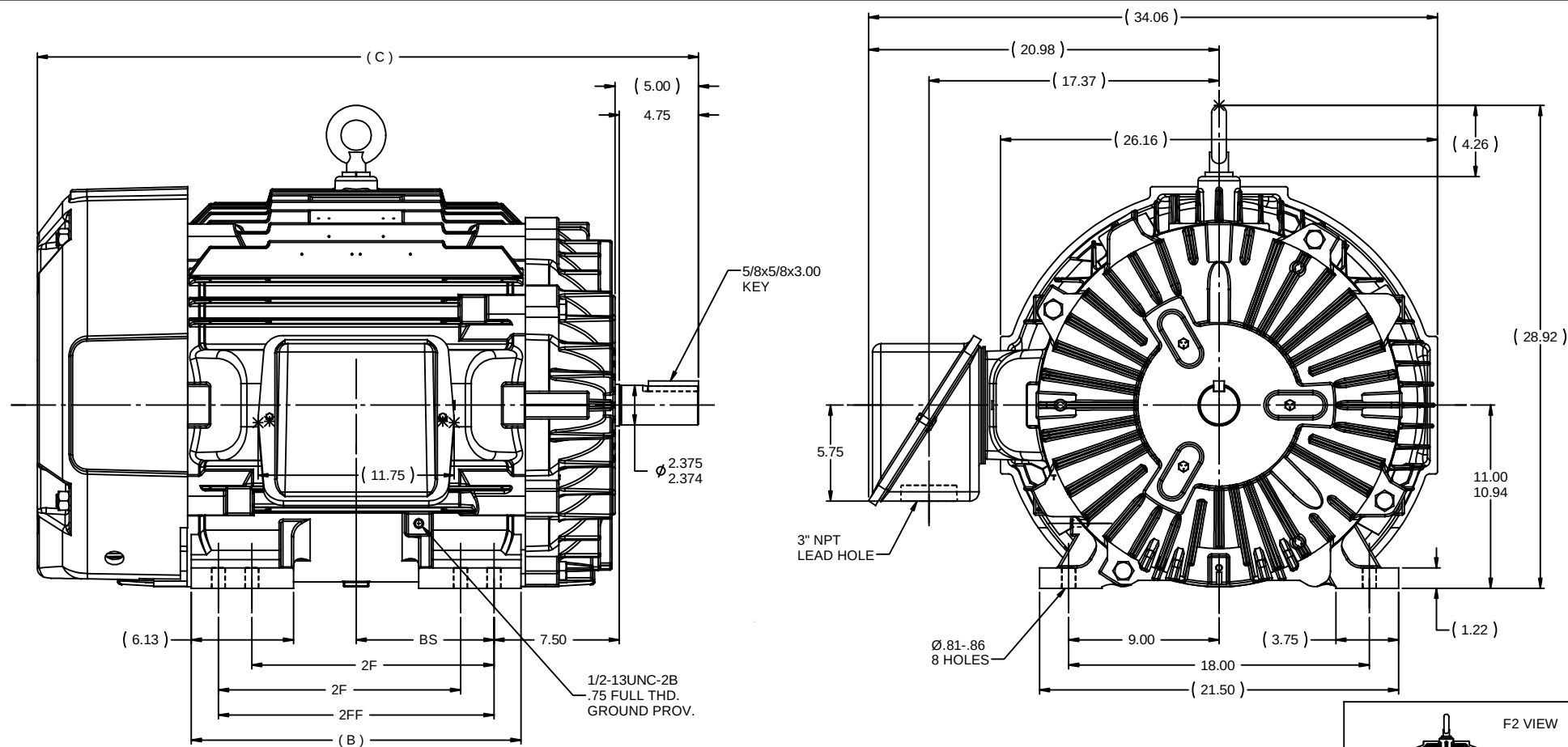
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	150 Hp
Output KW	112.0 kW	Voltage	460 V
Speed	1785 rpm	Service Factor	1.15
Frame	445TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	95.8 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	172.0 A	Power Factor	85
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	Recognized	CSA	Y
CE	Y	IP Code	54
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.0275 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	39.62 in
Frame Length	20.25 in	Shaft Diameter	2.375 in
Shaft Extension	5 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300U	Outline Drawing	B-SS514022-2025



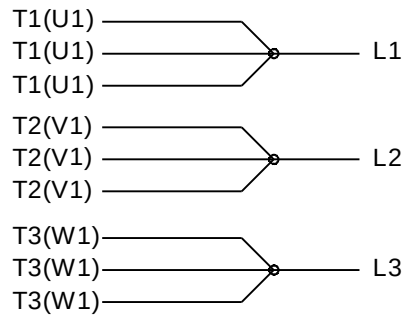
NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

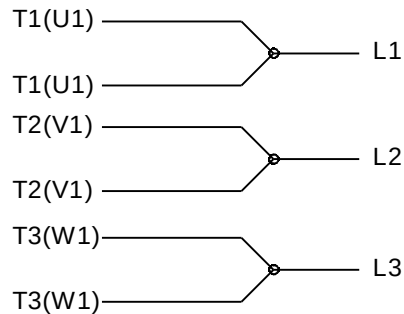
DASH	FRAME	B	C	2F	2FF	BS
2025	444/445TS	19.75	39.62	14.50	16.50	8.25

10	UPDATED WITH NEW FRAME PER ISAAC 09-5049	JJB 6/29/2010	TOLERANCES UNLESS SPECIFIED	DEC	INCHES		DRAWN RM 06-19-1991
9	REV. FAN GUARD & C-DIM. PER CN39335	RWR 6/29/2010	ML	X	±1		CHK TLB 06-28-1991
8	REDRAWN IN AUTOCAD	TAT 06/29/2004	XX	XX	±0.03		APPR ML 06-28-1991
7	REVISED "C" DIM. CN 26153	KL 01/22/1999	XXX	XXX	±0.005		SCALE 1:6
6	RE-ISSUE "C" DIM. WAS 37.44 & 39.44	BLR 06/10/1997	XXXX	XXXX	±0.005		REF
5	UPDATED TO SHOW NEW FRAME AND LIFT LUGS CN21946	PGK 01/22/1997	CHK	ANG	±1/2"	MATL	FMF MU96082
NO	REVISION	BY & DATE	RFP	PREV	FINISH	PAGE	OF
	THIRD ANGLE PROJECTION		NETWORK FILE NAME	SS514022	SIZE	DRAWING NO	REV
					B	SS514022	10

IF MOTOR HAS 9 LEADS

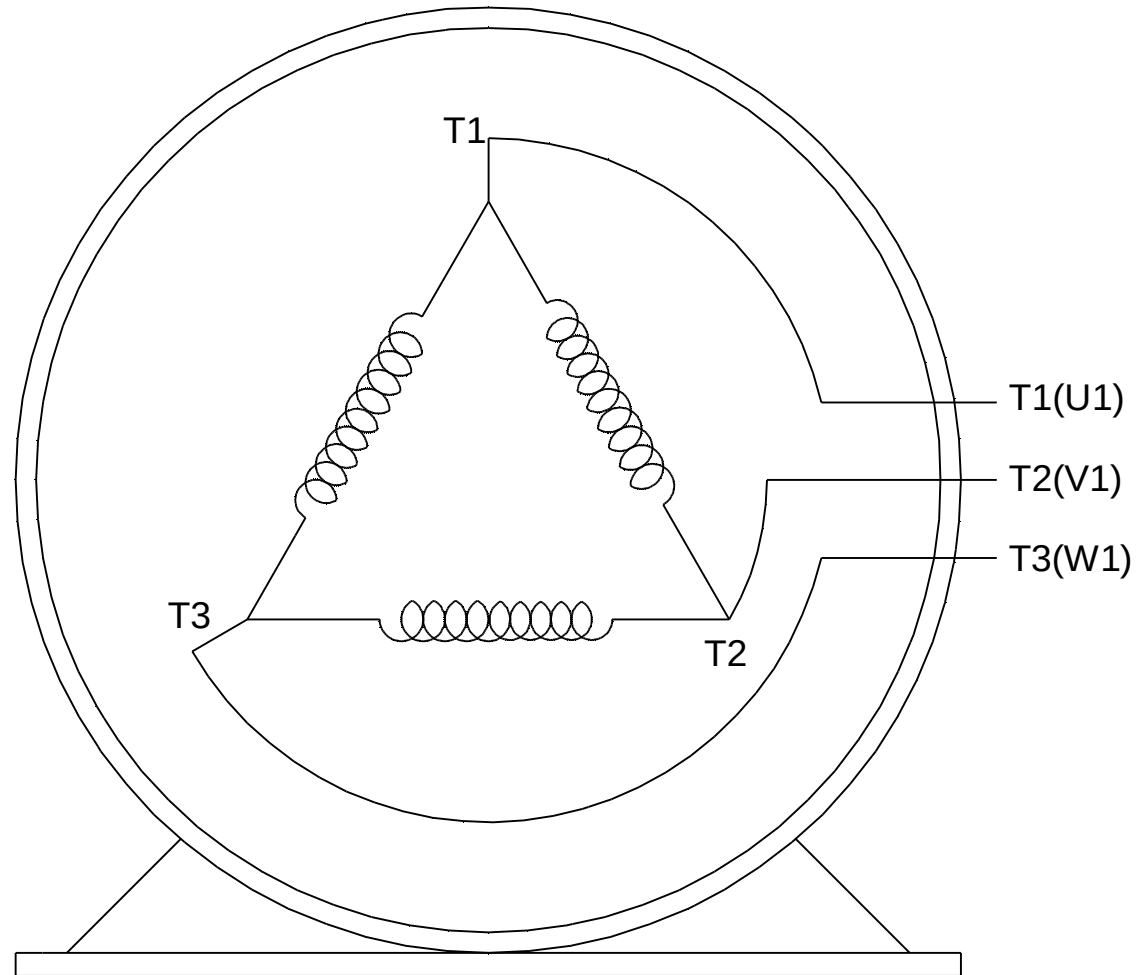
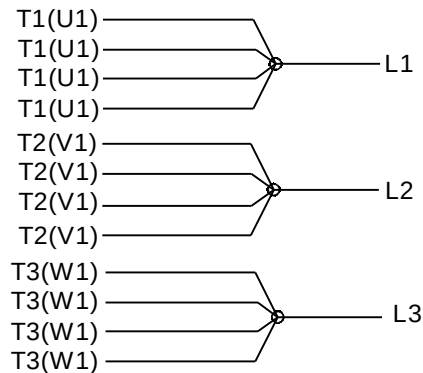


IF MOTOR HAS 6 LEADS



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: DEC. INCH. mm ANGLE .X ±0.1 [±2.5] ±7' 30" .XX ±0.02 [±0.51] XXX ±0.005 [±0.127] .XXXX ±0.0005 [±0.0127] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200^{INCH}5.1^{mm} mm SHOWN IN [BRACKETS]		DRAWN BY DRS	REGAL™ Regal Beloit America, Inc.	
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015			DATE 09-27-1996	DESCRIPTION	
ECO DESCRIPTION UPDATED TO SOLIDWORKS			APPROVED BY GK		CONN DIAGRAM-EXTERNAL 3Ø SINDLE VOLTAGE		
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			REFERENCE	MATERIAL	PROCESS/FINISH		
			THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1	

CERTIFICATION DATA SHEET

Model#: 445TSTFN6526 DD
 CONN. DIAGRAM: A-EE7300U
 OUTLINE: B-SS514022-2025

WINDING#: T4454127 NONE 1
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150	112	1800	1785	445TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	172	LINE OR INVERTER	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95.8	3/4 LOAD EFF: 96.2	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 85	3/4 LOAD PF: 82	1/2 LOAD PF: 74	95.4	SQ CAGE INV RATED	60

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
441 LB-FT	1085	800 LB-FT 181	1150 LB-FT 261	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	47 LB-FT^2	1000 LB-FT^2	25 SEC.	2	2050 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						
6313	6313	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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

* N O T E S *	INVERTER TORQUE: VARIABLE 10:1 INV. HP SPEED RANGE: NONE					
	ENCODER: NONE NONE NONE NONE NONE PPR					
	BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz					

DATE: 06/21/2017 05:33:50 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/20/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



445TSTFN6526

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	60.0	72.0	100	135	172	195	212	1,085	
Torque (ft-lb)	0.00	110	220	330	441	508	553	800	
RPM	1800	1796	1792	1790	1785	1,782	1780	0	
Efficiency (%)		93.0	95.4	96.2	95.8	95.8	95.4		
P.F. (%)	4.5	53.0	74.0	82.0	85.0	86.0	86.0	28.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																																																																		
Speed (RPM)	0	900	1725	1785	1800																																																																																		
Current (Amps)	1,085	950	600	172	60.0																																																																																		
Torque (ft-lb)	800	775	1,150	441	0.00																																																																																		
Efficiency (%) P.F. (%) Current (Amps) <table><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25</td><td>93</td><td>53</td><td>47</td></tr><tr><td>50</td><td>95</td><td>125</td><td>60</td></tr><tr><td>75</td><td>96</td><td>175</td><td>75</td></tr><tr><td>100</td><td>95</td><td>195</td><td>85</td></tr><tr><td>125</td><td>95</td><td>200</td><td>89</td></tr></tbody></table> <table><tr><td>HP</td><td>150.0</td></tr><tr><td>Sync. RPM</td><td>1800</td></tr><tr><td>Frame</td><td>445</td></tr><tr><td>Enclosure</td><td>TEFC</td></tr><tr><td>Construction</td><td>TFN</td></tr><tr><td>Voltage</td><td>460 V</td></tr><tr><td>Frequency</td><td>60 Hz</td></tr><tr><td>Design</td><td>A</td></tr><tr><td>LR Code letter</td><td>G</td></tr><tr><td>Service Factor</td><td>1.15</td></tr><tr><td>Temp Rise @ FL</td><td>70 ° C</td></tr><tr><td>Duty</td><td>CONT</td></tr><tr><td>Ambient</td><td>40 ° C</td></tr><tr><td>Elevation</td><td>1,000 feet</td></tr><tr><td>Rotor/Shaft wk²</td><td>47.0 Lb-Ft²</td></tr><tr><td>Ref Wdg</td><td>T4454127 NONE</td></tr><tr><td>Sound Pressure @ 1M</td><td>75 dBA</td></tr><tr><td>VFD Rating</td><td>VARIABLE 10:1</td></tr><tr><td>Outline Dwg</td><td>B-SS514022-2025</td></tr><tr><td>Conn. Diag</td><td>A-EE7300U</td></tr><tr><td colspan="2">Additional Specifications:</td></tr><tr><td colspan="2">0</td></tr><tr><td colspan="2">0</td></tr><tr><td colspan="2">EQUIV CKT (OHMS / PHASE)</td></tr><tr><td>R1</td><td>R2</td><td>X1</td><td>X2</td><td>Xm</td></tr><tr><td>0.0210</td><td>0.0120</td><td>0.1680</td><td>0.1590</td><td>4.4090</td></tr></table>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	93	53	47	50	95	125	60	75	96	175	75	100	95	195	85	125	95	200	89	HP	150.0	Sync. RPM	1800	Frame	445	Enclosure	TEFC	Construction	TFN	Voltage	460 V	Frequency	60 Hz	Design	A	LR Code letter	G	Service Factor	1.15	Temp Rise @ FL	70 ° C	Duty	CONT	Ambient	40 ° C	Elevation	1,000 feet	Rotor/Shaft wk²	47.0 Lb-Ft²	Ref Wdg	T4454127 NONE	Sound Pressure @ 1M	75 dBA	VFD Rating	VARIABLE 10:1	Outline Dwg	B-SS514022-2025	Conn. Diag	A-EE7300U	Additional Specifications:		0		0		EQUIV CKT (OHMS / PHASE)		R1	R2	X1	X2	Xm	0.0210	0.0120	0.1680	0.1590	4.4090
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Speed -Torque Curve

