

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 445TSTFN6026

Catalog No: E811A

XRI® General Purpose General Purpose Motor, 150 & 125 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V,
1800 & 1500 RPM, 445TS Frame, TEFC



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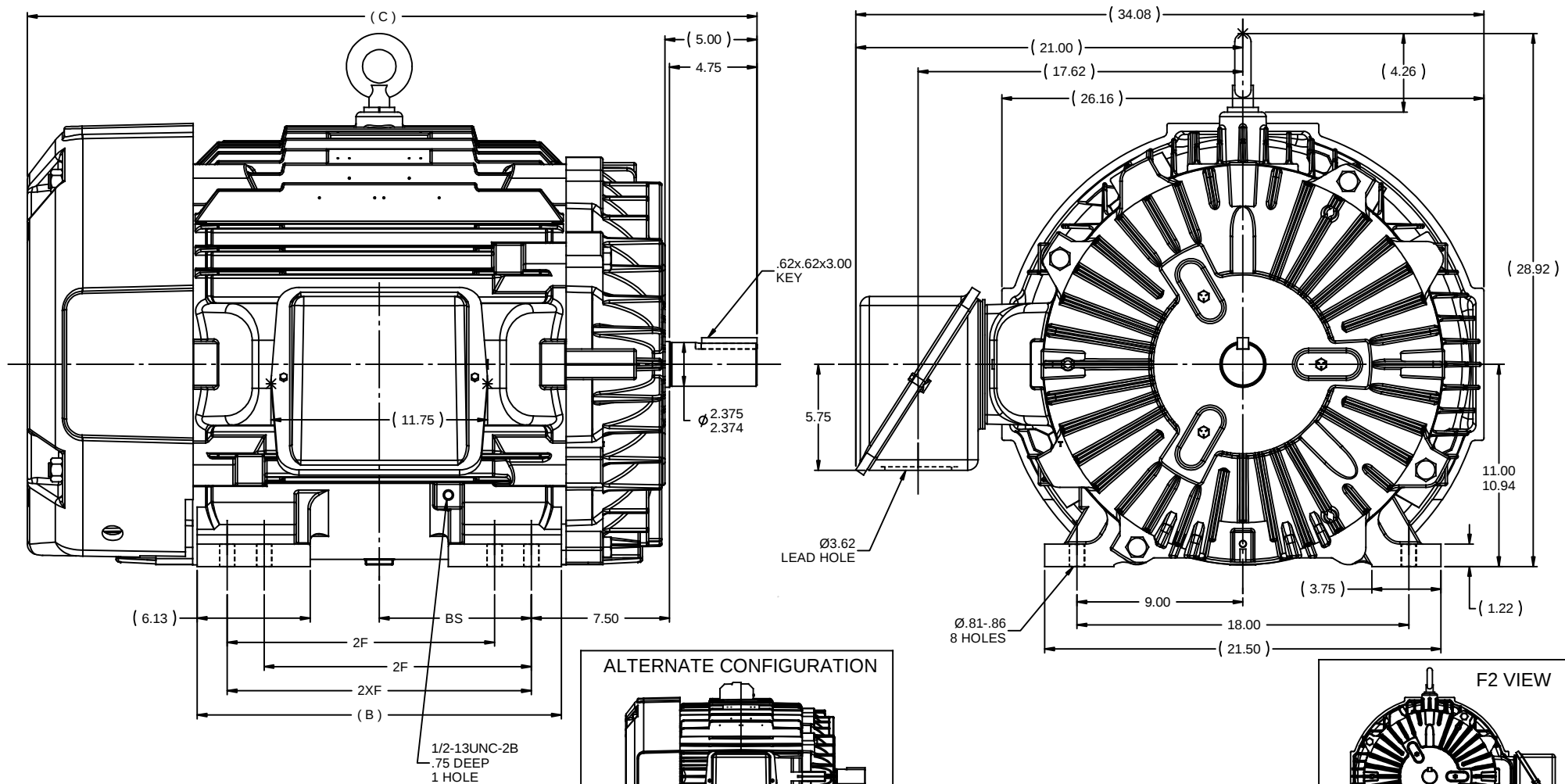
RegalRexnord

Nameplate Specifications

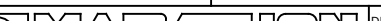
Phase	3	Output HP	150 & 125 Hp
Output KW	112.0 & 93.0 kW	Voltage	460 & 380 V
Speed	1785 & 1485 rpm	Service Factor	1.15 & 1.15
Frame	445TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	95.8 & 95.8 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	172 & 170 A	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	43
Number of Speeds	1		

Technical Specifications

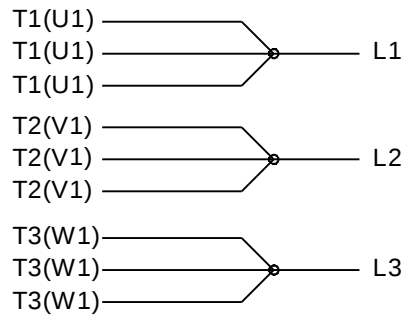
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.0275 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	39.60 in
Frame Length	20.25 in	Shaft Diameter	2.375 in
Shaft Extension	5 in	Assembly/Box Mounting	F1/F2 Capable
Inverter Load	VARIABLE 10:1		
Connection Drawing	A-EE7300U	Outline Drawing	B-SS514023-2025



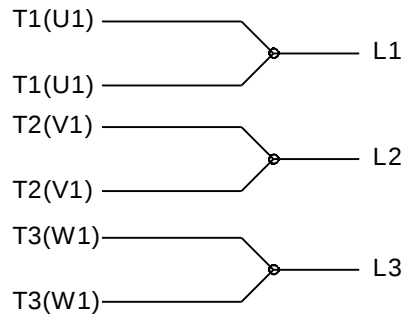
- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

10	CORRECTED C'BOX DIM., 5.75 WAS 5.56 ISAAC 09-5049		JJB 2/4/2011	TOLERANCES UNLESS SPECIFIED			DRAWN RM 06-25-1991
9	UPDATED WITH NEW FRAME. 28.92 DIMENSION WAS 26.52.			DEC INCHES	CHK TLB 06-25-1991		
	ADDED PREVIOUS CONFIG. & F2 VIEW PER ISAAC 09-5049		JJB 12/16/2009	MH X ±.1	APPR ML 06-25-1991		
8	CHG. FAN GUARD & REV. C DIM. PER CN 39335		RWR 01/22/2007	ML XX ±.03	TITLE OUTLINE		SCALE 1:5.25
7	REVISED LEAD DIM FROM Ø4.12 PER CN 32179		CTO 03/24/2003	ML XXX ±.005	444/445TS FR. - TEFC - STD.		REF
6	REISSUE - 26.52 DIMENSION WAS 24.19 CN 21946		KL 05/19/1999	KL XXXX ±.0005	MAT'L	FMF	
NO	REVISION		BY & DATE	CHK ANG ±1/2°	FINISH	PAGE OF	
THIRD ANGLE PROJECTION 			RFP 06-25-1991	PREV	SIZE B	DRAWING NO SSS14023	REV 1
			NETWORK FILE NAME SSS14023				

IF MOTOR HAS 9 LEADS

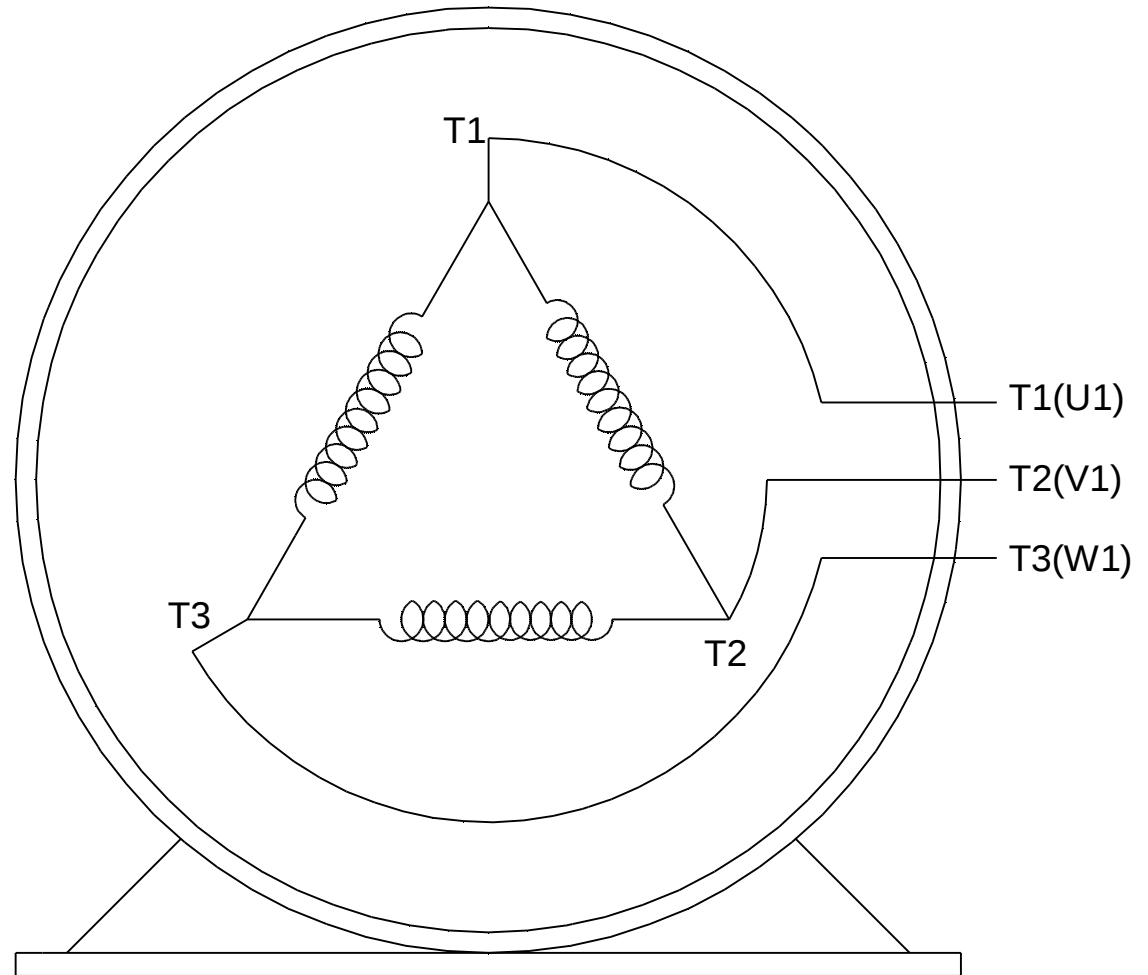
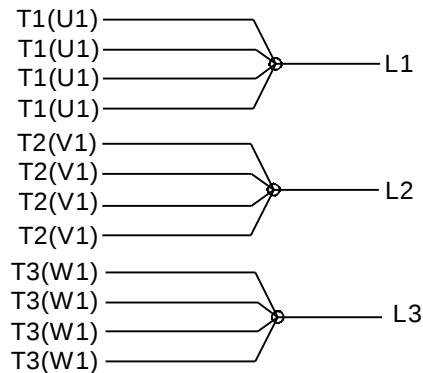


IF MOTOR HAS 6 LEADS



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 Beloit America, Inc.	
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015			DATE 09-27-1996		
ECO DESCRIPTION UPDATED TO SOLIDWORKS			DESCRIPTION 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#: 445TSTFN6026 AC
 CONN. DIAGRAM: A-EE7300U
 OUTLINE: B-SS514023-2025

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&125	112&93	1800	1785&1485	445TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	172&170	LINE OR INVERTER	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF: 95.8&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&86	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	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

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		
	- FT-LB	NONE V	NONE Hz

DATE: 06/21/2017 05:30:52 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



445TSTFN6026

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	Information Block																												
Current (Amps)	1,085	950	600	172	60.0	HP	150.0																											
Torque (ft-lb)	800	775	1,150	441	0.00	Sync. RPM	1800																											
Efficiency (%)P.F. (%)Current (Amps) <table><caption>Graph Data</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>50</td></tr><tr><td>50</td><td>95</td><td>125</td><td>75</td></tr><tr><td>75</td><td>96</td><td>175</td><td>110</td></tr><tr><td>100</td><td>95</td><td>195</td><td>150</td></tr><tr><td>125</td><td>95</td><td>200</td><td>190</td></tr></tbody></table>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	93	53	50	50	95	125	75	75	96	175	110	100	95	195	150	125	95	200	190	Frame	445			
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																									
						25	93	53	50																									
						50	95	125	75																									
						75	96	175	110																									
						100	95	195	150																									
						125	95	200	190																									
						Enclosure	TEFC																											
						Construction	TFN																											
						Voltage	460#380 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-SS514023-2025																																	
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																										

Speed -Torque Curve

