

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 445TSTFN6501

Catalog No: E615

XRI®-SD Severe Duty Motor, 150 HP, 3 Ph, 60 Hz, 460 V, 3600 RPM, 445TS Frame, TEFC



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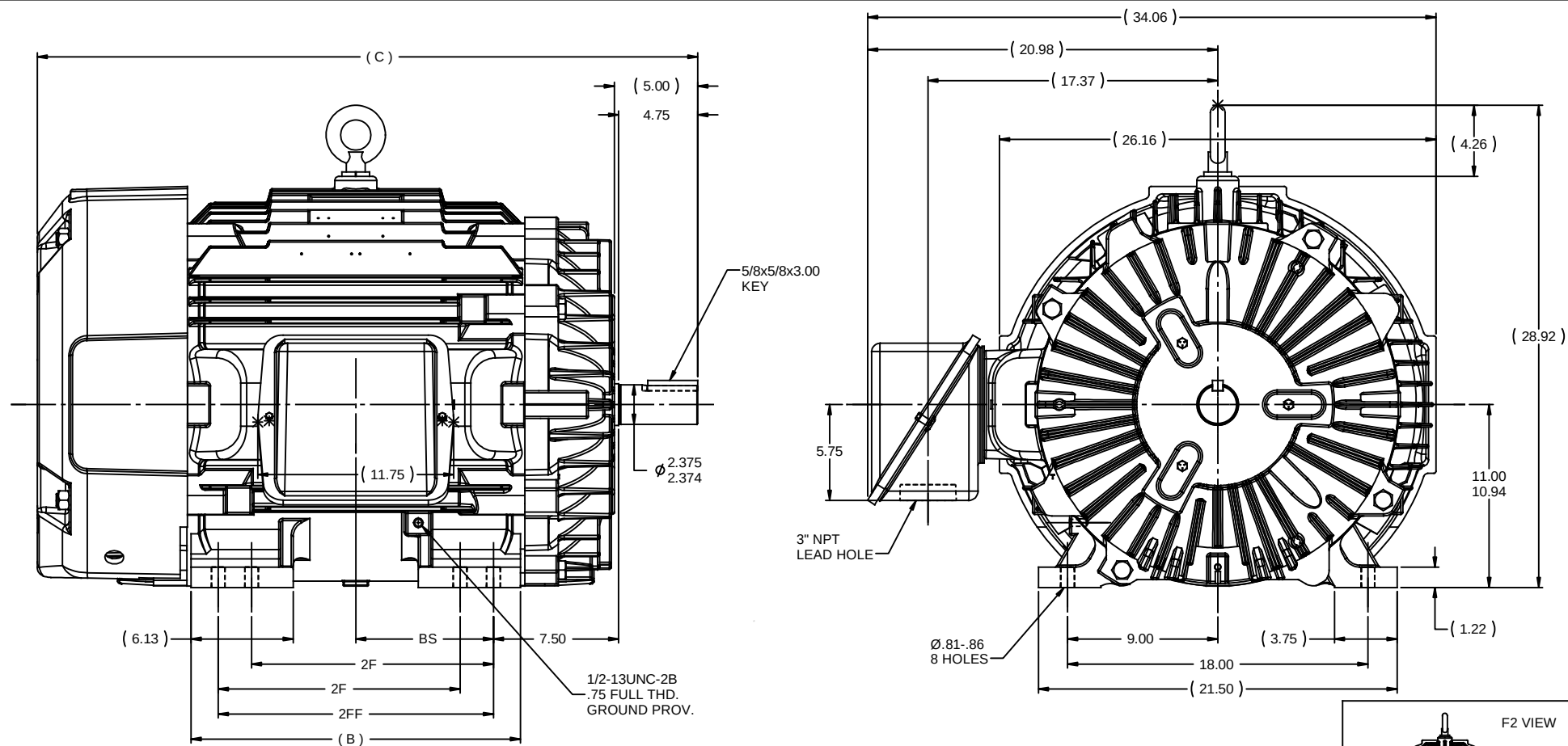
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	150 Hp
Output KW	112.0 kW	Voltage	460 V
Speed	3575 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	168.0 A	Power Factor	88
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	2	Rotation	Reversible
Resistance Main	.018 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
Outline Drawing	B-SS514022-2025	Connection Drawing	A-EE7300U



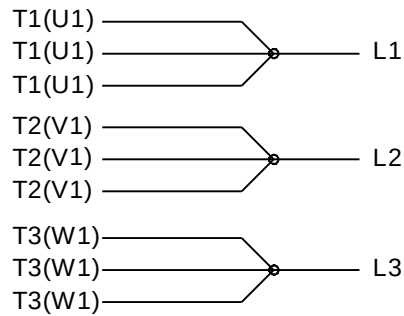
NOTES:

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.

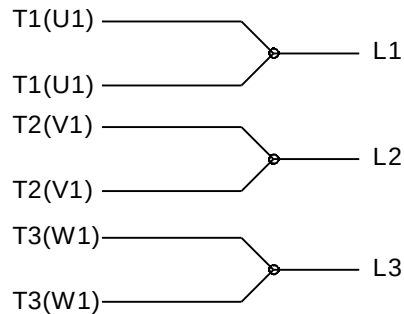
DASH	FRAME	B	C	2F	2FF	BS
2025	444/445TS	19.75	39.62	14.50	16.50	8.25

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	±0.0005		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					SIZE	DRAWING NO
						B	SS514022
							REV
							10

IF MOTOR HAS 9 LEADS

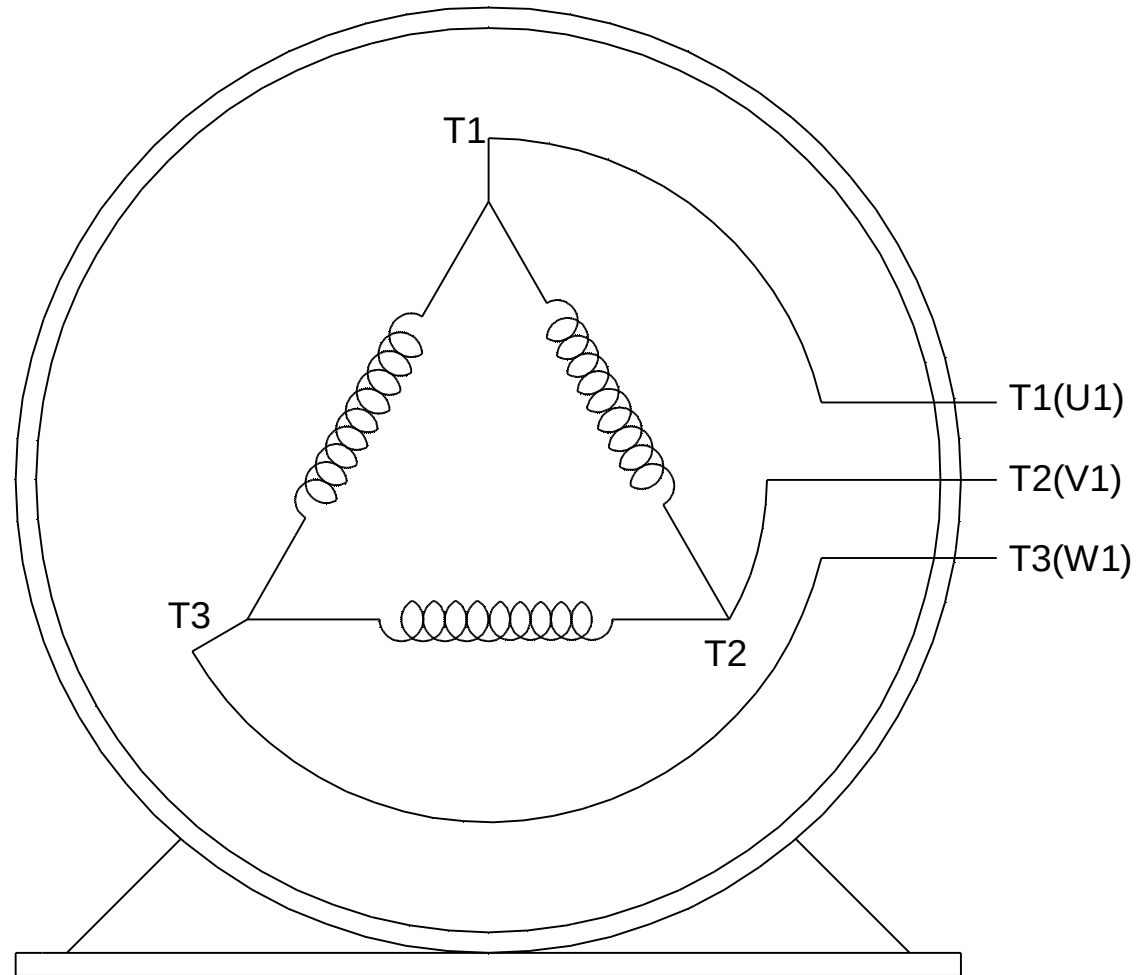
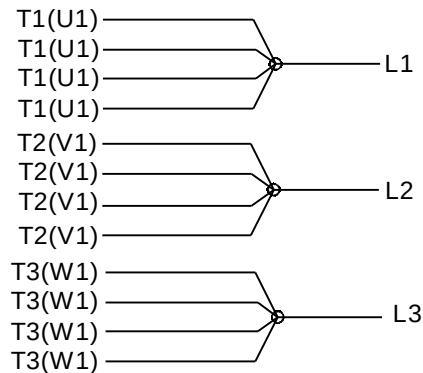


IF MOTOR HAS 6 LEADS



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				
			THIRD ANGLE PROJECTION		SIZE A	DRAWING NUMBER EE7300U	SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 445TSTFN6501 EG
 CONN. DIAGRAM: A-EE7300U
 OUTLINE: B-SS514022-2025

WINDING#: T445276 NONE 1
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150	112	3600	3575	445TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	168	LINE OR INVERTER	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 95.8	3/4 LOAD EFF: 95.8	1/2 LOAD EFF: 95	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88	3/4 LOAD PF: 85	1/2 LOAD PF: 78	95.4	SQ CAGE INV RATED	51

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
221 LB-FT	1085	275 LB-FT 124	640 LB-FT 288	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	31 LB-FT^2	120 LB-FT^2	15 SEC.	2	2200 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: 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					
NONE FT-LB		NONE V		NONE Hz		

DATE: 06/21/2017 05:31:35 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 20-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



445TSTFN6501

Submittal

Data @ 460 V

Motor Load Data

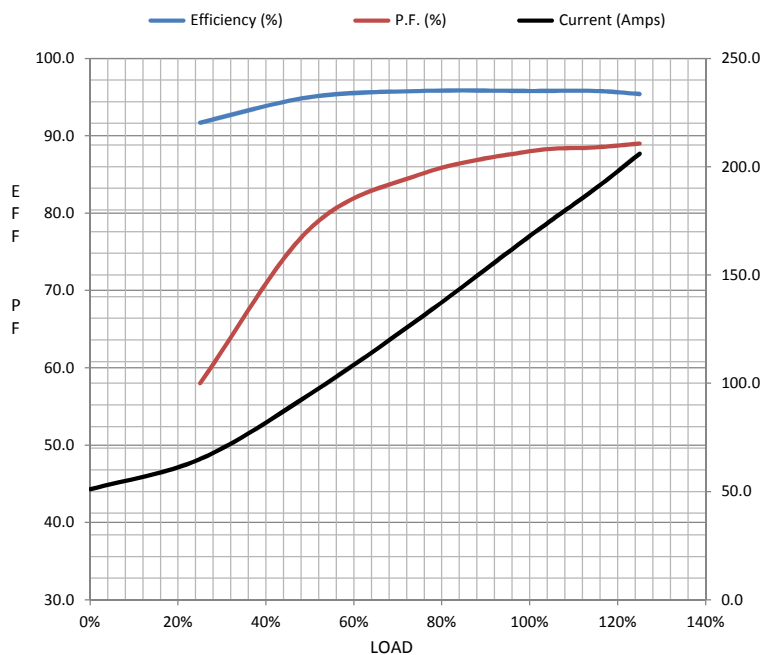
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	51.0	65.0	95.0	130	168	190	206	1,085	
Torque (ft-lb)	0.00	55.0	110	165	221	254	276	275	
RPM	3600	3595	3588	3582	3575	3,570	3568	0	
Efficiency (%)		91.7	95.0	95.8	95.8	95.8	95.4		
P.F. (%)	5.0	58.0	78.0	85.0	88.0	88.5	89.0	21.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3300	3575	3600
Current (Amps)	1,085	977	700	168	51.0
Torque (ft-lb)	275	248	640	221	0.00

Information Block

HP	150.0			
Sync. RPM	3600			
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	65 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	31.0 Lb-Ft²			
Ref Wdg	T445276 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	B-SS514022-2025			
Conn. Diag	A-EE7300U			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0140	0.0130	0.1660	0.1400	5.1600



Speed -Torque Curve

