

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 445TSTFN14013  
Catalog No: Y1634  
150,3600,TEFC,445TS,3/60/460  
Fire Pump



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**REGAL**<sup>®</sup>



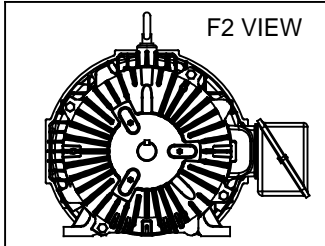
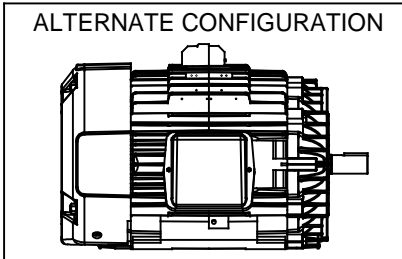
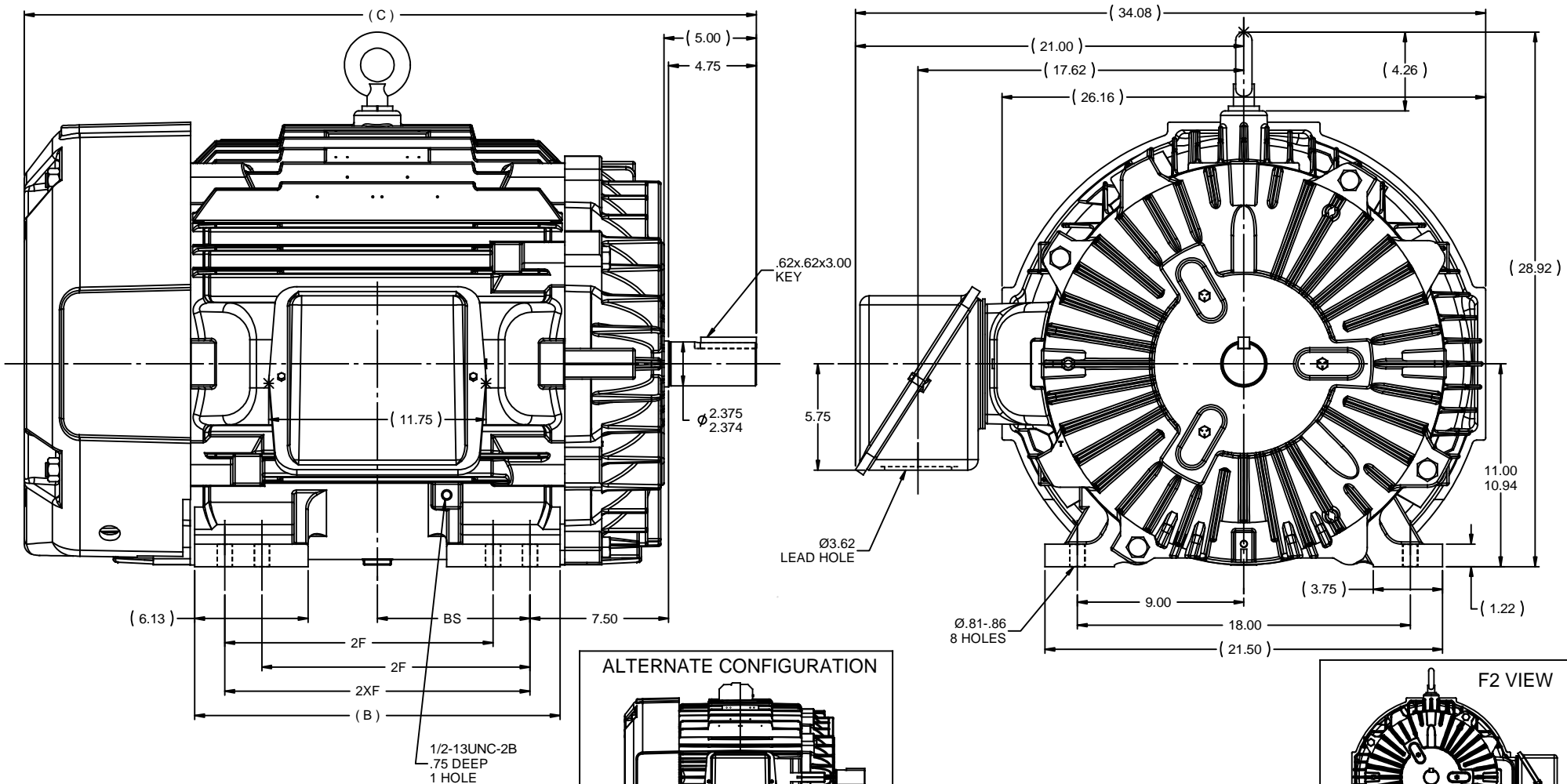
### Nameplate Specifications

Output HP	<b>150 Hp</b>	Output KW	<b>112.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>165.0 A</b>	Speed	<b>3565 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>94.5 %</b>	Duty	<b>Continous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>G</b>	Frame	<b>445TS</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6313</b>
Opp Drive End Bearing Size	<b>6313</b>	UL	<b>No</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>43</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Part Wdg Start &amp; Wye Start Delta Run</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>Horizontal</b>
Drive End Bearing	<b>Ball</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>TS</b>
Overall Length	<b>39.6 in</b>	Frame Length	<b>20.25 in</b>
Shaft Diameter	<b>2.375 in</b>	Shaft Extension	<b>5 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>B-SS514023-2025</b>	Connection Diagram	<b>A-EE7300BH</b>

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- 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	2XF	BS
1825	444TS	17.75	37.60	14.50	---	7.25
2025	444/445TS	19.75	39.60	14.50	16.50	8.25

10	CORRECTED C'BOX DIM. 5.75 WAS 5.56	ISAAC 09-5049	JJB 2/4/2011		TOLERANCES UNLESS SPECIFIED					
9	UPDATED WITH NEW FRAME. 28.92 DIMENSION WAS 26.52.				DEC INCHES					
	ADDED PREVIOUS CONFIG. & F2 VIEW PER ISAAC 09-5049		JJB 12/16/2008	MH	x ±.1					
8	CHG. FAN GUARD & REV. C DIM. PER CN 39335		RWR 01/22/2007	ML	xx ±.03	TITLE OUTLINE				
7	REVISED LEAD DIM FROM Ø4.12 PER CN 32179		CTO 03/24/2003	ML	xxx ±.005	444/445TS FR. - TEFC - STD.				
6	REISSUE - 26.52 DIMENSION WAS 24.19	CN 21946	KL 05/19/1999		xxxx ±.0005	MATL				
NO	REVISION		BY & DATE	CHK	ANG ±1/2°	FINISH				
				RFP	06-25-1991	PREV				
					NETWORK FILE NAME	SS514023				
							SIZE	DRAWING NO	REV	
							B	SS514023		10





VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		REGAL REGAL - BELOIT CORPORATION	DRAWN RJW 02-11-2005			
				DEC.	INCHES		CHK	ML	02-11-2005	
				.X	±.1		APPD	GK	02-11-2005	
				.XX	±.02	TITLE CONNECTION DIAGRAM	SCALE			
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX ±.005	12 LEAD- SINGLE VOLTAGE	REF			
1	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	ML	.XXXX ±.0005	MAT'L.	FMF			
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	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	02-11-2005	CAD FILE ee7300bh	SIZE	DRAWING NO.	PAGE OF	REV.
				DIST	LB		A	EE7300BH		C

**CERTIFICATION DATA SHEET**

**Model#:** 445TSTFN14013 AA      **WINDING#:** T445287 NONE 1  
**CONN. DIAGRAM:** A-EE7300BH      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS514023-2025

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150&125	112&93	3600	3565&2970	445TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	165&165	PWS & YDRUN	CONTINUOUS	F1	1.15/1.15	40	3300

FULL LOAD EFF:	3/4 LOAD EFF:	1/2 LOAD EFF:	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
94.5&94.5	94.5	93.6			
FULL LOAD PF: 89&89	3/4 LOAD PF: 88	1/2 LOAD PF: 83	93.6	SQ CAGE IND RUN	42

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
221 LB-FT	1025	300 LB-FT 135	625 LB-FT 282	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	30 LB-FT^2	110 LB-FT^2	15 SEC.	2	2150 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	RED (ENAMEL)

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

INVERTER TORQUE: NONE
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

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DATE: 06/21/2017 05:25:10 AM  
FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

Date: 29-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



445TSTFN14013

Submittal

Data @ 460 V

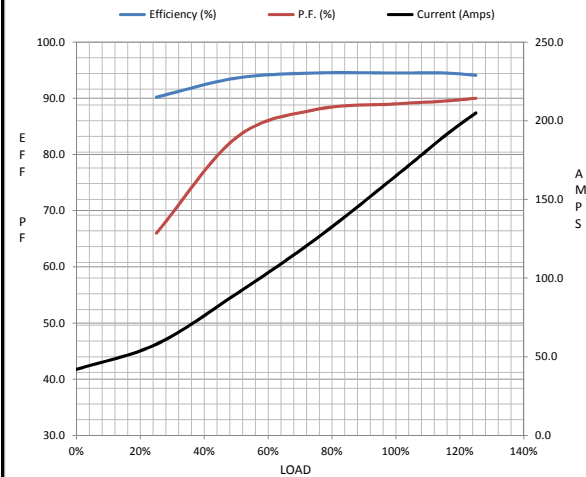
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	42.0	58.0	90.0	125	165	190	205	1,025
Torque (ft-lb)	0.00	55.0	110	165	221	254	276	300
RPM	3600	3590	3585	3575	3565	3,560	3555	0
Efficiency (%)		90.2	93.6	94.5	94.5	94.5	94.1	
P.F. (%)	7.0	66.0	83.0	88.0	89.0	89.5	90.0	27.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3450	3565	3600
Current (Amps)	1,025	900	650	165	42.0
Torque (ft-lb)	300	225	625	221	0.00

Information Block				
HP	150.0			
Sync. RPM	3600			
Frame	445			
Enclosure	TEFC			
Construction	TFN			
Voltage	460#380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	75 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	30.0 Lb-Ft <sup>2</sup>			
Ref Wdg	T445287 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS514023-2025			
Conn. Diag	A-EE7300BH			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0190	0.0130	0.1870	0.1360	6.1710



Speed -Torque Curve

