

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 445TSTD14051

Catalog No: U540A

Fire Pump Motor, 250 & 200 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 & 1500 RPM, 445TS Frame, DP



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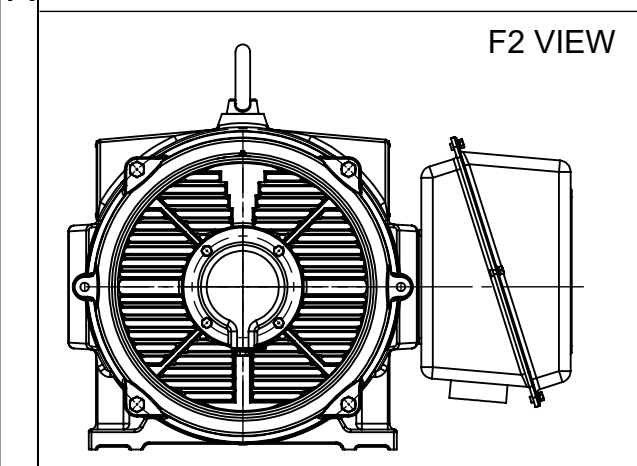
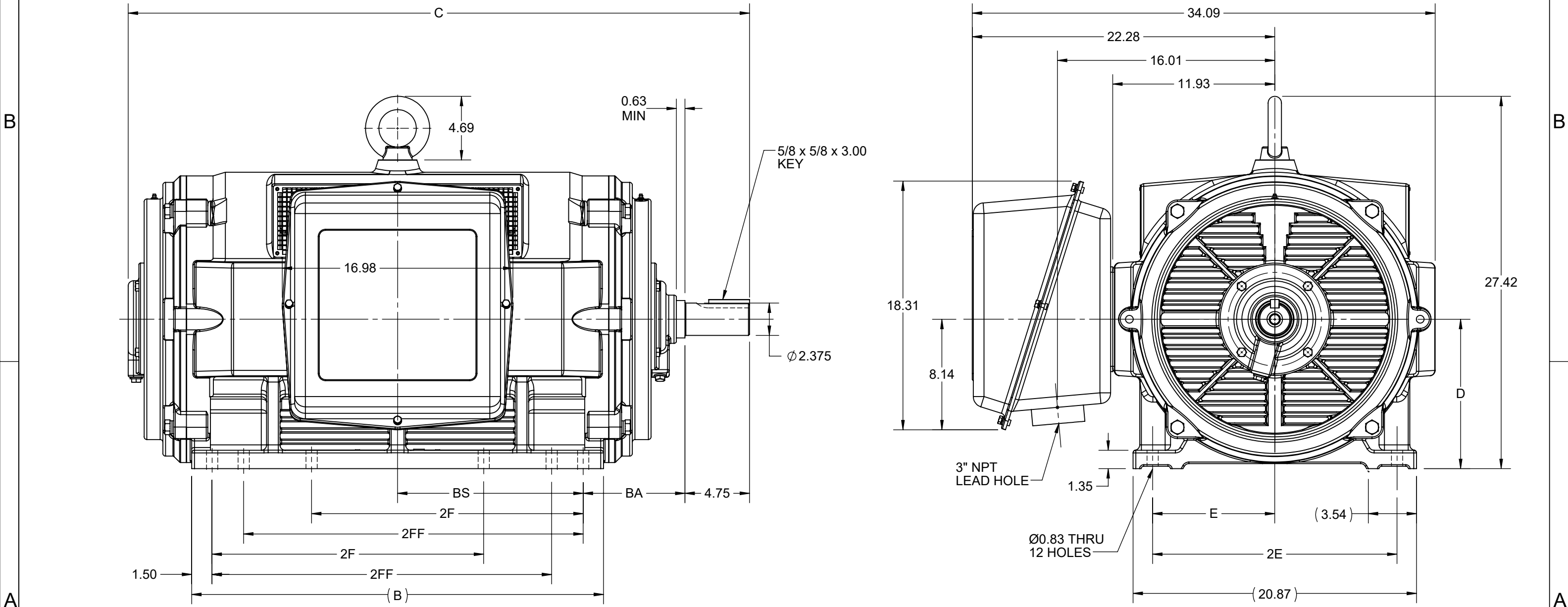
Nameplate Specifications

Phase	3	Output HP	250 & 200 Hp
Output KW	187.0 & 149.0 kW	Voltage	460 & 380 V
Speed	1788 & 1488 rpm	Service Factor	1.15 & 1.15
Frame	445TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	95.5 & 95.5 %
Ambient Temperature	50 °C	Frequency	60 & 50 Hz
Current	278 & 275 A	Power Factor	87
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6317
UL	Listed	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

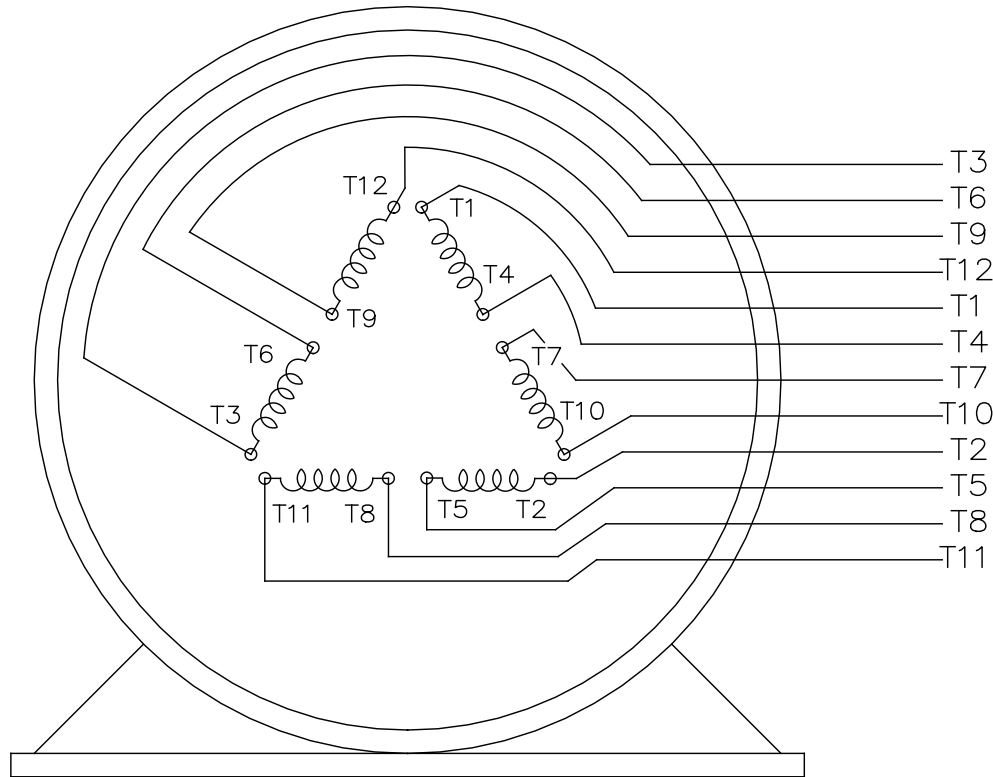
Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.022 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	45.95 in
Frame Length	31.10 in	Shaft Diameter	2.375 in
Shaft Extension	4.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	SS620756-445TS	Connection Drawing	EE7300BH

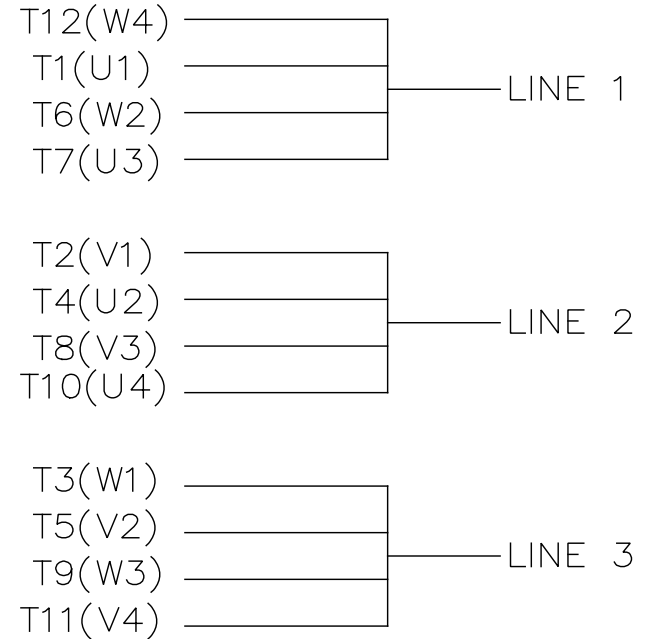
DASH NO.	4		3				2		1		
	B	C	D	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	25.20	40.64	11.00	9.00	18.00	14.50	16.50	7.50	11.10	F1 OR F2	444/445TS
200	30.31	45.76				20.00	25.00		13.66		447/449TS



DRAWING REVISION C	REVISION BY GOPI J	REV DATE/© DATE 09/02/2022	DRAWN BY ZXW	 Regal Beloit America, Inc.
REQUEST NUMBER CR-0006851	APPROVED BY SBD	DATE 09/02/2022	DATE 21/07/2016	
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D			APPROVED BY	DESCRIPTION OUTLINE
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			REFERENCE	MATERIAL
PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY			THIRD ANGLE PROJECTION	SIZE B
			DRAWING NUMBER SS620756	



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



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
 ORDER #: _____ REFERENCE MODEL #: 445TSTDCD14051
 CONN. DIAGRAM: EE7300BH CAT #: U540A
 OUTLINE: SS620756 CUSTOMER PART #: _____
 WINDING: IE3L2804112 NONE 1 MOUNTING: F1/F2 CAPABLE
 SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
250	187	1800	1788	445TS	DP	TDC	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	460#380	278&275	PWS & YDRUN	CONT	F	1.15	50	3300

F.L. EFF	95.4	3/4 LD EFF	95.8	1/2 LD EFF	95.4	GTD EFF	94.5	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	87.0	3/4 LD PF	86.0	1/2 LD PF	82.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
736 LB-FT	1,675	1,400 LB-FT 190%	1,600 LB-FT 217%	60

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
85 dBA	94 dBA	95.0 LB-FT²	0 LB-FT²	15 SEC.	0	3500 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	RED (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6319	6317						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.014	0.007	0.068	0.173	3.804	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE					
	INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE					
	NONE NONE PPR					

PREPARED BY: FAREEDA DUDEKULA	BRAKE: NONE
DATE: 8/30/2018	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
	UL: NONE

FORM: 3531 REV_4 2/27/06

Data Sheet

445TSTDCD14051

Date: 12/14/2018
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

Motor Load Data

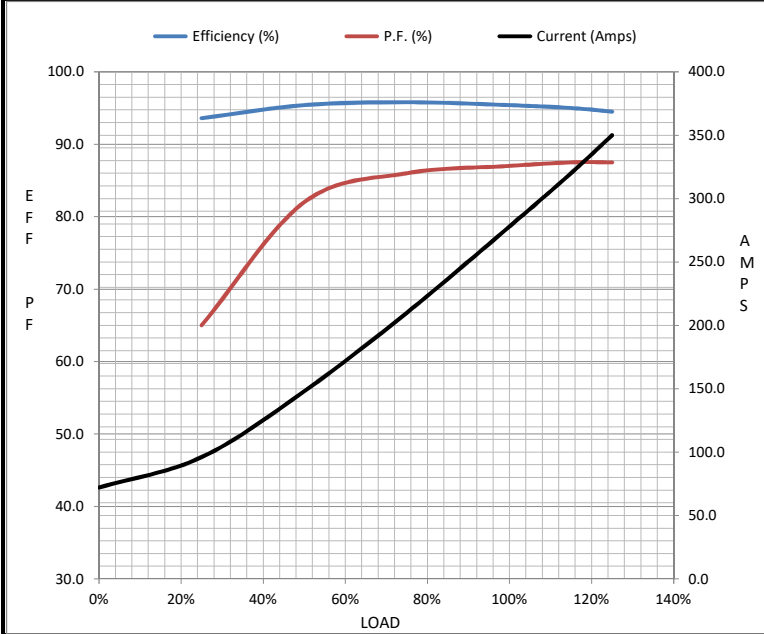
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	72.0	96.0	148	210	278	320	350	1,675
Torque (ft-lb)	0.00	183	366	550	736	847	922	1,400
RPM	1800	1796	1794	1790	1788	1,786	1784	0
Efficiency (%)		93.6	95.4	95.8	95.4	95.0	94.5	
P.F. (%)	4.5	65.0	82.0	86.0	87.0	87.5	87.5	38.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1788	1800
Current (Amps)	1,675	1,500	900	278	72.0
Torque (ft-lb)	1,400	1,150	1,600	736	0.00

Information Block

HP	250.0			
Sync. RPM	1800			
Frame	445			
Enclosure	DP			
Construction	TDC			
Voltage	460#380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	60 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	95.0 Lb-Ft ²			
Ref Wdg	IE3L2804112 NONE			
Sound Pressure @ 1M	85 dBA			
VFD Rating	NONE			
Outline Dwg	SS620756			
Conn. Diag	EE7300BH			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0140	0.0070	0.0680	0.1730	3.8040



Speed - Torque Curve

