

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 445TSTD14027

Catalog No: U540B

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



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RegalRexnord



Nameplate Specifications

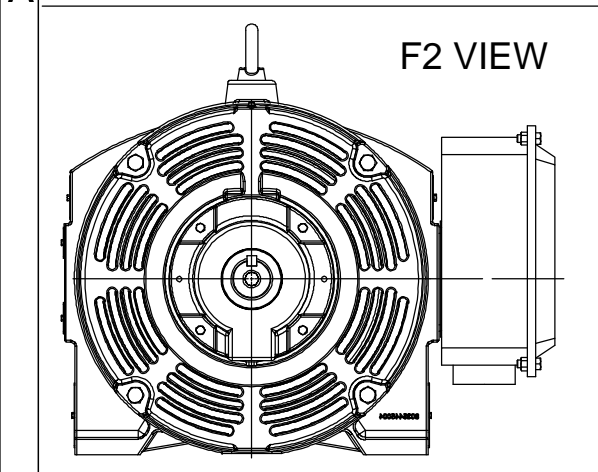
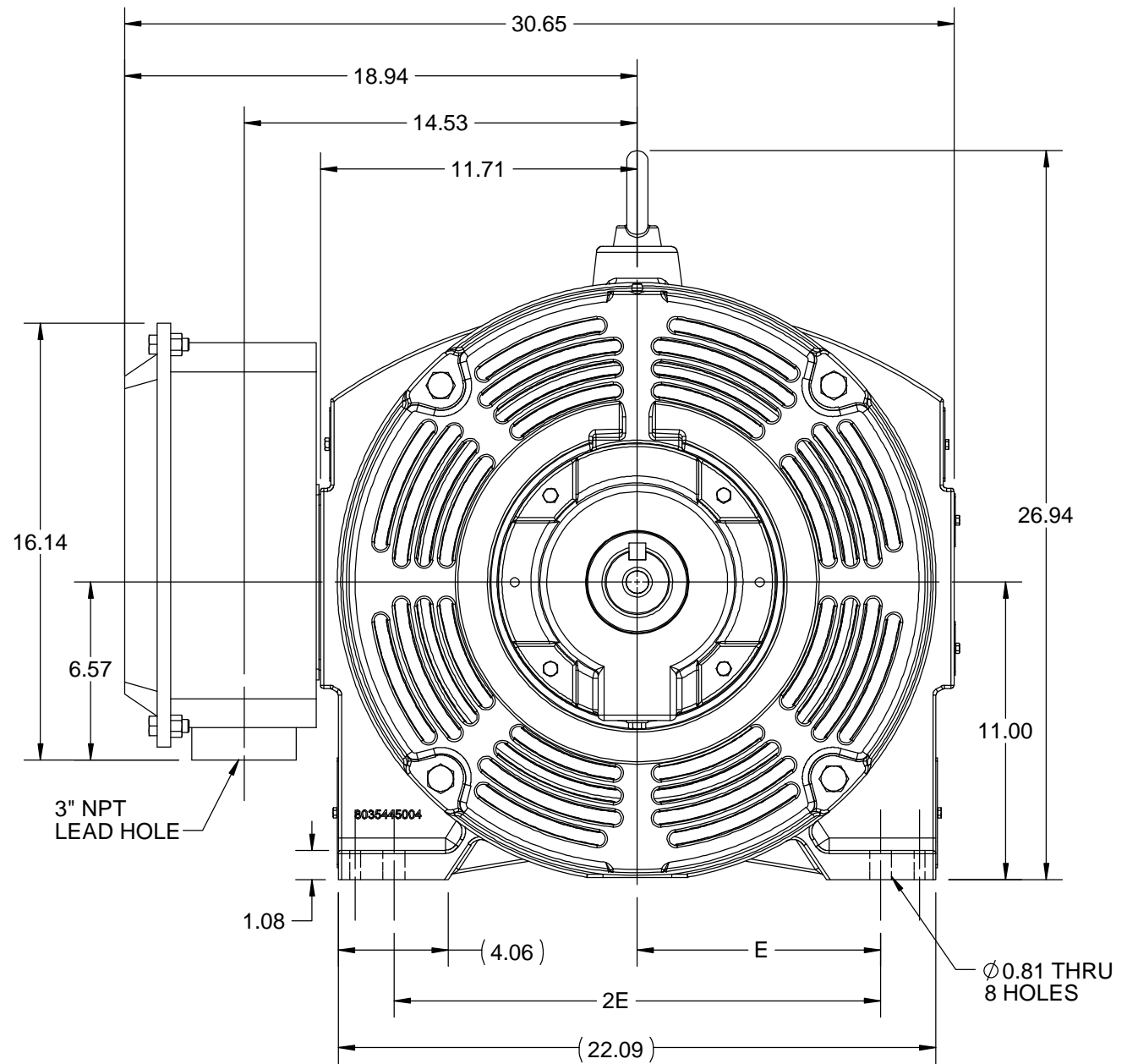
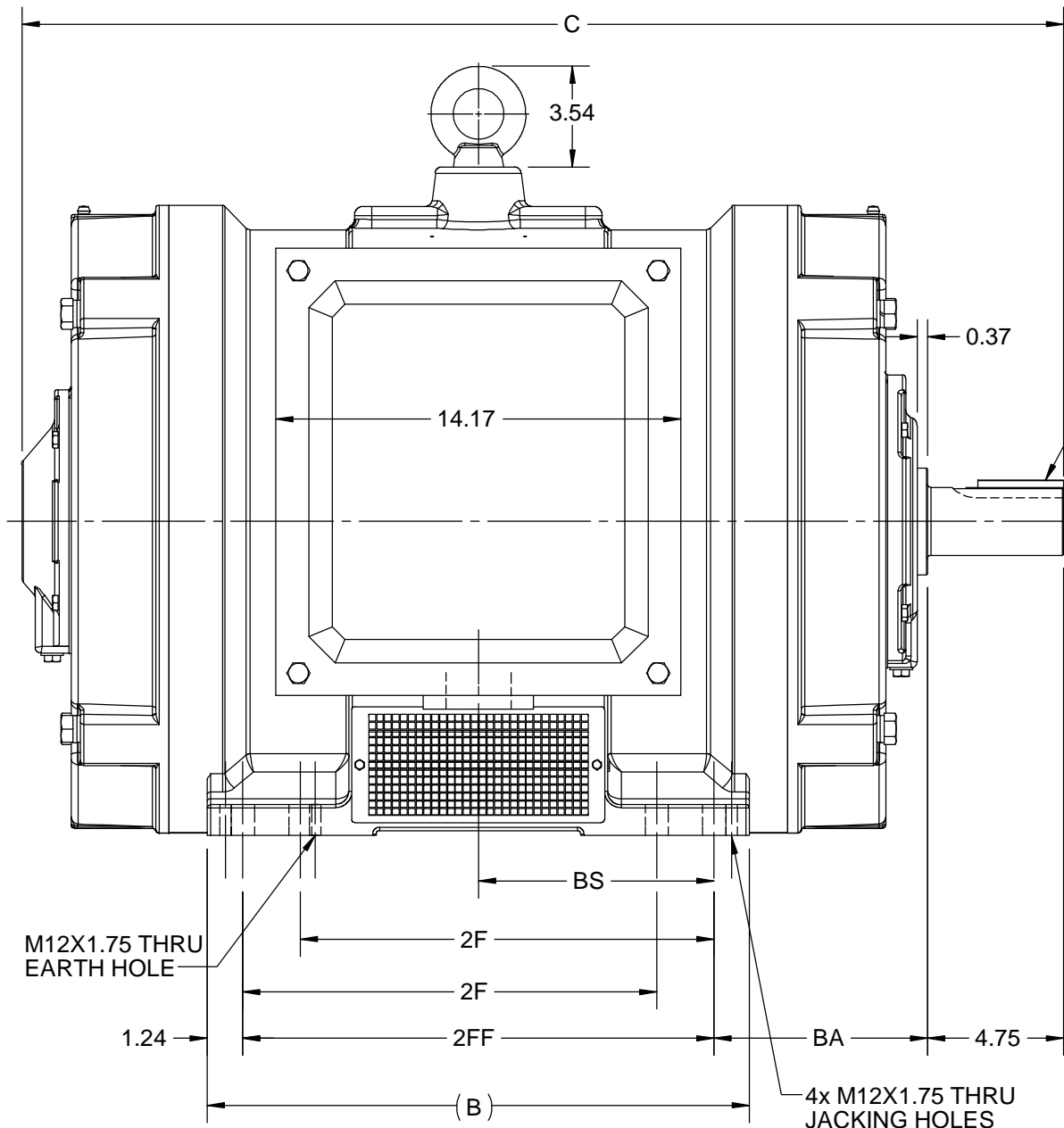
Phase	3	Output HP	250 & 200 Hp
Output KW	187.0 & 149.0 kW	Voltage	460 & 380 V
Speed	1789 & 1489 rpm	Service Factor	1.15 & 1.15
Frame	445TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	95.4 & 95.1 %
Ambient Temperature	50 °C	Frequency	60 & 50 Hz
Current	279 & 270 A	Power Factor	87.7
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
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	.0223 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Shaft Diameter	2.375 in
Assembly/Box Mounting	F1/F2 CAPABLE		
Connection Drawing	EE7300BH	Outline Drawing	SS620991

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	4				3				2	1
B	C	E	2E	2F	2FF	BA	BS	MOUNTING		
18.98	36.47	9.00	18.00	14.50	16.50	7.50	8.25	F1 OR F2		



DRAWING REVISION B	REVISION BY BISWA	DATE 30/11/2020
ECO ECO-0195277	APPROVED BY SBD	DATE 30/11/2020
ECO DESCRIPTION		
DRAWING UPDATED		
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DRAWN BY VS	REGAL ™ Regal Beloit America, Inc.
DATE 11/01/2019	
APPROVED BY SBD	DESCRIPTION OUTLINE 444/445 FR TS-NEMA-ODP
DATE 11/01/2019	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS620991
	SHEET 1 OF 1



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 #:** 445TSTD14027
CONN. DIAGRAM: EE7300BH **CAT #:** U540B
OUTLINE: SS620991 **CUSTOMER PART #:** _____
WINDING: HA22804105 NONE 1 **MOUNTING:** F1/F2 CAPABLE
SPEED: _____ **FAN:** 504205B

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
250	187	1800	1789	445TS	DP	TDC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	460#380	279&270	PWS & YDRUN	CONT	F	1.15	50	3300

F.L. EFF	95.4	3/4 LD EFF	95.7	1/2 LD EFF	95.4	GTD EFF	ELECT. TYPE
F.L. PF	87.7	3/4 LD PF	85.8	1/2 LD PF	79.9	95.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
734 LB-FT	1,825	1,915 LB-FT 261%	1,650 LB-FT 225%	75

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
84 dBA	93 dBA	75.0 LB-FT²	375 LB-FT²	18 SEC.	2	2262 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	YES	RODENT	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	0.006	0.069	0.16	3.391	0.150	ODE

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

PREPARED BY: _____	BRAKE: NONE
DATE: 7/27/2022	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:

FORM: 3531 REV_4 2/27/06

UL: NO LETTER - ALL BRANDS-UL LISTED FIRE PUMP MOTORS

Data Sheet

Date: 10/4/2023
 Customer: _____
 Attention: _____
 Submitted by: RAMYA



445TSTD14027

Submittal

Data @ 460 V

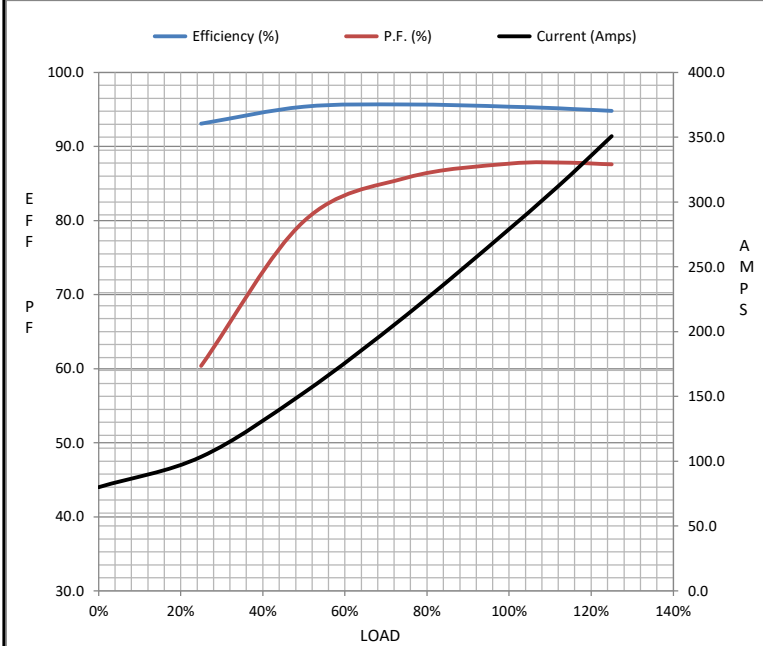
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	80.0	104	153	213	279	321	351	1,825
Torque (ft-lb)	0.00	183	366	550	734	845	920	1,915
RPM	1800	1797	1795	1792	1789	1,786	1785	0
Efficiency (%)		93.1	95.4	95.7	95.4	95.1	94.8	
P.F. (%)	4.9	60.4	79.9	85.8	87.7	87.8	87.6	43.0

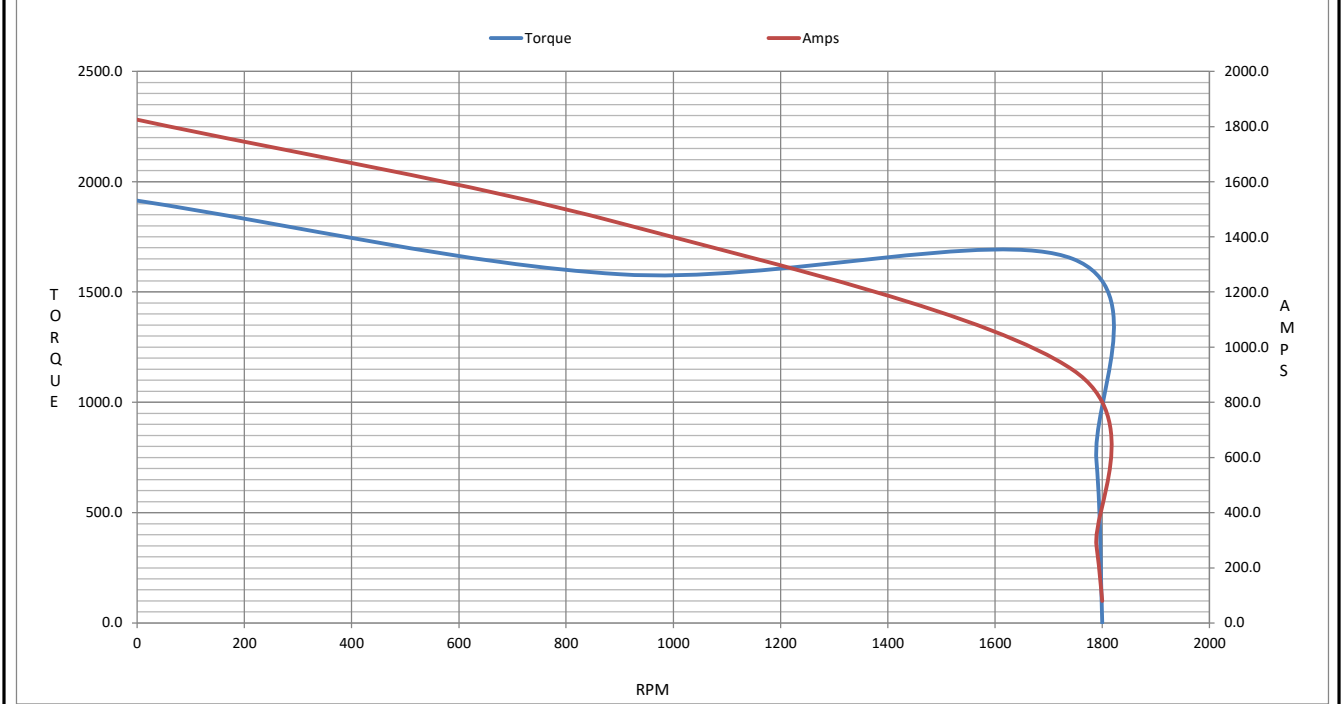
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1745	1789	1800
Current (Amps)	1,825	1,450	918	279	80.0
Torque (ft-lb)	1,915	1,580	1,650	734	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	G			
Service Factor	1.15			
Temp Rise @ FL	75 ° C			
Duty	CONT			
Ambient	50 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	75.0 Lb-F ²			
Ref Wdg	HA22804105 NONE			
Sound Pressure @ 1M	84 dBA			
VFD Rating	NONE			
Outline Dwg	SS620991			
Conn. Diag	EE7300BH			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0140	0.0060	0.0690	0.1600	3.3910



Speed - Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 445TSTDCD14027

(Model No. may contain prefix and/or suffix characters)

Catalog No : U540B

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22