

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 445TSTFCD6528

Catalog No: E459A

XRI®-SD Severe Duty Motor, 200 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 445TS Frame, TEFC



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RegalRexnord



Nameplate Specifications

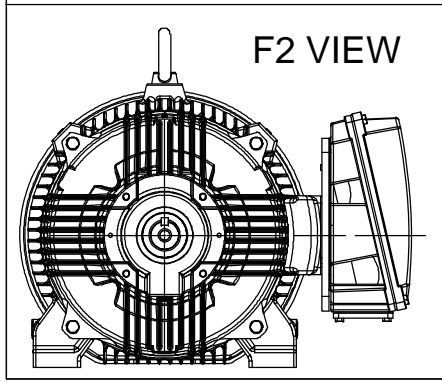
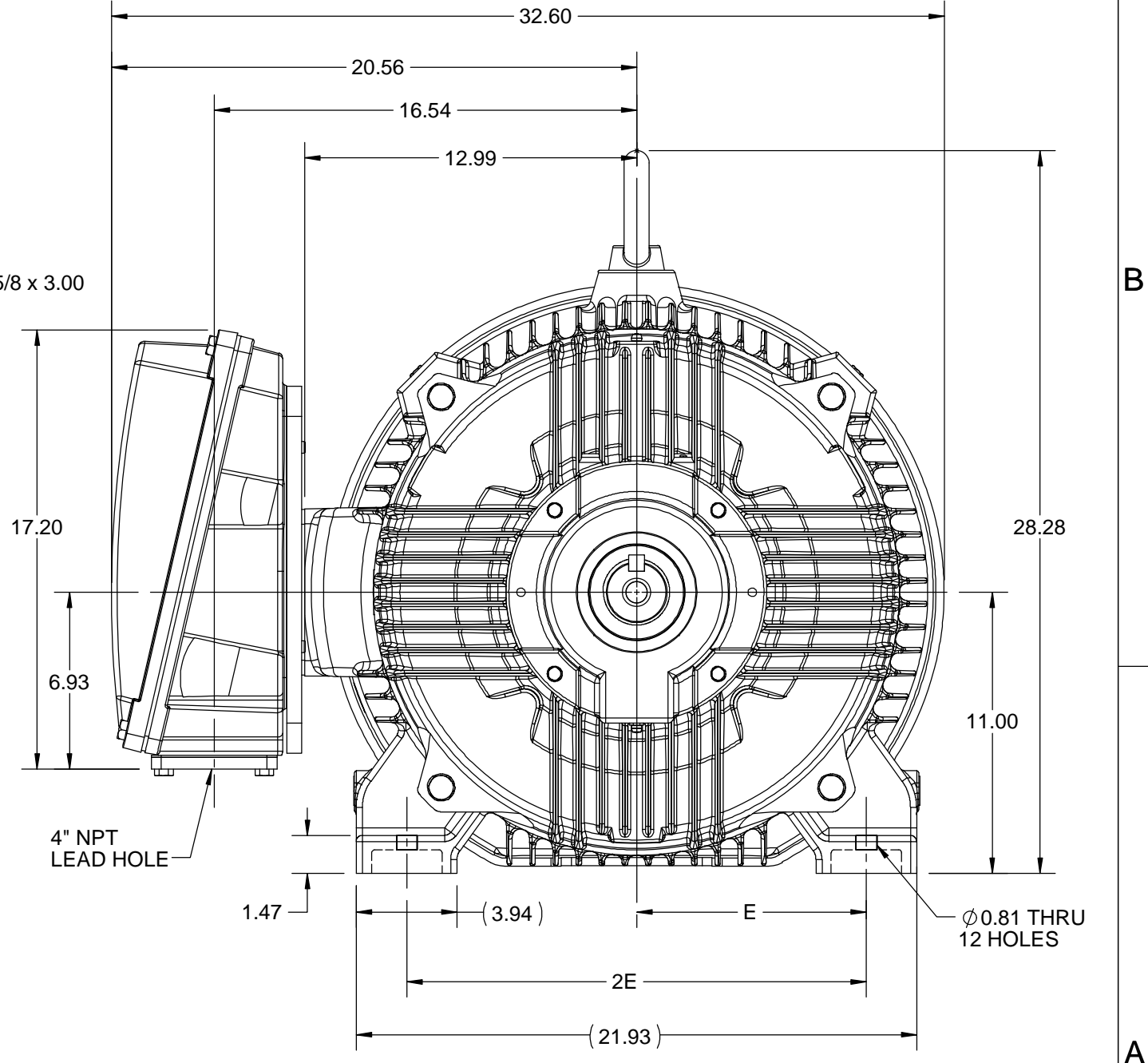
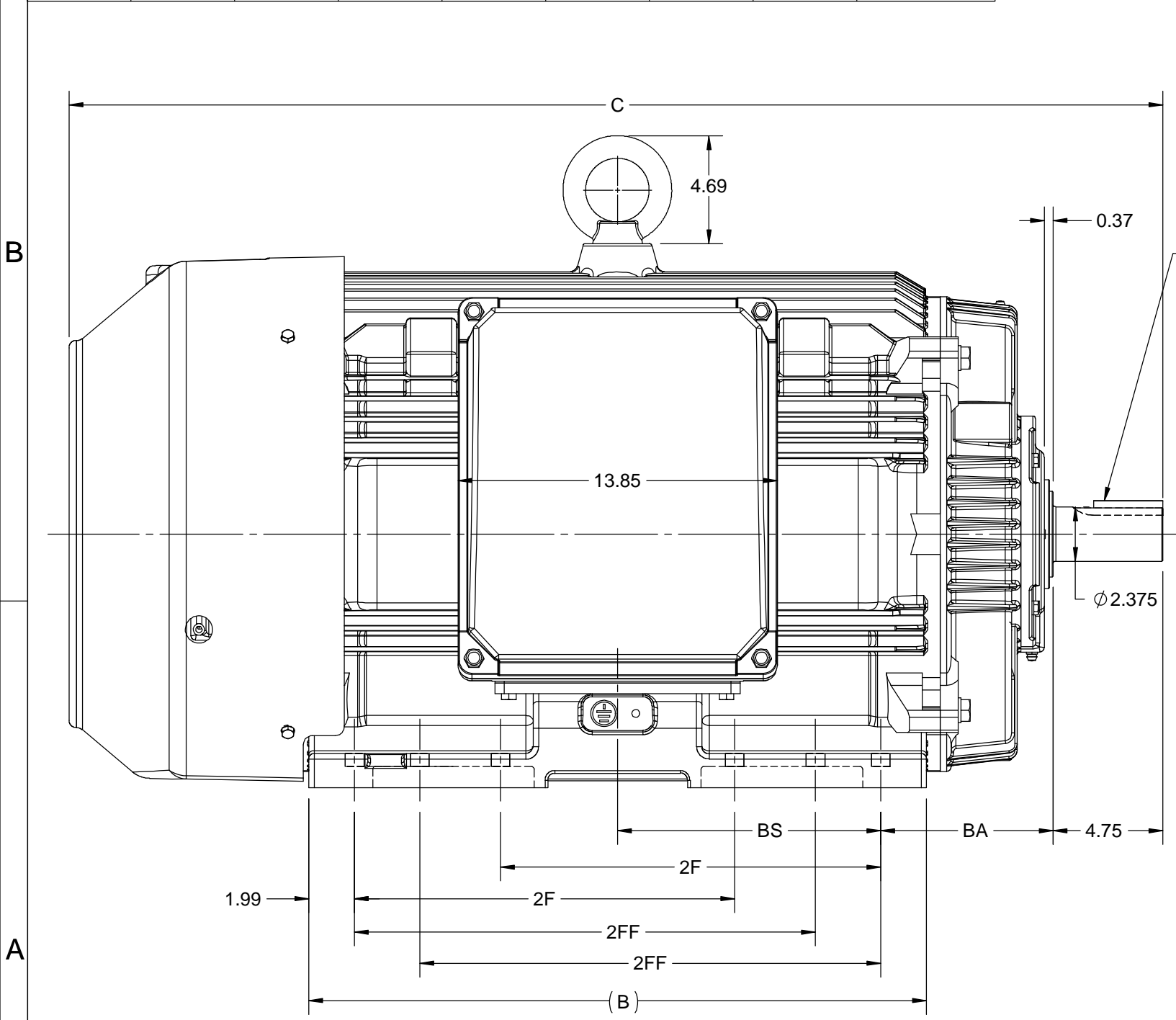
Output HP	200 Hp	Output KW	149.0 kW
Frequency	60 Hz	Voltage	460 V
Current	219.0 A	Speed	1790 rpm
Service Factor	1.15	Phase	3
Efficiency	96.5 %	Power Factor	88.5
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Frame	445TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6317
UL	Listed	CSA	Y
CE	Y	IP Code	55
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.0184 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	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Connection Drawing	EE7300U	Outline Drawing	SS557889

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4			3						2	1
B	C	E	2E	2F	2FF	BA	BS	MOUNTING		
26.81	47.45	9.00	18.00	16.50	20.00	7.50	11.42	F1 OR F2		

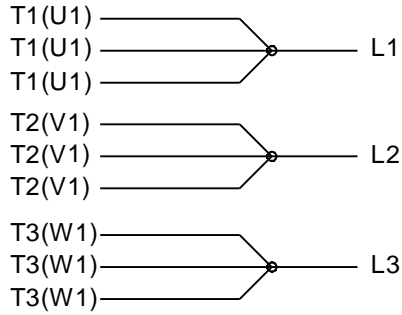


DRAWING REVISION C	REVISION BY BISWA	REV DATE/© DATE 30/11/2020
ECO ECO-0195277	APPROVED BY GNK	DATE 30/11/2020
ECO DESCRIPTION DRAWING UPDATED.		
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PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY BISWA	Regal Beloit America, Inc.
DATE 23/05/2019	
APPROVED BY SBD	
DATE 23/05/2019	
REFERENCE	DESCRIPTION OUTLINE 445/447TS FR NEMA-SD & IEEE841
THIRD ANGLE PROJECTION	MATERIAL
SIZE B	DRAWING NUMBER SS557889
	PROCESS/FINISH
	SHEET 1 OF 1

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:	DRAWN BY DRS	Regal Beloit America, Inc.																					
ECO ECO-0077067	APPROVED BY EWH	DATE 05-05-2015	<table style="font-size: small; border-collapse: collapse;"> <tr> <td><u>DEC.</u></td> <td><u>INCH</u></td> <td><u>mm</u></td> <td><u>ANGLE</u></td> </tr> <tr> <td>.X</td> <td>±0.1</td> <td>[±2.5]</td> <td>±7' 30"</td> </tr> <tr> <td>.XX</td> <td>±0.02</td> <td>[±0.51]</td> <td></td> </tr> <tr> <td>.XXX</td> <td>±0.005</td> <td>[±0.127]</td> <td></td> </tr> <tr> <td>.XXXX</td> <td>±0.0005</td> <td>[±0.0127]</td> <td></td> </tr> </table>	<u>DEC.</u>			<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>	.X	±0.1	[±2.5]	±7' 30"	.XX	±0.02	[±0.51]		.XXX	±0.005	[±0.127]		.XXXX	±0.0005	[±0.0127]		DATE 09-27-1996
<u>DEC.</u>	<u>INCH</u>	<u>mm</u>	<u>ANGLE</u>																							
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.XXX	±0.005	[±0.127]																								
.XXXX	±0.0005	[±0.0127]																								
ECO DESCRIPTION UPDATED TO SOLIDWORKS			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH √ 5.1 mm √	APPROVED BY GK	MATERIAL	PROCESS/FINISH																				
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				THIRD ANGLE PROJECTION																						



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300
 REFERENCE MODEL #: 445TSTFCD6528
 OUTLINE: SS557889
 CAT #: E459A
 WINDING: HA32804009 NONE 5
 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
200	149	1800	1790	445TS	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	460	219	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	96.2	3/4 LD EFF	96.2	1/2 LD EFF	95.4	GTD EFF	ELECT. TYPE
F.L. PF	89.0	3/4 LD PF	86.5	1/2 LD PF	79.5	95.8	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
587 LB-FT	1,450	1,256 LB-FT 214%	1,656 LB-FT 282%	60

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.
80 dBA	89 dBA	88.0 LB-FT²	1300 LB-FT²	25 SEC.	2	2257 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	PREMIUM SEVERE DUTY	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)

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)
0.012	0.007	0.081	0.185	3.834	0.080

* N O T E S *	If Inverter equals NONE, contact factory for further information	
	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	NONE PPR

PREPARED BY: _____ DATE: 5/13/2020	BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE HZ:
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FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.

Data Sheet

Date: 5/6/2020
 Customer: _____
 Attention: _____
 Submitted by: _____



445TSTFCD6528

Submittal

Data @ 460 V

Motor Load Data

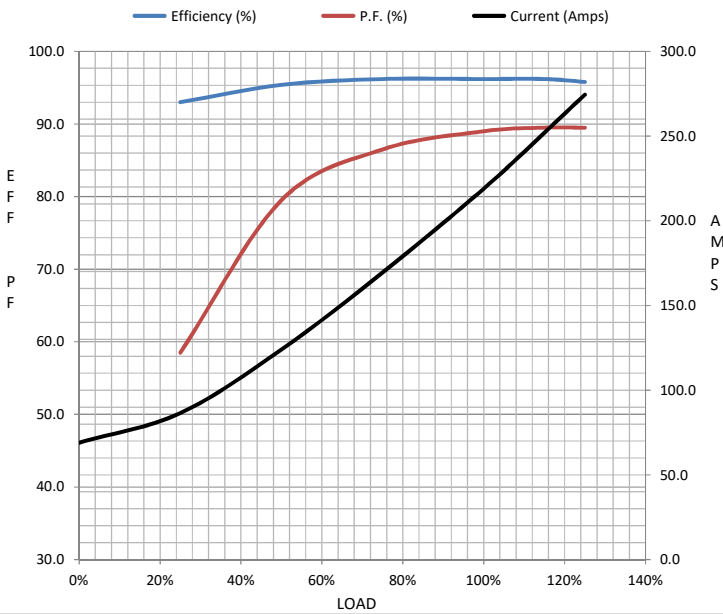
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	69.0	86.5	124	170	219	252	275	1,450
Torque (ft-lb)	0.00	146	293	440	587	676	735	1,256
RPM	1800	1798	1795	1792	1790	1,788	1788	0
Efficiency (%)		93.0	95.4	96.2	96.2	96.2	95.8	
P.F. (%)	4.5	58.5	79.5	86.5	89.0	89.5	89.5	38.0

Motor Speed Data

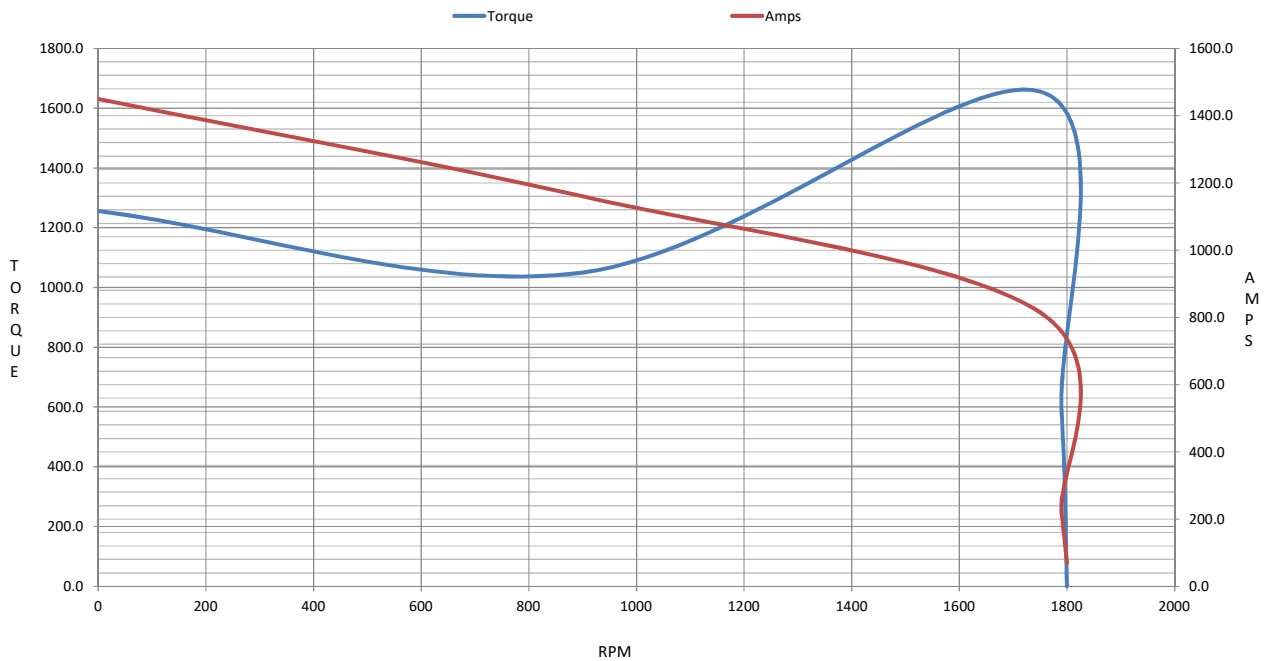
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1750	1790	1800
Current (Amps)	1,450	1,160	815	219	69.0
Torque (ft-lb)	1,256	1,050	1,656	587	0.00

Information Block

HP	200.0			
Sync. RPM	1800			
Frame	445			
Enclosure	TEFC			
Construction	TFC			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	60 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	88.0 Lb-Ft ²			
Ref Wdg	HA32804009 NONE			
Sound Pressure @ 1M	80 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	SS557889			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0120	0.0070	0.0810	0.1850	3.8340



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 : 445TSTFCD6528

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

Catalog No : E459A

Rework No : N/A

Directives :

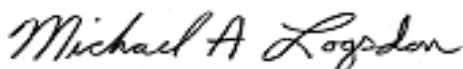
Low Voltage Directive 2014/35/EU

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