

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 182TTFCD6540

Catalog No: E030

XRI®-SD Severe Duty Motor, 3 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 182TC Frame, TEFC



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RegalRexnord

### Nameplate Specifications

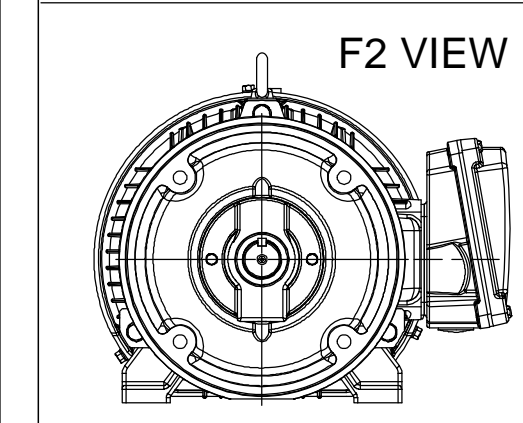
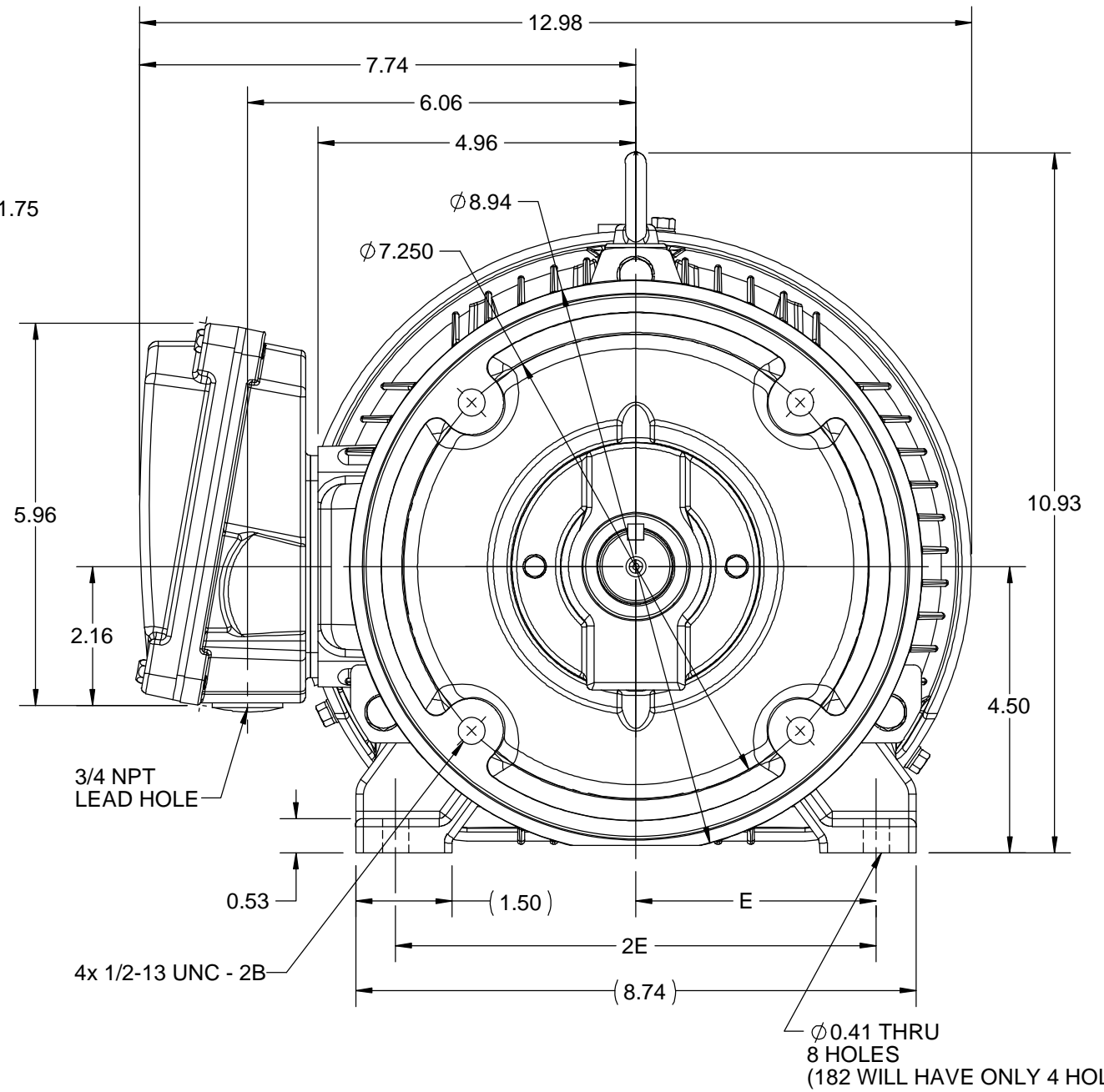
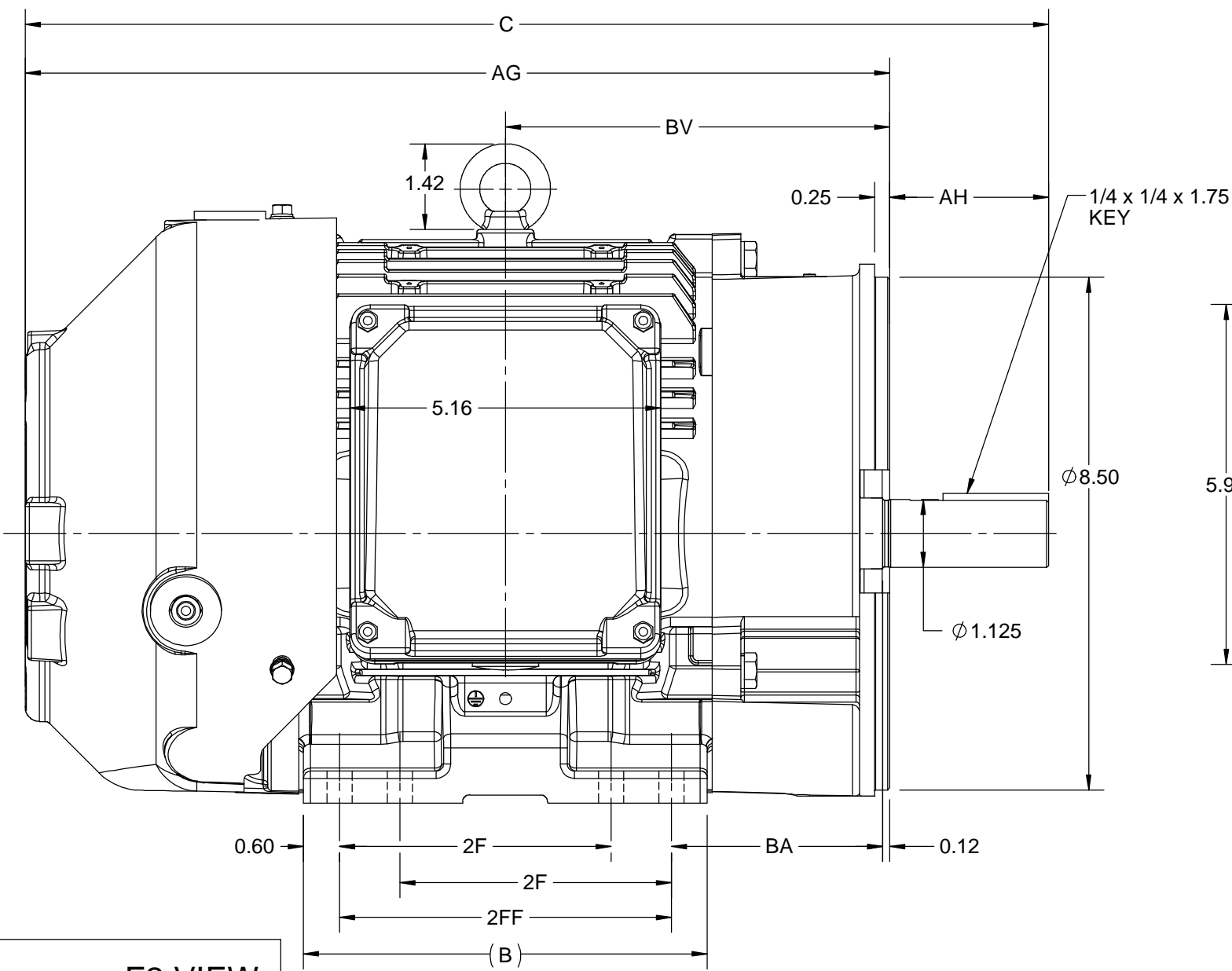
Output HP	<b>3 Hp</b>	Output KW	<b>2.2 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>8.0/4.0 A</b>	Speed	<b>1762 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>89.5 %</b>	Power Factor	<b>78</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>K</b>
Frame	<b>182TC</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6206</b>	Opp Drive End Bearing Size	<b>6205</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>55</b>
Hazardous Location	<b>DIVISION 2 T2B</b>	Number of Speeds	<b>1</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>4.15 Ohms</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>T</b>	Shaft Diameter	<b>1.125 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>	Inverter Load	<b>CONSTANT 10:1/VARIABLE 10:1</b>
Outline Drawing	<b>SS600218-100</b>	Connection Drawing	<b>EE7308</b>

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DASH NO.	4			3				2			1	
	B	C	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	5.67	15.95	3.75	7.50	---	4.50	13.32	2.62	3.50	5.87	F1 OR F2	182TC
200	6.69	16.95			4.50	5.50	14.32			6.37		182/184TC



DRAWING REVISION B	REVISION BY BISWA	REV DATE/© DATE 07/09/2020
ECO ECO-0192056	APPROVED BY GNK	DATE 07/09/2020
ECO DESCRIPTION <b>UPDATED DRAWING.</b>		
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DRAWN BY BISWA	<b>REGAL</b> ® Regal Beloit America, Inc.
DATE 14/03/2019	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 182/184TC FR-NEMA-SD & IEEE841
DATE 14/03/2019	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER <b>SS600218</b>
	SHEET 1 OF 1

EE7308

THREE PHASE  
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G  
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD  
CONNECTION

L1 — WHITE  
L2 — RED  
L3 — BLACK

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					CHK ML 11/21/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1			APPD SAS 04/24/2003				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		TITLE CONNECTION DIAGRAM	SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			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	CAD FILE ee7308	SIZE A	DRAWING NO. EE7308	PAGE OF 5	REV. 5
							DIST WP					



Regal Beloit America, Inc.



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_  
ORDER #: \_\_\_\_\_  
CONN. DIAGRAM: EE7308  
OUTLINE: SS600218-100  
WINDING: HA31124021 NONE 3  
SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
REFERENCE MODEL #: 182TTFCD6540  
CAT #: E030  
CUSTOMER PART #: \_\_\_\_\_  
MOUNTING: F1/F2 CAPABLE  
FAN: 504205B

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
3	2.2	1800	1762	182TC	TEFC	TFB	K	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	8/4	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	89.5	3/4 LD EFF	88.5	1/2 LD EFF	86.5	GTD EFF	ELECT. TYPE
F.L. PF	78.0	3/4 LD PF	70.0	1/2 LD PF	57.0	88.5	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
9.0 LB-FT	32.0	20.0 LB-FT	222%	29.0 LB-FT 322%

SOUND PRESSURE	SOUND	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR
62 dBA	71 dBA	0.30 LB-FT <sup>2</sup>	25 LB-FT <sup>2</sup>	32 SEC.	2	153 LB.	

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	YES	NONE	BLUE - RAL 5003 (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6206	6205						

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
2.365	1.419	5.392	5.392	118.25	0.080	ODE

* N O T E S *		<b>INVERTER TORQUE:</b> CONSTANT 10:1/VARIABLE 10:1 <b>INV. HP SPEED RANGE:</b> NONE  <b>ENCODER:</b> NONE NONE NONE <span style="float: right;">NONE PPR</span>

<b>PREPARED BY:</b> _____ <b>DATE:</b> 7/26/2022	<b>BRAKE:</b> NONE NONE <span style="float: right;">NONE</span> <b>FT-LB:</b> NA <b>VOLTAGE:</b> NONE <span style="float: right;">HZ:</span>
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FORM: 3531 REV\_4 2/27/06

**Data Sheet**

Date: 7/28/2022  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_



182TTFC6540  
 112014.002 FAN  
**Submittal**  
 Data @ **460 V**

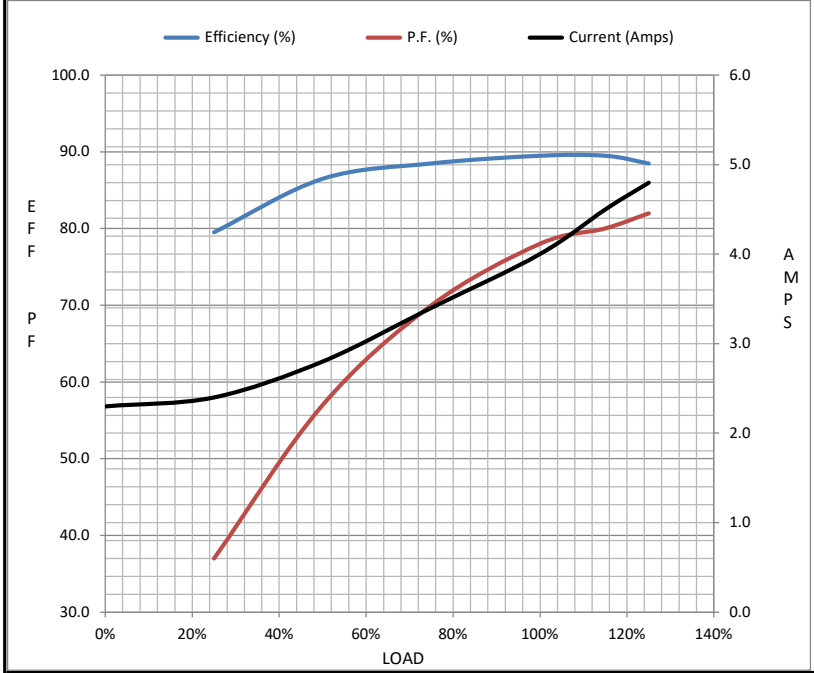
**Motor Load Data**

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	2.30	2.40	2.80	3.4	4.0	4.5	4.8	32.0
Torque (ft-lb)	0.00	2.20	4.4	6.7	9.0	10.3	11.2	20.0
RPM	1800	1790	1782	1772	1762	1,758	1755	0
Efficiency (%)		79.5	86.5	88.5	89.5	89.5	88.5	
P.F. (%)	7.0	37.0	57.0	70.0	78.0	80.0	82.0	48.0

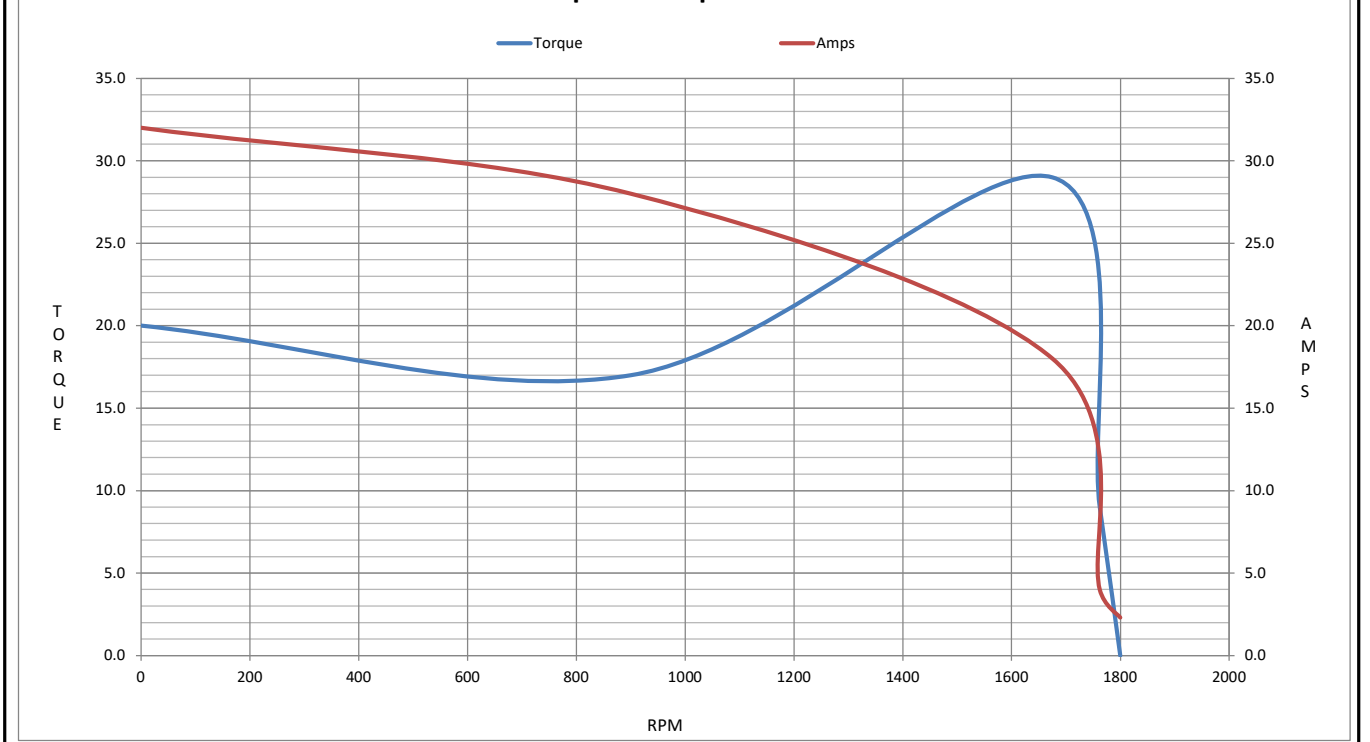
**Motor Speed Data**

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1762	1800
Current (Amps)	32.0	28.0	18.0	4.0	2.30
Torque (ft-lb)	20.0	17.0	29.0	9.0	0.00

Information Block				
HP	3.0			
Sync. RPM	1800			
Frame	182			
Enclosure	TEFC			
Construction	TFB			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.30 Lb-Ft <sup>2</sup>			
Ref Wdg	HA31124021 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	ONSTANT 10:1/VARIABLE 10:1			
Outline Dwg	SS600218-100			
Conn. Diag	EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
2.3650	1.4190	5.3920	5.3920	118.2500



**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 : 182TTFCD6540

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

Catalog No : E030

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**