

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 184TTFC6810

Catalog No: E472A

XRI®-SD Severe Duty Motor, 5 HP, 3 Ph, 60 Hz, 230/460 V, 3600 RPM, 184T Frame, TEFC



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Nameplate Specifications

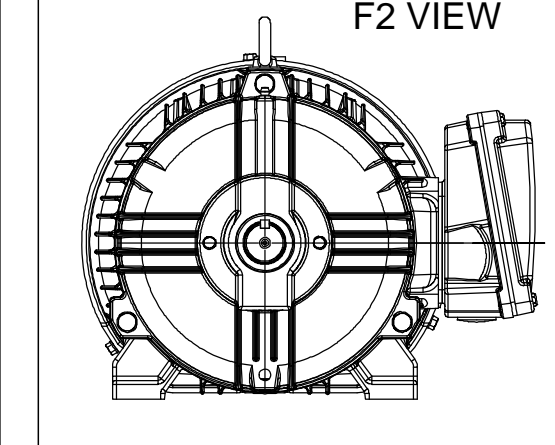
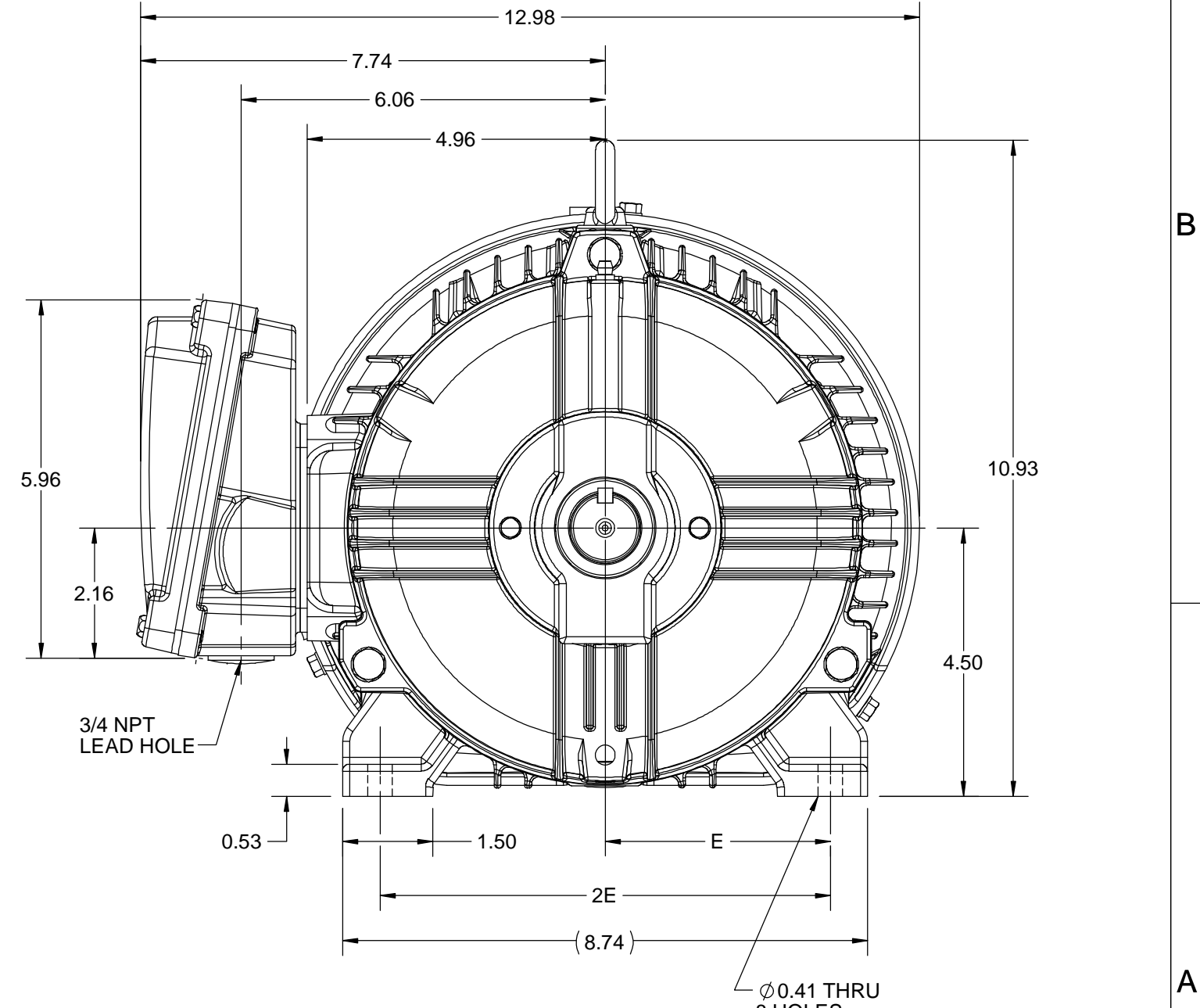
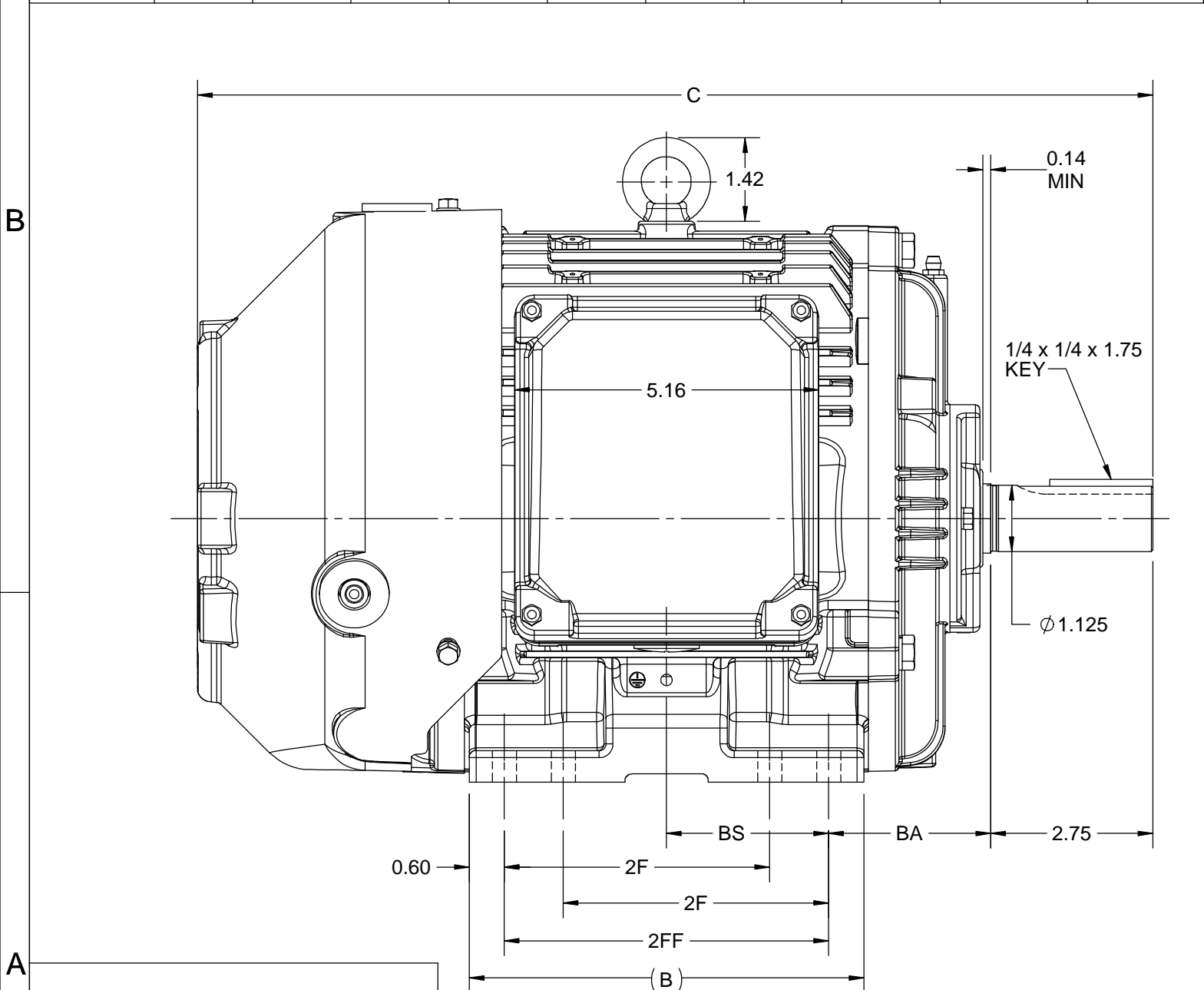
Output HP	5 Hp	Output KW	3.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	12.0/6.0 A	Speed	3510 rpm
Service Factor	1.15	Phase	3
Efficiency	88.5 %	Power Factor	88
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	J
Frame	184T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6205
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	2	Rotation	Reversible
Resistance Main	3.55 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	1.125 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 20:1/VARIABLE 10:1
Outline Drawing	SS600210-200	Connection Drawing	EE7308

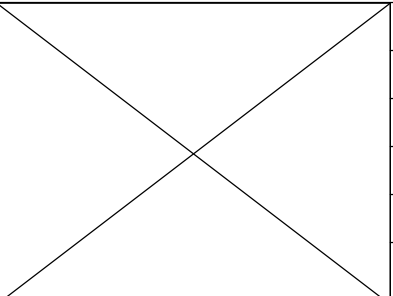
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DASH NO.	4			3				2		1
	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	5.67	15.20	3.75	7.50	-	4.50	2.75	2.35	F1 OR F2	182T
200	6.69	16.20			4.50	5.50		2.75	F1 OR F2	182/184T



4 3 2 1

DRAWING REVISION C	REVISION BY BISWA	DATE 06/10/2020
ECO ECO-0194180	APPROVED BY GNK	DATE 06/10/2020
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DRAWN BY BISWA	REGAL ™ Regal Beloit America, Inc.
DATE 24/12/2018	
APPROVED BY SBD	DESCRIPTION OUTLINE 182/184T FR-NEMA-SD & IEEE841
DATE 24/12/2018	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS600210
	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.



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7308
 REFERENCE MODEL #: 184TTFCD6810
 OUTLINE: SS600210-184T CAT #: E472A
 WINDING: HE31122016 NONE 3 MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
5	3.7	3600	3510	184T	TEFC	TFC	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV.(Ft)
3	60	230/460	12/6	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	88.5	3/4 LD EFF	88.5	1/2 LD EFF	87.5	GTD EFF	ELECT. TYPE
F.L. PF	88.0	3/4 LD PF	83.0	1/2 LD PF	73.0	87.5	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
7.5 LB-FT	42.0	16.2 LB-FT 216%	23.0 LB-FT 307%	65

SOUND PRESSURE @	SOUND	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.
70 dBA	79 dBA	0.23 LB-FT ²	5.5 LB-FT ²	15 SEC.	2	284 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	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON
BALL 6206	BALL 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
2.098	1.021	3.969	1.588	112.379	0.080	ODE

* N O T E S *	If Inverter equals NONE, contact factory for further information INVERTER TORQUE: CONSTANT 20:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE	
	ENCODER: NONE NONE NONE NONE PPR	
	BRAKE: NONE NONE NONE	
	FT-LB: NA VOLTAGE: NONE	

PREPARED BY: ANUSHA M
 DATE: 3/18/2020

FORM: 3531 REV_4 2/27/06
 ** Subject to change without notice.

Data Sheet

Date: 3/10/2020
 Customer: _____
 Attention: _____
 Submitted by: ANUSHA M

184TTFC6810



Submittal

Data @ 460 V

Motor Load Data

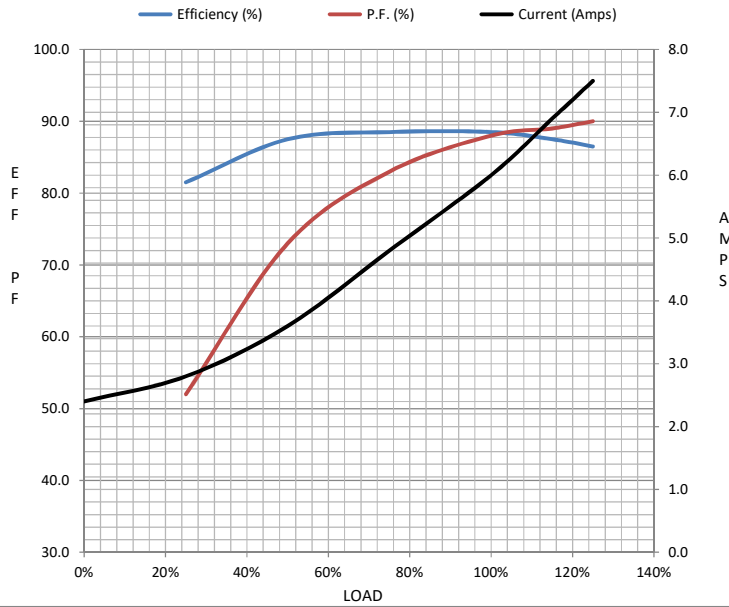
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	2.40	2.80	3.6	4.8	6.0	6.9	7.5	42.0
Torque (ft-lb)	0.00	1.85	3.7	5.6	7.5	8.6	9.4	16.2
RPM	3600	3580	3555	3535	3510	3,500	3490	0
Efficiency (%)		81.5	87.5	88.5	88.5	87.5	86.5	
P.F. (%)	9.0	52.0	73.0	83.0	88.0	89.0	90.0	50.0

Motor Speed Data

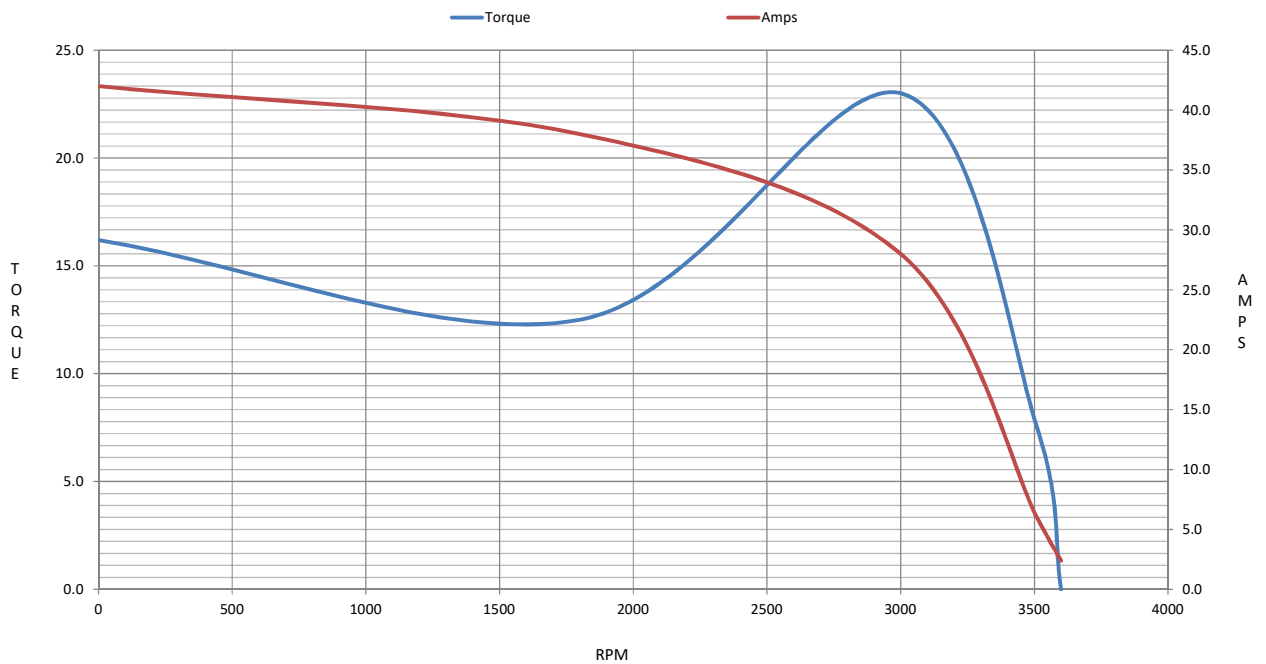
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3000	3510	3600
Current (Amps)	42.0	38.0	28.0	6.0	2.40
Torque (ft-lb)	16.2	12.5	23.0	7.5	0.00

Information Block

HP	5.0			
Sync. RPM	3600			
Frame	184			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	50 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.23 Lb-Ft ²			
Ref Wdg	HE31122016 NONE			
Sound Pressure @ 1M	70 dBA			
VFD Rating	CONSTANT 20:1/VARIABLE 10:1			
Outline Dwg	SS600210-184T			
Conn. Diag	EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
2.0980	1.0210	3.9690	1.5880	112.3790



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 : 184TTFCD6810

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

Catalog No : E472A

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