

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 213TTFBD6038  
Catalog No: GT3516A  
7 1/2, 1800, TEFC, 213JP, 3/60/575  
JP



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.  
©2018 Regal Beloit Corporation, All Rights Reserved. MC017097E

**REGAL**<sup>®</sup>



### Nameplate Specifications

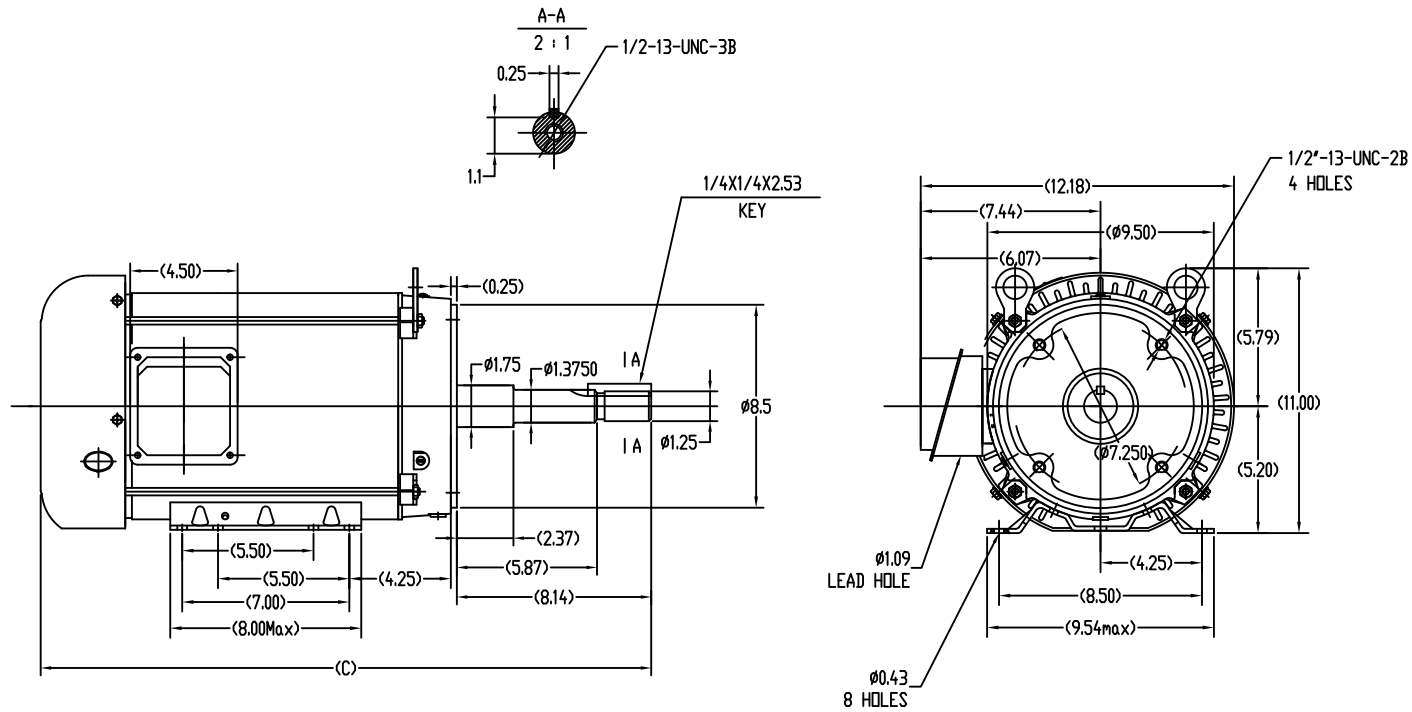
Output HP	<b>7.50 Hp</b>	Output KW	<b>5.6 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>7.6 A</b>	Speed	<b>1768 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>93.3 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>H</b>	Frame	<b>213JP</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6309</b>
Opp Drive End Bearing Size	<b>6206</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>43</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>
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>Rolled Steel</b>	Shaft Type	<b>JP</b>
Frame Length	<b>9.65 in</b>	Shaft Diameter	<b>1.25 in</b>
Shaft Extension	<b>8.39 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Outline Drawing	<b>SS620827</b>	Connection Diagram	<b>EE7300</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 07/02/2018

SS620827



213TC	24.01
215TC	25.78
FRAME	C

TOLERANCES UNLESS SPECIFIED		DRAWN ZYH 4/13/2017	
DEC.	INCHES	CHK	
.X	±.1	APPD	
.XX	±.03	TITLE	OUTLINE
.XXX	±.005	REF	SCALE 1=4
.XXXX	±.0005	FIN	WUXI
NO.	REVISION	BY & DATE	PREV
1	UPDATED KEY DETAILS	XIAOWEI ZHU/29/05/2017	YZ
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.		CHK	ANG ±1/2
		FIN	FINISH
		APP	CAD FILE
		APP	SS620827
		SIZE	DRAWING NO.
		B	SS620827
		REV.	B

**THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.**

**TERMINAL BLOCK WHEN SPECIFIED**



**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**




A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**

- L1 \_\_\_\_\_ WHITE
- L2 \_\_\_\_\_ RED
- L3 \_\_\_\_\_ BLACK

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>		
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.                  PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF                  REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY                  INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED,                  BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED                  TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT                  AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL                  BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN                  RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>		



DRAWN BY DA	 Regal Beloit America, Inc.
DATE 03-26-1993	
APPROVED BY TB	DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR
DATE 03-26-1993	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE <b>A</b>
	DRAWING NUMBER <b>EE7300</b>
	SHEET <b>1 OF 1</b>



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

**CERTIFICATION DATA SHEET**

**CUSTOMER:** CUSTOMER PO #:  
**ORDER #:** MODEL #: 213TTFBD6038 AA  
**CONN. DIAGRAM:** EE7300 CUSTOMER PART #:  
**OUTLINE:** SS620827 MOUNTING: F1/F2 CAPABLE  
**WINDING #:** HE31324012 3

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN	
7 1/2	5.60	1800	1768	213JP	TEFC	H	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	575	7.6	LINE OR INVERTER	CONTINUOUS	F7	1.15	40

<b>FULL LOAD EFF:</b>	93.3	<b>3/4 LOAD EFF:</b>	93	<b>1/2 LOAD EFF:</b>	90	<b>GTD. EFF</b>		<b>ELEC. TYPE</b>
<b>FULL LOAD PF:</b>	79.3	<b>3/4 LOAD PF:</b>	73.4	<b>1/2 LOAD PF:</b>	63.8	91		SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.3 LB-FT	49.6	45 LB-FT	202 %	59 LB-FT
				265 %

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 DBA	72 DBA	0.95 LB-FT^2	75 LB-FT^2	25 SEC.	2	175 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE BALL	ODE BALL	POLYREX EM	JP	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
6309	6206						

THERMO-PROTECTORS				THERMISTORS			SPACE HEATERS	
THERMOSTATS	PROTECTORS	WDG RTDS	BRG RTDS	NONE	FALSE	NONE	NONE	VOLTS
NONE	NOT	NONE	NONE	NONE	FALSE	NONE	NONE	

<b>* INVERTER</b>	TORQUE: CONSTANT 20:1/VARIABLE 20:1
<b>N INV. HP SPEED RANGE:</b>	NONE
<b>O ENCODER:</b>	NONE
<b>T NONE</b>	NONE
<b>E NONE</b>	PPR
<b>S BRAKE:</b>	NONE
<b>* NONE</b>	P/N NONE
	NONE
	NONE
	FT-LB
	NONE
	V
	NONE
	Hz

**PREPARED BY:** Anusha Muthyala  
**DATE:** 05/04/2018 12:20:43 AM  
**FORM** 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

**MARATHON ELECTRIC CORPORATION**

TYPICAL PERFORMANCE CURVE for AC MOTOR

Customer

Curve at

575

Volts

HP 7.50

PHASE 3

Model No 213TTFBD6038

60

HZ

VOLTS 575

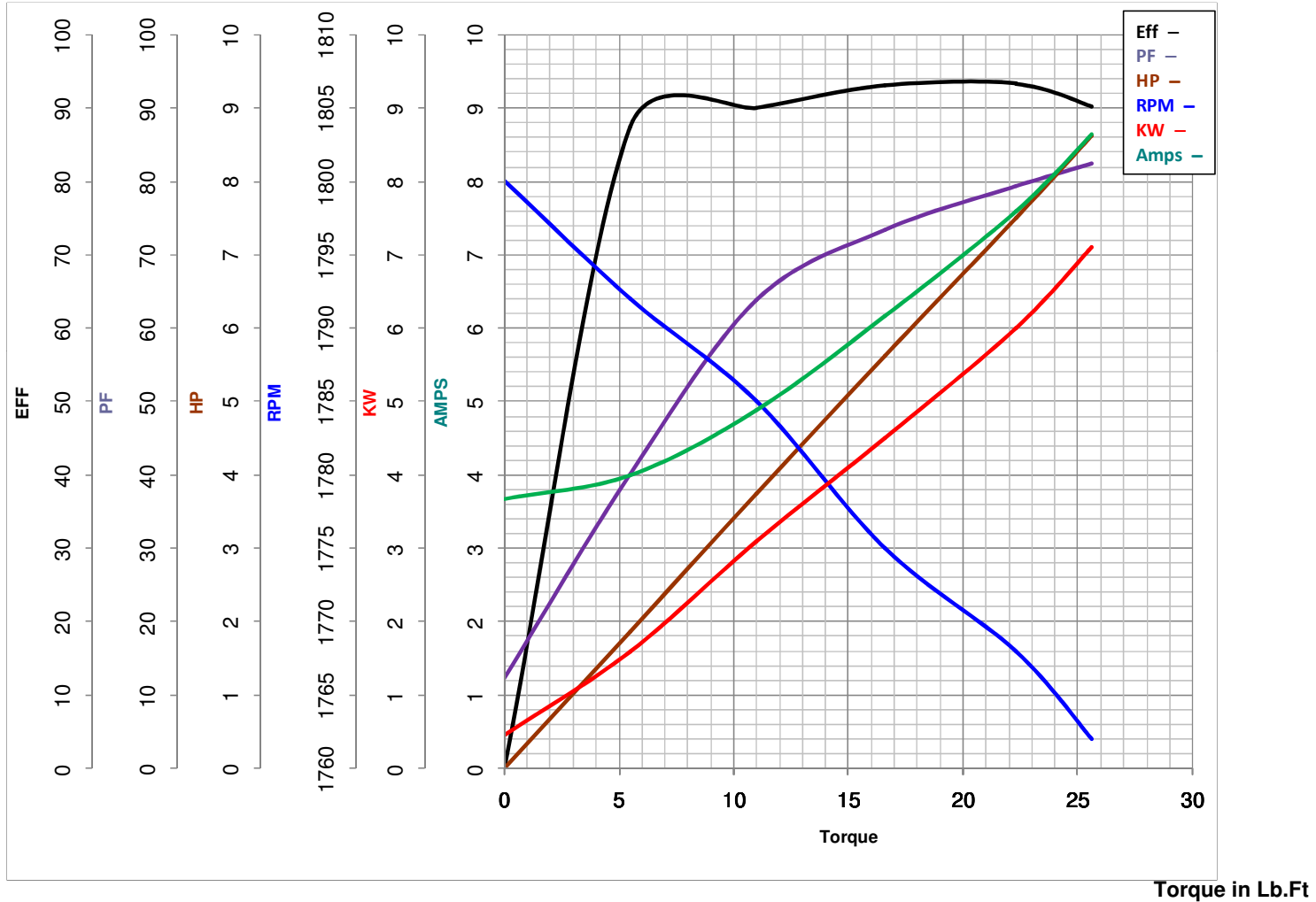
7.5

HP

Catalog No GT3516A

HZ 60

RPM 1768



Torque in Lb.Ft

FL TORQUE 22.3 Lb.Ft  
 BD TORQUE 59.0 Lb.Ft  
 LR TORQUE 45 Lb.Ft

FL AMPS 7.6  
 PU TORQUE 38.0 Lb.Ft  
 LR AMPS 49.6

WINDING HE31324012-3 Prepared By ANUSHA M

Date 5/4/2018