

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 213TTFWD16012

Catalog No: C205B

XRI® General Purpose General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
3600 & 3000 RPM, 213TC Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

**RegalRexnord**

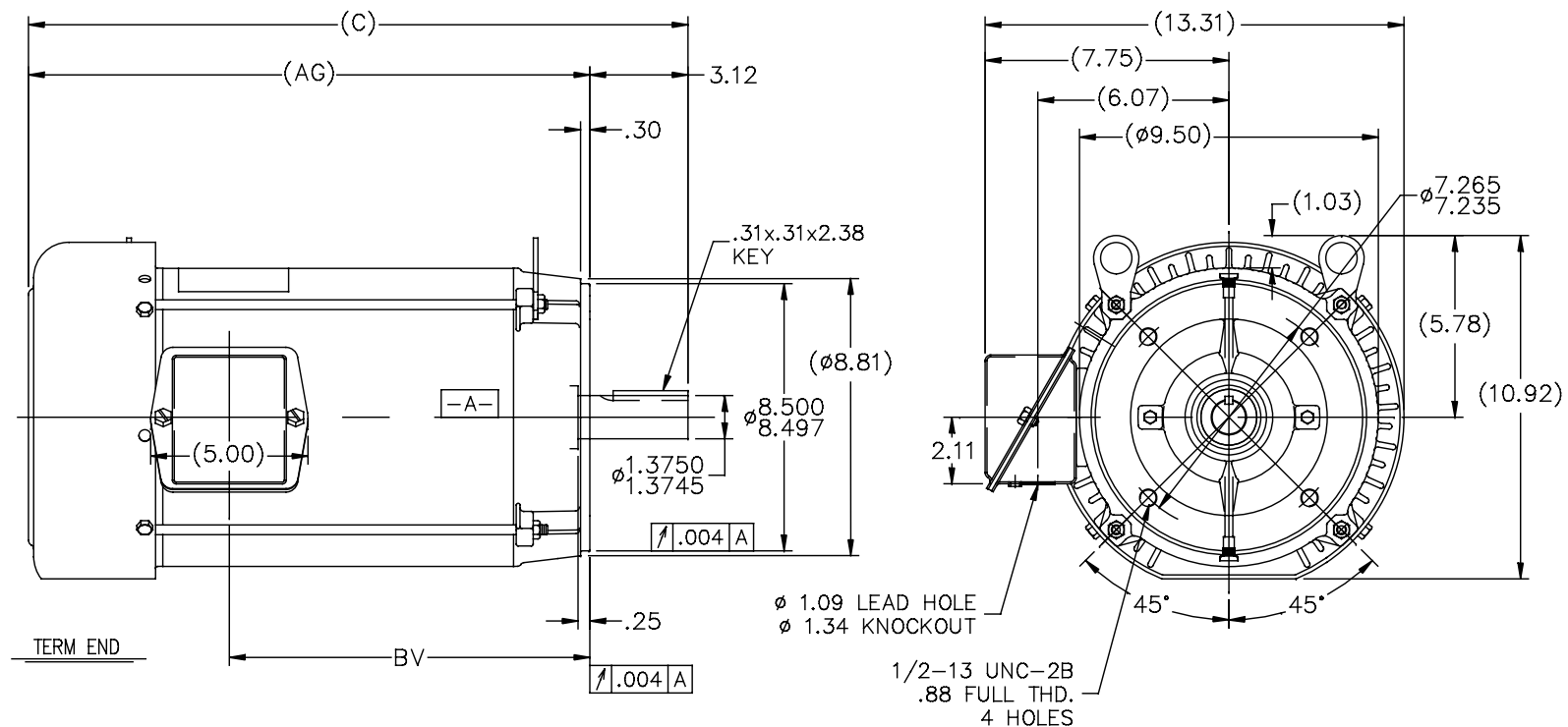
### Nameplate Specifications

Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	230/460 & 190/380 V
Speed	3525 & 2945 rpm	Service Factor	1.15 & 1.15
Frame	213TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	89.5 & 88.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	18.6/9.3 & 16/8 A	Power Factor	84.6
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6206
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

### Technical Specifications

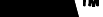
Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.1725 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	19.46 in
Frame Length	9.65 in	Shaft Diameter	1.375 in
Shaft Extension	3.12 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	EE7308	Outline Drawing	SS86634-965

SS86634



DASH	FR.	C	AG	BV	MOUNTING
965	213T	19.46	16.34	9.96	
1115	213/15T	20.96	17.84	11.46	
1240	213/15T	22.21	19.09	12.71	

NOTES:  
1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.  
2. BOX CAN BE MOUNTED IN 90° STEPS.

6	UPDATED TO REGAL LOGO	SAJ 07/21/15	AJA	TOLERANCES UNLESS SPECIFIED		 <b>Regal Beloit America, Inc.</b>	DRAWN DRS 10-02-1996				
5	REDRAWN IN AUTOCAD	TAT 06-29-2004	ML	DEC.	INCHES		CHK ML 10-03-1996				
4	UPDATED C' BOX GEOMETRY CN 28425	DRS 01-31-2000		.X	±.1		APPD DN 10-04-1996				
3	REMOVED GROUND SCREW FROM FRAME CN 24453	DRS 10-01-1997		.XX	±.03		SCALE 1=5				
2	REMOVED NOTE: BOX CAN BE MOUNTED ON OPPOSITE SIDE OF MOTOR CN 23925-459	MJD 09-02-1997		.XXX	±.005		REF				
NO.	REVISION	BY & DATE	CHK	ANG	±7°30"	FINISH	FMF				
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 ss86634			SIZE	DRAWING NO.	PAGE	OF	REV.
			DIST	LB				A	SS86634		6



				TOLERANCES UNLESS SPECIFIED		 <b>Regal</b> Beloit America, Inc.	DRAWN RM	11/20/1990
5	CHG TO REGAL LOGO	SL 09/10/2015	AB	DEC.	INCHES		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		SCALE	1=1
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005	TITLE CONNECTION DIAGRAM 3ø – DUAL VOLTAGE MOTOR		REF
1	REDRAWN	RM 11/20/1990		.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		CAD FILE ee7308		SIZE	DRAWING NO. PAGE OF REV.
			DIST WP				A	EE7308

## CERTIFICATION DATA SHEET

Model#: 213TTFWD16012 AA  
 CONN. DIAGRAM: EE7308  
 OUTLINE: SS86634-965

WINDING#: K2132124 NONE 2  
 ASSEMBLY: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.60&3.70	3600	3525&2945	213TC	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	18.6/9.3&16/8	ACROSS THE LINE	CONTINUOU S	F4	1.15/1.15	40	3300

FULL LOAD EFF: 89.5&88.5	3/4 LOAD EFF: 88.9	1/2 LOAD EFF: 88.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 84.6&80.2	3/4 LOAD PF: 79.7	1/2 LOAD PF: 68.4	89.5	SQ CAGE IND RUN	8.2 / 4.1

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
11.2 LB-FT	126 / 63	19.3 LB-FT 172	33 LB-FT 295	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	0.55 LB-FT^2	12 LB-FT^2	20 SEC.	2	165 LBS.

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

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL
6309	6206						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

* N O T E S *	INVERTER TORQUE: NONE
	INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE NONE NONE PPR
	BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

DATE: 06/22/2017 05:59:03 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

## Data Sheet

Date: 29-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



213TTFWD16012

Submittal

Data @ 460 V

## Motor Load Data

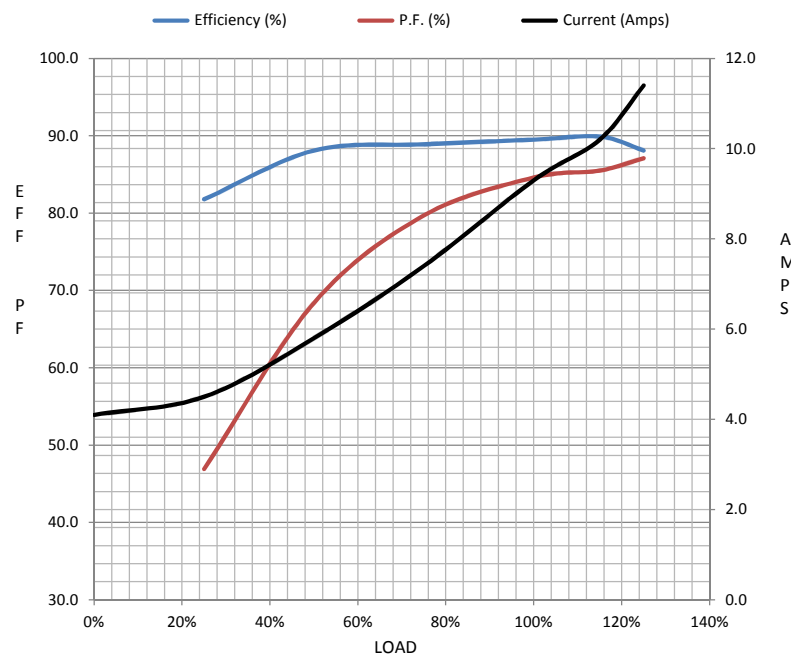
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.1	4.5	5.8	7.4	9.3	10.2	11.4	63.0	
Torque (ft-lb)	0.00	2.70	5.5	8.3	11.2	12.5	14.0	19.3	
RPM	3600	3585	3565	3545	3525	3,520	3505	0	
Efficiency (%)		81.8	88.1	88.9	89.5	89.9	88.1		
P.F. (%)	8.0	46.9	68.4	79.7	84.6	85.5	87.1	0.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	552	3130	3525	3600
Current (Amps)	63.0	60.0	38.0	9.3	4.1
Torque (ft-lb)	19.3	19.0	33.0	11.2	0.00

## Information Block

HP	7.5			
Sync. RPM	3600			
Frame	213			
Enclosure	TEFC			
Construction	TFW			
Voltage	230/460#190/38(V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.55 Lb-Ft²			
Ref Wdg	K2132124 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	NONE			
Outline Dwg	SS86634-965			
Conn. Diag	EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.0550	0.5750	2.5440	1.4140	56.7000



## Speed -Torque Curve

