

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 213TTFWD16035

Catalog No: C390B

XRI® General Purpose General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V,  
1800 & 1500 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	208-230/460 & 190/380 V
Speed	1765 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	213TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	91.7 & 90.2 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	20.8-19.6/9.8 & 16.6/8.3 A	Power Factor	78.3
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		

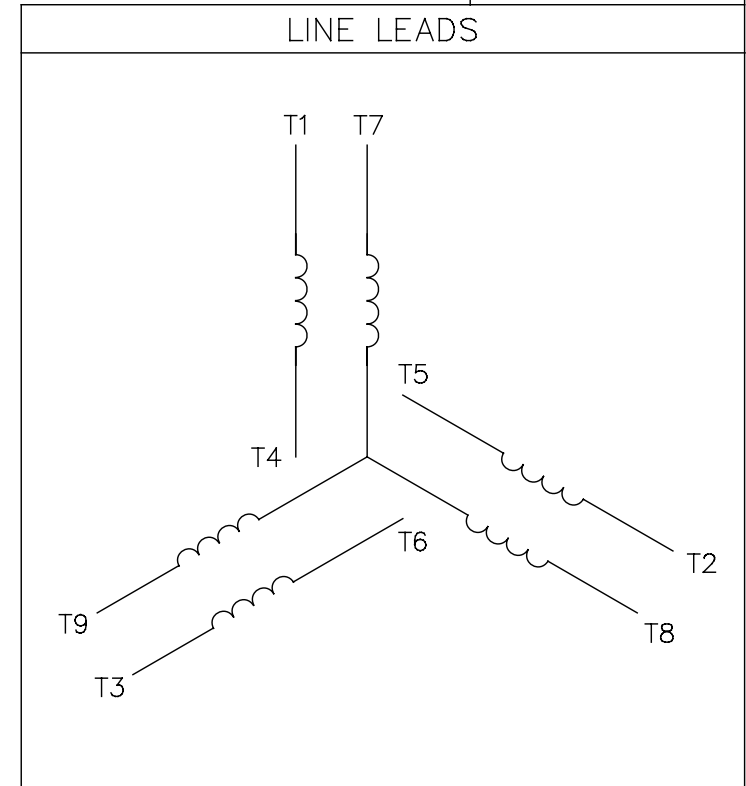
## Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	1.18 Ohms	Mounting	Bolt-on Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	19.47 in
Frame Length	9.65 in	Shaft Diameter	1.375 in
Shaft Extension	3.13 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	005010.01	Outline Drawing	SS88652-965




005010-01

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



VOLTAGE	L1	L2	L3	JOIN & INSULATE
HIGH	T1	T2	T3	(T4,T7) (T5,T8) (T6,T9)
LOW	T1,T7	T2,T8	T3,T9	T4,T5,T6

				TOLERANCES UNLESS SPECIFIED		 <b>Regal Beloit America, Inc.</b>			DRAWN RDW 04/12/02		
				DEC.	INCHES				CHK		
				.X	±.1				APPD		
				.XX	±.01				SCALE 1=1		
				.XXX	±.005	TITLE EXTERNAL WIRING DIAGRAM 3 PHASE W/O PROTECTOR			REF FIG.2-51		
A	UPDATED TO REGAL LOGO	SAJ 06/26/15	AJY	.XXXX	±.0005				MAT'L. DECAL - 004014		
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	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 04/12/02		CAD FILE 00501001		SIZE A	DRAWING NO. 005010-01		REV. A
				DIST BRF-NLV							



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

DATA VOLTS: 460

### CERTIFICATION DATA SHEET

CUSTOMER: \_\_\_\_\_ CUSTOMER P.O. #: \_\_\_\_\_  
ORDER #: \_\_\_\_\_ REFERENCE MODEL #: 213TTFWD16035  
CONN. DIAGRAM: 005010.01 CAT #: C390B  
OUTLINE: SS88652-965 CUSTOMER PART #: \_\_\_\_\_  
WINDING: K2134279 R1 2 MOUNTING: F1/F2 CAPABLE  
SPEED: \_\_\_\_\_

### TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	1800	1765	213TC	TEFC	TFW	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	208-230/460#190/380	20.8-19.6/9.8&16.6/8.3	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	91.7	3/4 LD EFF	91.6	1/2 LD EFF	90.6	GTD EFF	91.0	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	78.3	3/4 LD PF	72.6	1/2 LD PF	60.4				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
22.3 LB-FT	67.5	52.9 LB-FT 237%	75.0 LB-FT 336%	55	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
62 dBA	71 dBA	0.85 LB-FT²	62 LB-FT²	15 SEC.	2	140 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	BOLT-ON	HORIZONTAL	NO	NONE	YES	NONE	BLUE (ENAMEL)

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

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
0.76	1.108	2.458	3.173	50.414	0.150	ODE

* N O T E S *		INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE	NONE PPR
PREPARED BY: FAREEDA DUDEKULA DATE: 9/11/2018	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE	NONE H2:
FORM: 3531 REV_4 2/27/06	UL: V-INS, CONST UL REC	

## Data Sheet

Date: 12/3/2018

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



213TTFWD16035

Submittal

Data @ 460 V

## Motor Load Data

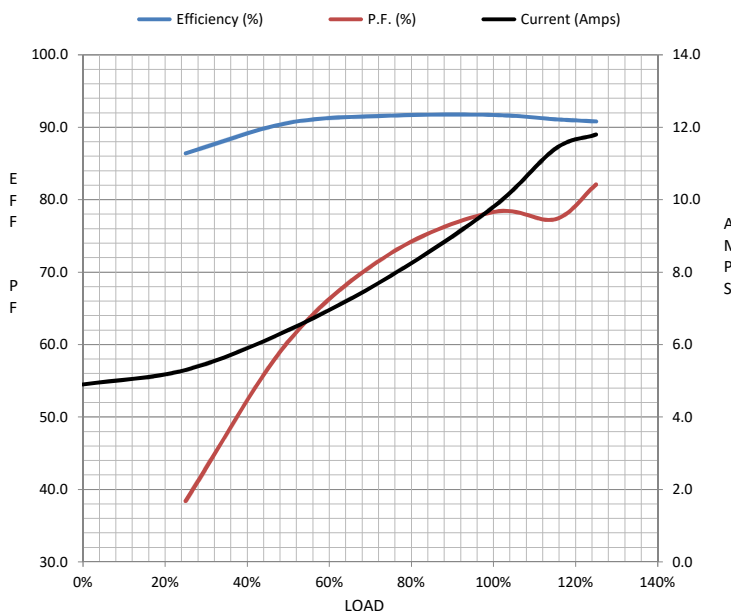
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.9	5.3	6.4	7.9	9.8	11.4	11.8	67.5	
Torque (ft-lb)	0.00	5.5	11.0	16.6	22.3	25.5	28.0	52.9	
RPM	1800	1792	1785	1775	1765	1,765	1762	0	
Efficiency (%)		86.4	90.6	91.6	91.7	91.1	90.8		
P.F. (%)	4.9	38.4	60.4	72.6	78.3	77.3	82.1	42.6	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1765	1800
Current (Amps)	67.5	57.0	41.0	9.8	4.9
Torque (ft-lb)	52.9	49.0	75.0	22.3	0.00

## Information Block

HP	7.5			
Sync. RPM	1800			
Frame	213			
Enclosure	TEFC			
Construction	TFR			
Voltage	208-230/460#190/380 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	0.85 Lb-Ft²			
Ref Wdg	K2134279 R1			
Sound Pressure @ 1M	62 dBA			
VFD Rating	NONE			
Outline Dwg	SS88652-965			
Conn. Diag	005010.01			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7600	1.1080	2.4580	3.1730	50.4140



## Speed -Torque Curve

