

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 213TTFW16040

Catalog No: E2141

7.50 HP General Purpose Motor, 3 phase, 1800 RPM, 575 V, 213T Frame, TEFC  
General Purpose Motors



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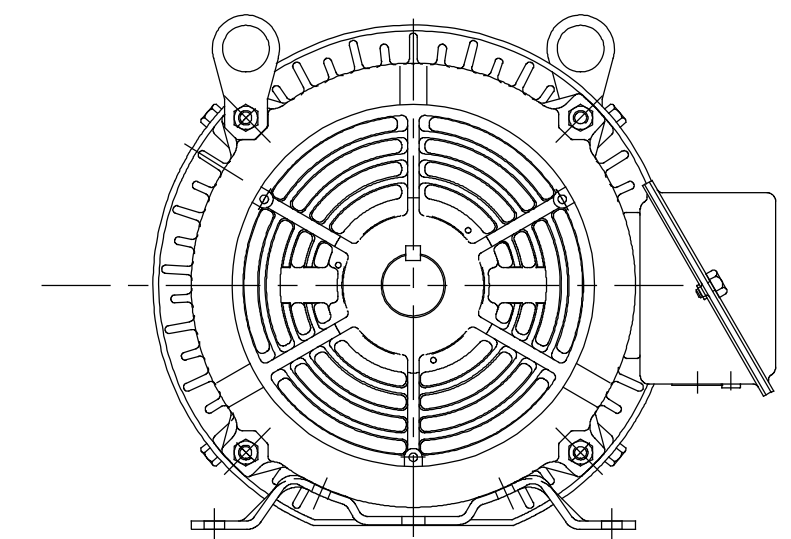
**RegalRexnord**

### Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	575 V
Current	7.9 A	Speed	1765 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	78.3
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Frame	213T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6307	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 Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	1.18 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	18.73 in
Frame Length	9.65 in	Shaft Diameter	1.375 in
Shaft Extension	3.47 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	SS88975-965	Connection Drawing	A-EE7300



F2-VIEW

NOTES:

1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.
3. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. (EXCEPT AS NOTED.)

				TOLERANCES UNLESS SPECIFIED		 <b>Regal Beloit America, Inc.</b>			DRAWN ERH 12-08-2003		
				DEC.	INCHES				CHK ML 12-08-2003		
4	UPDTED F2 ONLY FOR 1115 CONFIG PER ECO-0168214	VMR 06/03/2019	RG	.X	±.1				APPD DR 12-09-2003		
3	NOTE UPDATED	SAJ 08/24/15	SR	.XX	±.03	TITLE OUTLINE 210T FR.-BB-TS-TEFC-R/S			SCALE 1=4		
2	TITLE BLOCK LOGO CHANGE PER ECO-0078542	MDV 06/09/2015		.XXX	±.005				REF		
1	REMOVE HOLE AND BOLT SIDE VIEW CN24453	RWR 01/30/2004	ML	.XXXX	±.0005	MAT'L.			FMF MU 49283		
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 12-09-2003		CAD FILE ss88975		SIZE A	DRAWING NO. PAGE OF		REV. 4
				DIST LB					SS88975		

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

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.

TERMINAL BLOCK WHEN SPECIFIED



IF MOTOR HAS  
6 LEADS



A-9806 DECAL

OPTIONAL CORD  
CONNECTION



VIEW OF TERMINAL END

DRAWING REVISION AB	REVISION BY JJB	DATE 06-27-2017
ECO ECO-0125361	APPROVED BY TB	DATE 06-27-2017
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION



Regal Beloit America, Inc.

DESCRIPTION  
**CONNECTION DIAGRAM**  
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

SIZE A	DRAWING NUMBER EE7300	SHEET 1 OF 1
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## CERTIFICATION DATA SHEET

Model#: 213TTFW16040 AA

WINDING#: K2134279 R1 3

CONN. DIAGRAM: A-EE7300

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: SS88975-965

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.60	1800	1765	213T	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	7.9	LINE OR INVERTER	CONTINUOUS	F4	1.15	40	3300

FULL LOAD EFF: 91.7	3/4 LOAD EFF: 91.6	1/2 LOAD EFF: 90.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78.3	3/4 LOAD PF: 72.6	1/2 LOAD PF: 60.4	91	SQ CAGE INV RATED	3.9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.3 LB-FT	54	52.9 LB-FT 238	75 LB-FT 338	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.85 LB-FT^2	62 LB-FT^2	15 SEC.	2	140 LBS.

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

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6307	6206	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL

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

INVERTER TORQUE: CONSTANT 10:1
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

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DATE: 06/22/2017 05:53:27 AM

FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

## Data Sheet

Date: 6/29/2017

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

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

Submitted by: FAREEDA DUDEKULA



213TTFW16040

Submittal

Data @ 575 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.9	4.2	5.1	6.3	7.8	9.1	9.4	54.0	
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)	54.0	45.6	32.8	7.8	3.9																													
Torque (ft-lb)	52.9	49.0	75.0	22.3	0.00																													
<div><div>Efficiency (%)</div><div>P.F. (%)</div><div>Current (Amps)</div></div> <table><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25</td><td>86</td><td>38</td><td>3.8</td></tr><tr><td>50</td><td>90</td><td>65</td><td>6.5</td></tr><tr><td>75</td><td>91</td><td>75</td><td>8.0</td></tr><tr><td>100</td><td>92</td><td>78</td><td>9.0</td></tr><tr><td>125</td><td>91</td><td>82</td><td>9.5</td></tr></tbody></table>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	86	38	3.8	50	90	65	6.5	75	91	75	8.0	100	92	78	9.0	125	91	82	9.5	Information Block				
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																									
						25	86	38	3.8																									
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						100	92	78	9.0																									
						125	91	82	9.5																									
						HP			7.5																									
						Sync. RPM			1800																									
						Frame			213																									
						Enclosure			TEFC																									
						Construction			TFW																									
						Voltage			575 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			CONSTANT 10:1																															
Outline Dwg			SS88975-965																															
Conn. Diag			A-EE7300																															
Additional Specifications:																																		
0																																		
0																																		
EQUIV CKT (OHMS / PHASE)																																		
R1		R2		X1		X2		Xm																										
1.1880		1.7310		3.8410		4.9580		78.7720																										

## Speed -Torque Curve

