

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 213TTDC6003

Catalog No: U283

10 HP General Purpose Motor, 3 phase, 3600 RPM, 575 V, 213T Frame, ODP  
General Purpose Motors



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**RegalRexnord**

**Nameplate Specifications**

Output HP	10 Hp	Output KW	7.5 kW
Frequency	60 Hz	Voltage	575 V
Current	9.5 A	Speed	3525 rpm
Service Factor	1.15	Phase	3
Efficiency	90.2 %	Power Factor	87.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Frame	213T	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6308	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

**Technical Specifications**

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	1.068 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	16.38 in
Shaft Diameter	1.375 in	Shaft Extension	3.38 in
Assembly/Box Mounting	F1/F2 Capable	Inverter Load	CONSTANT 10:1
Outline Drawing	169549.60ME	Connection Drawing	005102.01ME

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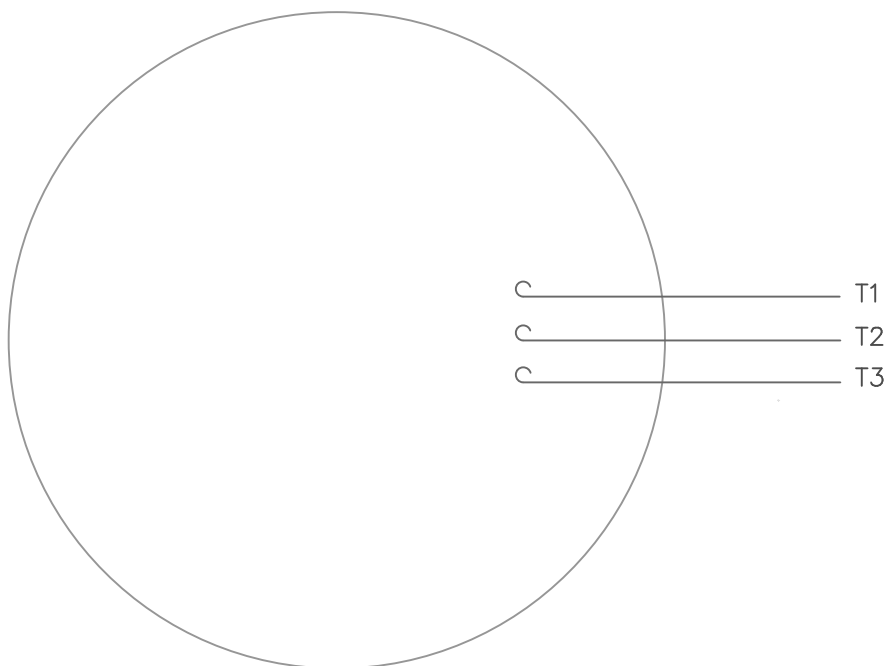
169549-60ME

Front view of the motor frame. Dimensions include overall width of 16.38 ±.12, mounting hole spacing of 6.19 ±.06, and a central mounting hole of 1.3750 ±.003. A nameplate is mounted on the front. The shaft flinger is shown with a 2.41 full depth and .31 SQ. x 2.38 KEY. The base has a width of 7.50 and a mounting hole of 5.50 ±.05.

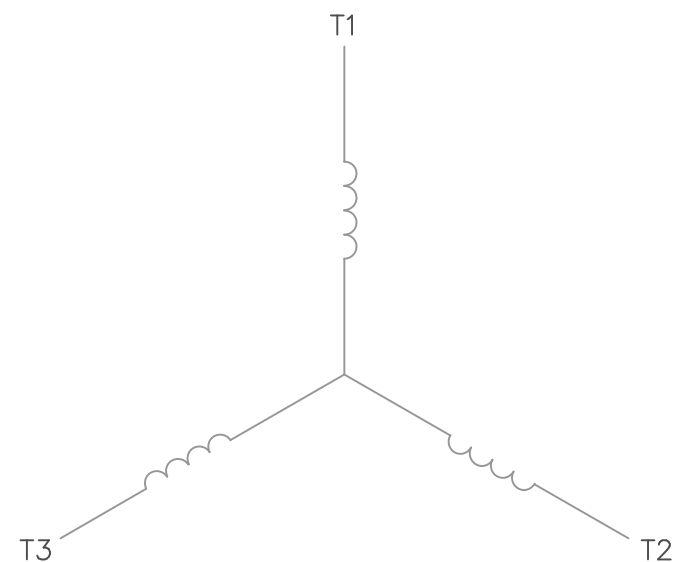
Top view of the motor frame. Dimensions include overall diameter of 10.50, mounting hole spacing of 6.94 ±.09, and a central mounting hole of 1.3750 ±.003. The shaft flinger is shown with a 2.41 full depth and .31 SQ. x 2.38 KEY. The base has a width of 7.50 and a mounting hole of 5.50 ±.05.

		TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC	DRAWN CTO 04-23-2002	
NO.	REVISION	CHK	ANG		CHK	ML
1	NEW DRAWING	CTO	5/21/02	.XX	APPD	SB
				.XXX	REF	169515
				.XXXX	FMF	
				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				CAD FILE	16954960me	SIZE
				DIST		B
						169549-60ME
						REV. 1


VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



LINE LEADS

CONNECT LEADS AS FOLLOWS  
FOR FOUR CONDUCTOR CORD ( )

CORD	L1 (RED)	L2 (WHITE)	L3 (BLACK)	(GREEN)
MOTOR	T1	T2	T3	GROUND

				TOLERANCES UNLESS SPECIFIED			DRAWN RDW 5/1/02		
				DEC.	INCHES		CHK		
				.X	±.1		APPD		
				.XX	±.01		TITLE EXTERNAL WIRING DIAGRAM TYPE "T" W/O PROTECTOR	SCALE 1=1	
				.XXX	±.005			REF	
				.XXXX	±.0005			FMF	
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	5/1/02	CAD FILE	00510201ME	SIZE	DRAWING NO.	REV.
			DIST				A	005102-01ME	

## CERTIFICATION DATA SHEET

Model#: 213TTDC6003 AA

WINDING#: T10702006 NONE 4

CONN. DIAGRAM: 5102.01

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: 169549.60ME

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10	7.5	3600	3525	213T	DP	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	9.5	LINE OR INVERTER	CONTINUOU S	F2	1.15/1.0	40	3300

FULL LOAD EFF: 90.2	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 88.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 87.5	3/4 LOAD PF: 84	1/2 LOAD PF: 76	89.5	SQ CAGE INV RATED	3.4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
15 LB-FT	64.8	30 LB-FT 200	55 LB-FT 368	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
53 dBA	63 dBA	- LB-FT^2	- LB-FT^2	- SEC.	-	150 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						
6308	6208	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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: CONSTANT 10:1					
	INV. HP SPEED RANGE: 1.5 X BASE SPEED					
	ENCODER: NONE					
	NONE NONE					
	NONE NONE PPR					
	BRAKE: NONE NONE					
	NONE P/N NONE					
	NONE NONE					
	- FT-LB NONE V NONE Hz					

DATE: 06/22/2017 04:53:25 AM

FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

## Data Sheet

Date: 6/20/2017

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

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

Submitted by: FAREEDA DUDEKULA



213TTDC6003

Submittal

Data @ 575 V

## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.4	4.0	5.5	7.5	9.4	10.8	11.8	64.8	
Torque (ft-lb)	0.00	3.7	7.4	11.2	15.0	17.3	18.7	30.0	
RPM	3600	3585	3565	3545	3530	3,515	3505	0	
Efficiency (%)		82.5	88.5	90.2	90.2	90.2	89.5		
P.F. (%)	9.0	56.0	76.0	84.0	87.5	88.5	89.5	45.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																													
Speed (RPM)	0	900	3100	3530	3600	Information Block																												
Current (Amps)	64.8	62.4	43.2	9.4	3.4	HP	10.0																											
Torque (ft-lb)	30.0	25.0	55.0	15.0	0.00	Sync. RPM	3600																											
<div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</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>83</td><td>56</td><td>3.6</td></tr><tr><td>50</td><td>88</td><td>75</td><td>5.5</td></tr><tr><td>75</td><td>90</td><td>85</td><td>7.5</td></tr><tr><td>100</td><td>90</td><td>88</td><td>9.5</td></tr><tr><td>125</td><td>90</td><td>89</td><td>12.0</td></tr></tbody></table></div>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	83	56	3.6	50	88	75	5.5	75	90	85	7.5	100	90	88	9.5	125	90	89	12.0	Frame	213			
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																									
						25	83	56	3.6																									
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						125	90	89	12.0																									
						Enclosure	DP																											
						Construction	TDC																											
						Voltage	575 V																											
						Frequency	60 Hz																											
						Design	B																											
						LR Code letter	H																											
						Service Factor	1.15																											
						Temp Rise @ FL	50 ° C																											
						Duty	CONT																											
						Ambient	40 ° C																											
Elevation	1,000 feet																																	
Rotor/Shaft wk²	0.00 Lb-Ft²																																	
Ref Wdg	T10702006 NONE																																	
Sound Pressure @ 1M	53 dBA																																	
VFD Rating	CONSTANT 10:1																																	
Outline Dwg	169549.60ME																																	
Conn. Diag	5102.01																																	
Additional Specifications:																																		
0																																		
0																																		
EQUIV CKT (OHMS / PHASE)																																		
R1		R2		X1		X2		Xm																										
0.0000		0.0000		0.0000		0.0000		0.0000																										

## Speed -Torque Curve

