

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 213TTFWD16012  
Catalog No: C205B  
7 1/2,3600,TEFC,213TC,3/60/230/460  
Totally Enclosed Fan Cooled (TEFC)



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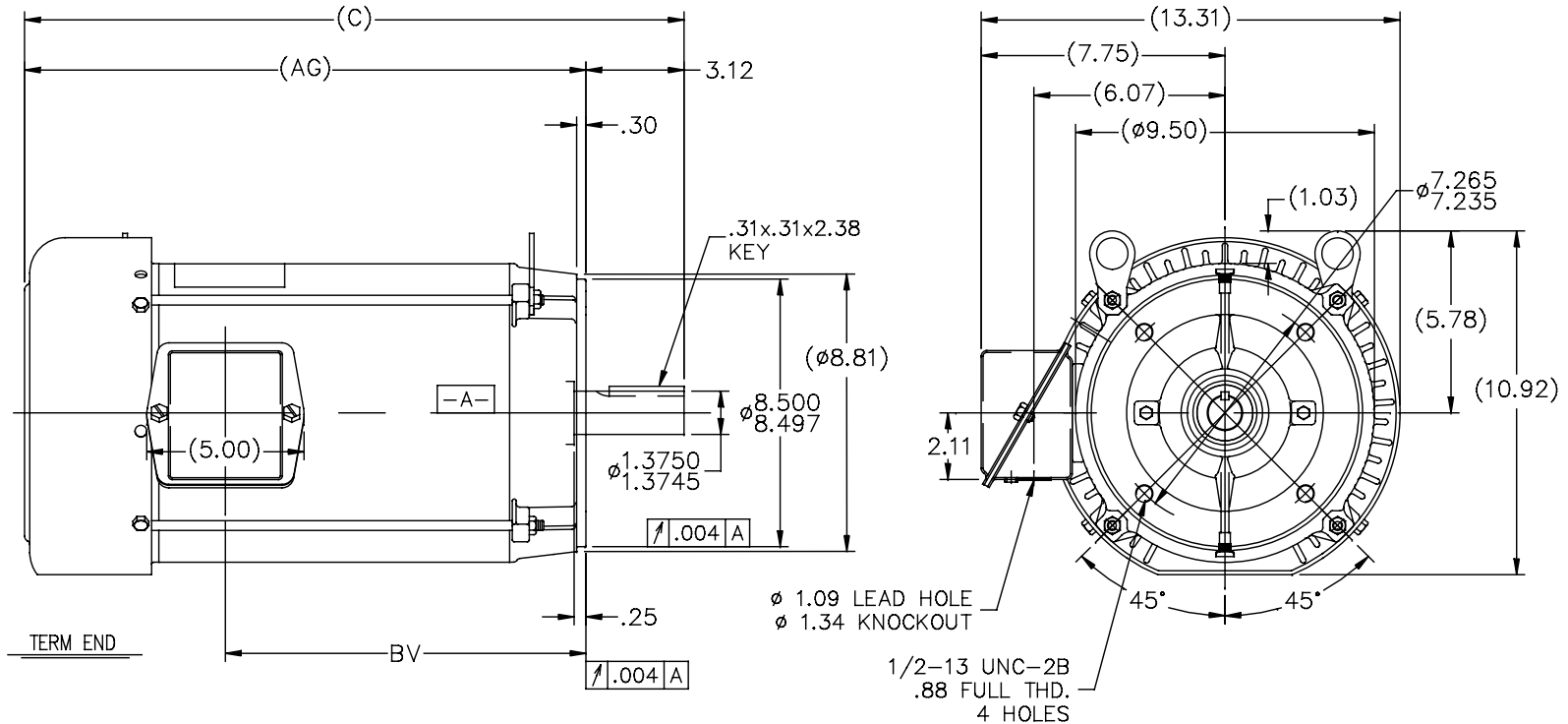
### Nameplate Specifications

Output HP	<b>7.50 Hp</b>	Output KW	<b>5.6 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>18.6/9.3 A</b>	Speed	<b>3525 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>89.5 %</b>	Duty	<b>Continous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>H</b>	Frame	<b>213TC</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 Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Mounting	<b>Round</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>T</b>
Overall Length	<b>19.46 in</b>	Frame Length	<b>9.65 in</b>
Shaft Diameter	<b>1.375 in</b>	Shaft Extension	<b>3.12 in</b>
Assembly/Box Mounting	<b>F1/F2 Capable</b>		
Outline Drawing	<b>SS86634-965</b>	Connection Diagram	<b>EE7308</b>

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.

NO.	REVISION	BY & DATE	CHK	ANG	FINISH	TOLERANCES UNLESS SPECIFIED		DRAWN	DRS				
						DEC.	INCHES						
6	UPDATED TO REGAL LOGO	SAJ 07/21/15	AJA					DRS	10-02-1996				
5	REDRAWN IN AUTOCAD	TAT 06-29-2004	ML					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					
				.XXXX	±.0005			FMF					
				ANG	±7'30"			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	ss86634	SIZE	DRAWING NO.	PAGE	OF	REV.
						DIST	LB		A	SS86634	6		6



EE7308

THREE PHASE  
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

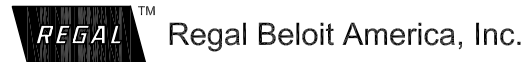
REF.  
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G  
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD  
CONNECTION

L1 — WHITE  
L2 — RED  
L3 — BLACK

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					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				
					±7'30"			PREV				
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							DIST WP					



**CERTIFICATION DATA SHEET**

**Model#:** 213TTFWD16012 AA      **WINDING#:** K2132124 NONE 2  
**CONN. DIAGRAM:** EE7308      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** SS86634-965

**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

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

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DATE: 06/22/2017 05:59:03 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

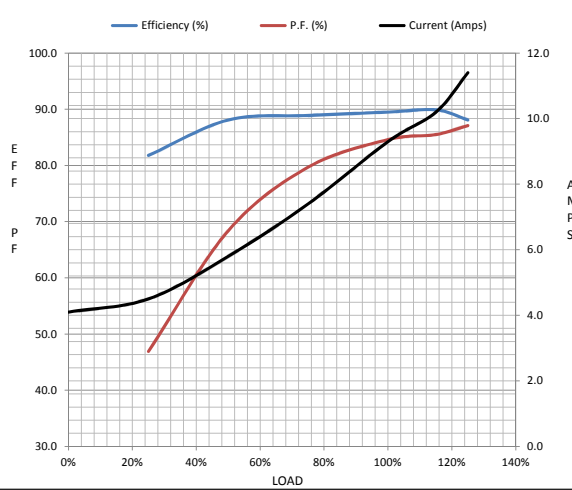
Date: 29-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



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						Information Block	
	LR	Pull-Up	BD	Rated	Idle		
Speed (RPM)	0	552	3130	3525	3600	HP	7.5
Current (Amps)	63.0	60.0	38.0	9.3	4.1	Sync. RPM	3600
Torque (ft-lb)	19.3	19.0	33.0	11.2	0.00	Frame	213



Construction	TFW			
Voltage	30/460#190/38V			
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 wk <sup>2</sup>	0.55 Lb-Ft <sup>2</sup>			
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

