

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 213TTFW16047

Catalog No: C225B

XRI® General Purpose General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 213TC Frame, TEFC



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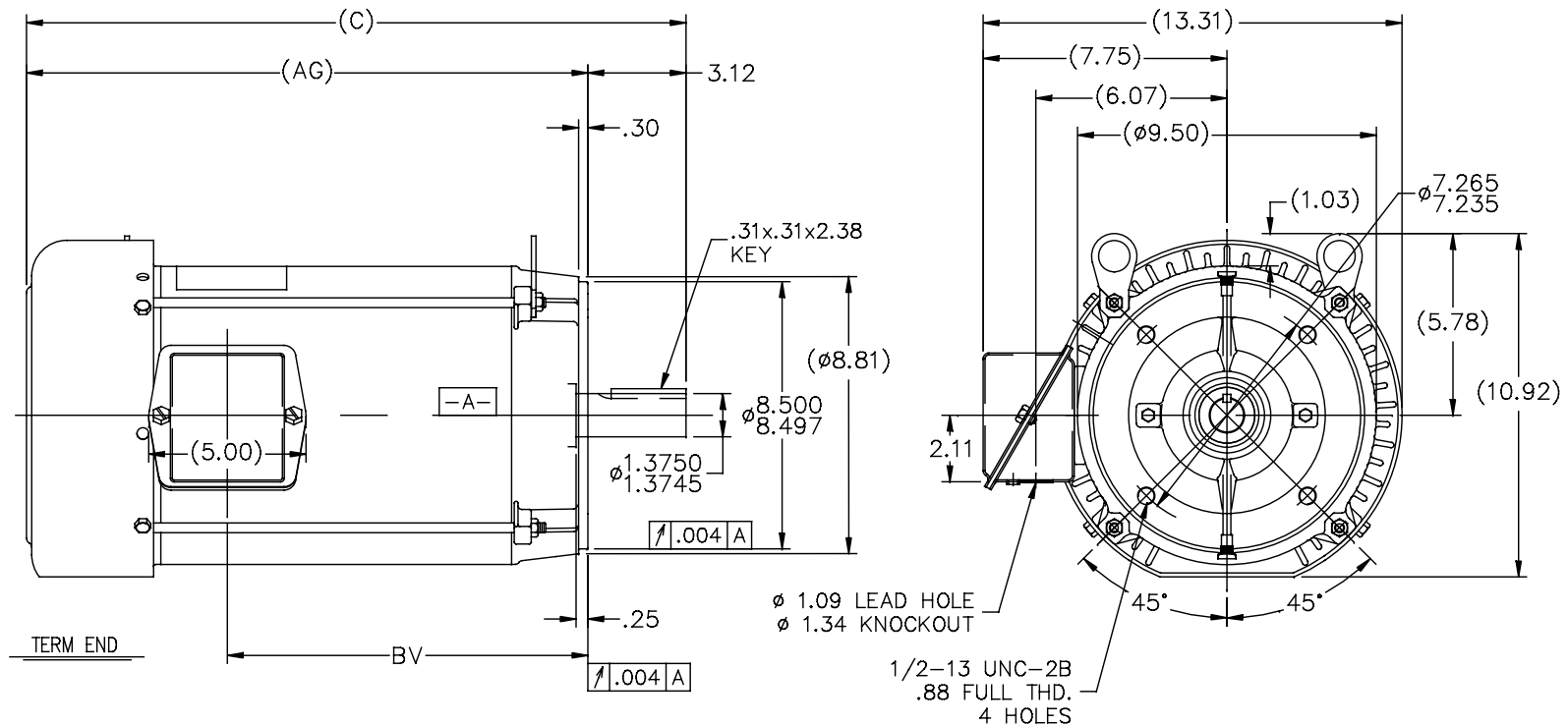
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	230/460 & 190/380 V
Speed	1765 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	213TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	91.7 & 91 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	19.2/9.6 & 17.4/8.7 A	Power Factor	79.2
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	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
Outline Drawing	SS86634-965	Connection Drawing	005010.01ME

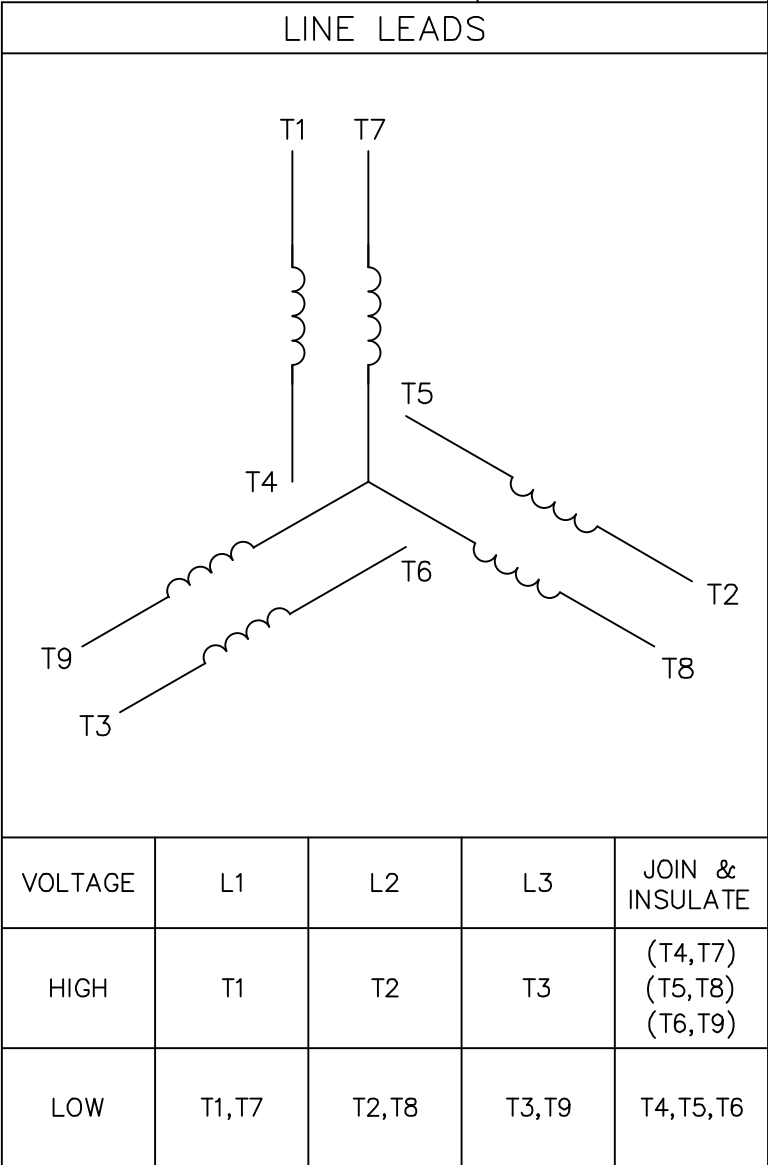
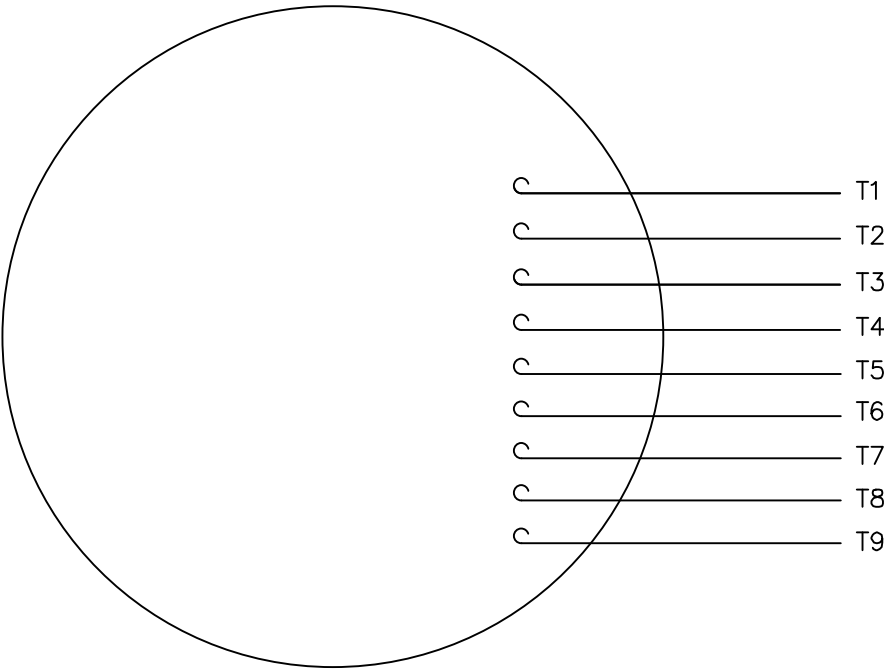


DASH	FR.	C	AG	BV	MOUNTING
965	213T	19.46	16.34	9.96	
1115	213/15T	20.96	17.84	11.46	
1240	213/15T	22.21	19.09	12.71	

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	AJAY TOLERANCES UNLESS SPECIFIED			 Regal Beloit America, Inc.	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			
				.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 ss86634	SIZE A	DRAWING NO. SS86634	PAGE OF	REV. 6
			DIST LB							

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		 MARATHON ELECTRIC	DRAWN RDW 04/12/02					
				DEC.	INCHES		CHK					
				.X	±.1		APPD					
				.XX	±.01		TITLE EXTERNAL WIRING DIAGRAM 3 PHASE W/O PROTECTOR					
				.XXX	±.005					SCALE 1=1		
				.XXXX	±.0005					REF FIG.2-51		
						MAT'L. DECAL - 004014						
						FMF						
NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH			PREV			
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			DIST				A	005010-01ME				

CERTIFICATION DATA SHEET

Model#: 213TTFW16047 AA
 CONN. DIAGRAM: 005010.01
 OUTLINE: SS86634-965

WINDING#: K2134279 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	1800	1765&1475	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	19.2/9.6&17.4/ 8.7	ACROSS THE LINE	CONTINUOU S	F4	1.15/1.15	40	3300

FULL LOAD EFF: 91.7&91	3/4 LOAD EFF: 92.2	1/2 LOAD EFF: 91.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 79.2&71.2	3/4 LOAD PF: 72.9	1/2 LOAD PF: 61.1	91	SQ CAGE IND RUN	9.8 / 4.9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.3 LB-FT	127 / 63.5	52.9 LB-FT 238	75 LB-FT 338	50

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	45 LB-FT^2	25 SEC.	2	140 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 05:53:59 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/19/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



213TTFW16047

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.9	5.2	6.3	7.8	9.6	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	1784	1775	1765	1,765	1756	0	
Efficiency (%)		87.4	91.6	92.2	91.7	91.1	91.0		
P.F. (%)	4.7	38.8	61.1	72.9	79.2	77.3	82.0	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	9.6	4.9					
Torque (ft-lb)	52.9	49.0	75.0	22.3	0.00					
Efficiency (%) P.F. (%) Current (Amps) EFFICIENCY (%) P.F. (%) CURRENT (AMPS) LOAD						Information Block				
						HP		7.5		
						Sync. RPM		1800		
						Frame		213		
						Enclosure		TEFC		
						Construction		TFN		
						Voltage		230/460#190/381V		
						Frequency		60 Hz		
						Design		A		
						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		0.85 Lb-Ft²		
						Ref Wdg		K2134279 NONE		
Sound Pressure @ 1M		62 dBA								
VFD Rating		NONE								
Outline Dwg		SS86634-965								
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

