

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 213TTGN6540

Catalog No: U991A

Hazardous Duty® Explosion Proof Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 213T Frame, EPFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2024 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	230/460 & 190/380 V
Speed	1770 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	213T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	91.7 & 91 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	20/10 & 17.4/8.7 A	Power Factor	76.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6307	Opp Drive End Bearing Size	6208
UL	UL Listed; also, UL Certified for Canada	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	EXP PROOF CL I GR C&D CL II GR F&G T3B

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	Cast Iron
Shaft Type	T	Overall Length	19.63 in
Frame Length	9.12 in	Shaft Diameter	1.375 in
Shaft Extension	3.48 in	Assembly/Box Mounting	F1 ONLY
Connection Drawing	A-EE7308T	Outline Drawing	037660-912

4

3

Uncontrolled Copy

2

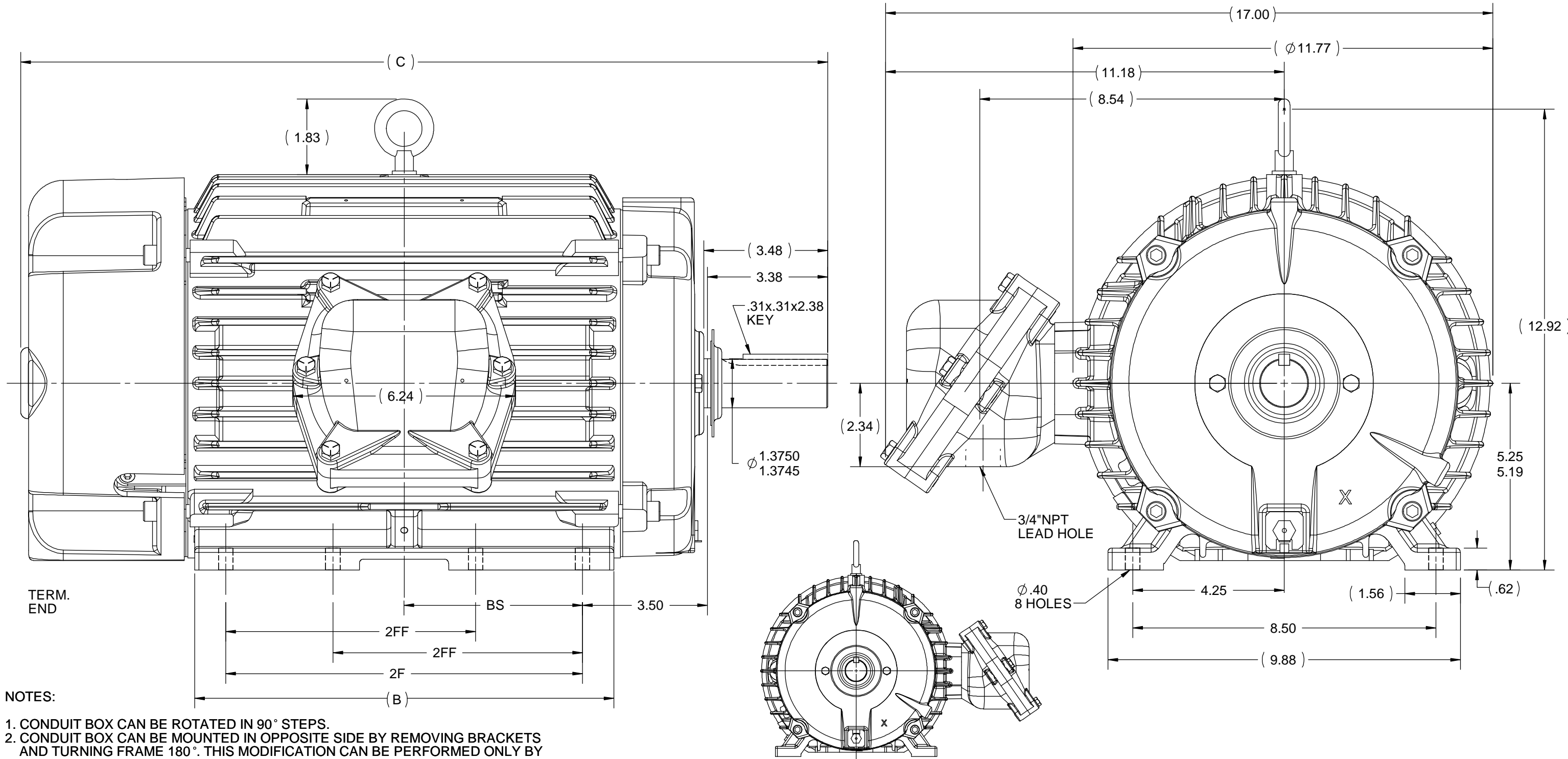
1

B

B

A

A




NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED IN OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. THIS MODIFICATION CAN BE PERFORMED ONLY BY THE ORIGINAL EQUIPMENT MANUFACTURER, OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. CATEGORY PTKQ, TITLED "MOTOR AND GENERATORS,. REBUILT FOR USE IN HAZARDOUS LOCATION".
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

F2 MOUNTING

1212	215	22.63	11.76	10	7	5
912	213/215	19.63	8.63	7	5.5	3.5
DASH	FRAME	C	B	2F	2FF	BS

DRAWING REVISION G	REVISION BY MVG	DATE 02/08/2019	TOLERANCES UNLESS OTHERWISE SPECIFIED:				DRAWN BY AK 10/28/2009	 Regal Beloit America, Inc.		
ECO ECO-0139404	APPROVED BY SR	DATE 02/08/2019	DEC.	INCH	mm	ANGLE	DATE			
ECO DESCRIPTION OUTLINE UPDATED AS PER ECR-0149056			.X	±0.1	[±2.5]	±7° 30"	APPROVED BY	DESCRIPTION OUTLINE		
COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.			.XX	±0.03	[±0.76]		DATE	210 FR. - EPFC		
			.XXX	±0.005	[±0.127]		REFERENCE SS84370	MATERIAL		
			.XXXX	±0.0005	[±0.0127]		THIRD ANGLE PROJECTION	PROCESS/FINISH		
			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH/mm 5.1 mm SHOWN IN [BRACKETS]				SIZE B	DRAWING NUMBER 037660		SHEET 1 OF 1

HIGH VOLTAGE



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE

THREE PHASE
DUAL VOLTAGE MOTOR

VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019

ECO DESCRIPTION
ADDED TERMINAL CONNECTION DIAGRAM

COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.
PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF
REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY
INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED,
BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED
TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT
AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL
BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN
RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

DRAWN BY
SMC

DATE
05-13-1992

APPROVED BY
TB

DATE
05-13-1992

REFERENCE
EE7308/EE7300

THIRD ANGLE
PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-INTERNAL
3 PHASE - DUAL VOLTAGE MOTOR

MATERIAL

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

EE7308T

SHEET
1 OF 1

CERTIFICATION DATA SHEET

Model#: 213TTGN6540 AB

WINDING#: K2134268 NONE 1

CONN. DIAGRAM: A-EE7308T

ASSEMBLY: F1 ONLY

OUTLINE: 037660-912

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.6&3.7	1800	1770&1475	213T	EPFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	20/10&17.4/8. 7	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 91.7&91	3/4 LOAD EFF: 91.4	1/2 LOAD EFF: 90.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 76.5&71.2	3/4 LOAD PF: 68.1	1/2 LOAD PF: 56	91	SQ CAGE INV RATED	11 / 5.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.2 LB-FT	135 / 67.5	52.9 LB-FT 238	75 LB-FT 338	45

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
STANDARD	STANDARD	RIGID	HORIZONTAL	TRUE	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6307	6208						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	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: NONE
	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 06:44:50 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



213TTGN6540

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	5.5	5.8	6.9	8.4	10.0	11.4	12.1	67.5	
Torque (ft-lb)	0.00	5.5	11.0	16.5	22.2	25.5	28.0	52.9	
RPM	1800	1794	1785	1779	1770	1,765	1762	0	
Efficiency (%)		85.5	90.6	91.4	91.7	91.1	91.6		
P.F. (%)	5.0	35.5	56.0	68.1	76.5	77.3	79.4	42.6	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																													
Speed (RPM)	0	900	1600	1770	1800																																													
Current (Amps)	67.5	57.0	41.0	10.0	5.5																																													
Torque (ft-lb)	52.9	49.0	75.0	22.2	0.00																																													
<div><div>Efficiency (%)</div><div>P.F. (%)</div><div>Current (Amps)</div></div> <table><thead><tr><th>LOAD</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>0%</td><td></td><td></td><td>5.5</td></tr><tr><td>20%</td><td></td><td></td><td>5.5</td></tr><tr><td>25%</td><td>85</td><td>1.5</td><td>5.6</td></tr><tr><td>40%</td><td>88</td><td>4.5</td><td>6.0</td></tr><tr><td>60%</td><td>91</td><td>7.5</td><td>7.0</td></tr><tr><td>80%</td><td>91</td><td>9.5</td><td>8.5</td></tr><tr><td>100%</td><td>91</td><td>10.5</td><td>10.0</td></tr><tr><td>110%</td><td>90</td><td>10.5</td><td>11.5</td></tr><tr><td>125%</td><td>91</td><td>10</td><td>12.5</td></tr></tbody></table>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	0%			5.5	20%			5.5	25%	85	1.5	5.6	40%	88	4.5	6.0	60%	91	7.5	7.0	80%	91	9.5	8.5	100%	91	10.5	10.0	110%	90	10.5	11.5	125%	91	10	12.5	HP		7.5		
						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)																																									
						0%			5.5																																									
						20%			5.5																																									
						25%	85	1.5	5.6																																									
						40%	88	4.5	6.0																																									
						60%	91	7.5	7.0																																									
						80%	91	9.5	8.5																																									
						100%	91	10.5	10.0																																									
						110%	90	10.5	11.5																																									
						125%	91	10	12.5																																									
						Sync. RPM		1800																																										
						Frame		213																																										
						Enclosure		TEFC																																										
						Construction		TFN																																										
						Voltage		330/460#190/381V																																										
						Frequency		60 Hz																																										
Design		B																																																
LR Code letter		H																																																
Service Factor		1.15																																																
Temp Rise @ FL		45 ° C																																																
Duty		CONT																																																
Ambient		40 ° C																																																
Elevation		1,000 feet																																																
Rotor/Shaft wk²		0.85 Lb-Ft²																																																
Ref Wdg		K2134268 NONE																																																
Sound Pressure @ 1M		62 dBA																																																
VFD Rating		CONSTANT 10:1																																																
Outline Dwg		037660-912																																																
Conn. Diag		A-EE7308T																																																
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

