

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 215TTGN16539

Catalog No: U992A-P

Hazardous Duty® Explosion Proof Motor, 10 & 7.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 215T Frame, EPFC



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RegalRexnord

Nameplate Specifications

Phase	3	Output HP	10 & 7.5 Hp
Output KW	7.5 & 5.6 kW	Voltage	230/460 & 190/380 V
Speed	1765 & 1470 rpm	Service Factor	1.15 & 1.15
Frame	215T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	91.7 & 91.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	25/12.5 & 23/11.5 A	Power Factor	82
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
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	.894 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	22.63 in
Frame Length	12.12 in	Shaft Diameter	1.375 in
Shaft Extension	3.48 in	Assembly/Box Mounting	F1 ONLY
Connection Drawing	A-EE7308T	Outline Drawing	037660-1212

4

3

Uncontrolled Copy

2

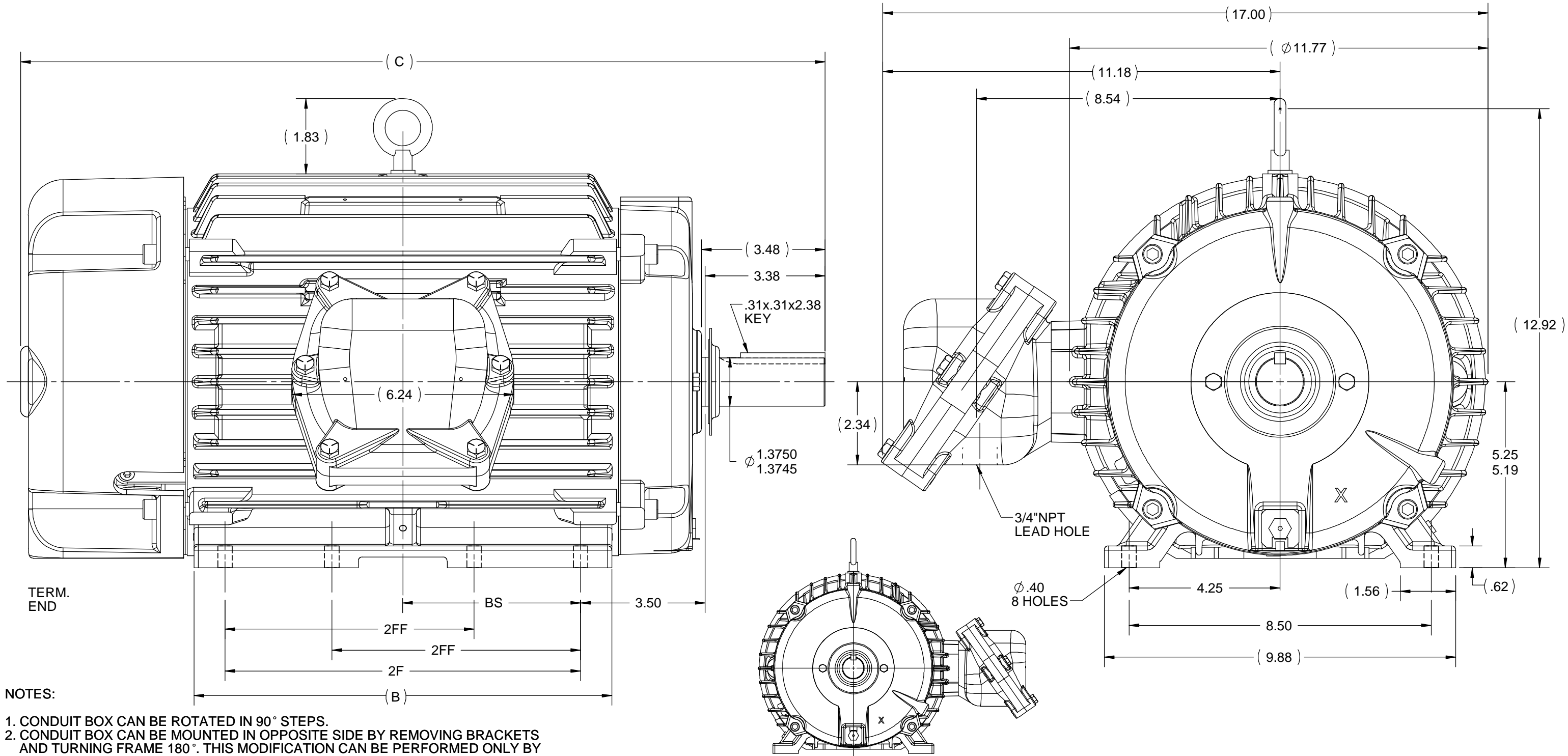
1

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.

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		
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			.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				SIZE B	DRAWING NUMBER 037660		
			mm SHOWN IN [BRACKETS]					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

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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#: 215TTGN16539 AA

WINDING#: K2154249 NONE 1

CONN. DIAGRAM: A-EE7308T

ASSEMBLY: F1 ONLY

OUTLINE: 037660-1212

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10&7 1/2	7.5&5.6	1800	1765&1470	215T	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	25/12.5&23/11 .5	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 91.7&91.5	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82&81	3/4 LOAD PF: 78	1/2 LOAD PF: 68	91	SQ CAGE INV RATED	10 / 5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
29.8 LB-FT	160 / 80	60 LB-FT 201	81 LB-FT 272	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	1.2 LB-FT^2	192 LB-FT^2	20 SEC.	2	240 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	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 2:1
	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

DATE: 06/21/2017 11:09:42 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



215TTGN16539

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	5.0	5.5	7.5	10.0	12.5	14.0	15.5	80.0	
Torque (ft-lb)	0.00	7.5	14.5	22.0	29.8	34.5	37.5	60.0	
RPM	1800	1790	1785	1775	1765	1,755	1750	0	
Efficiency (%)		87.5	91.0	91.7	91.7	91.0	90.2		
P.F. (%)	6.5	47.0	68.0	78.0	82.0	83.5	83.5	42.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block																																								
Speed (RPM)	0	900	1675	1765	1800	HP	10.0																																							
Current (Amps)	80.0	72.0	46.0	12.5	5.0	Sync. RPM	1800																																							
Torque (ft-lb)	60.0	54.0	81.0	29.8	0.00	Frame	215																																							
<div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</div><table border="1"><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>0</td><td>-</td><td>-</td><td>5.0</td></tr><tr><td>20</td><td>88</td><td>-</td><td>5.2</td></tr><tr><td>25</td><td>-</td><td>45</td><td>-</td></tr><tr><td>40</td><td>91</td><td>65</td><td>6.5</td></tr><tr><td>60</td><td>93</td><td>78</td><td>10.0</td></tr><tr><td>80</td><td>93</td><td>82</td><td>13.0</td></tr><tr><td>100</td><td>92</td><td>84</td><td>15.0</td></tr><tr><td>125</td><td>90</td><td>84</td><td>16.0</td></tr></tbody></table></div>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	0	-	-	5.0	20	88	-	5.2	25	-	45	-	40	91	65	6.5	60	93	78	10.0	80	93	82	13.0	100	92	84	15.0	125	90	84	16.0	Enclosure	TEFC			
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																																					
						0	-	-	5.0																																					
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						100	92	84	15.0																																					
						125	90	84	16.0																																					
						Construction	TFN																																							
						Voltage	30/460#190/381V																																							
						Frequency	60 Hz																																							
						Design	B																																							
						LR Code letter	G																																							
						Service Factor	1.15																																							
						Temp Rise @ FL	55 °C																																							
						Duty	CONT																																							
						Ambient	40 °C																																							
						Elevation	1,000 feet																																							
						Rotor/Shaft wk ²	1.20 Lb-Ft ²																																							
						Ref Wdg	K2154249 NONE																																							
						Sound Pressure @ 1M	62 dBA																																							
VFD Rating	CONSTANT 2:1																																													
Outline Dwg	037660-1212																																													
Conn. Diag	A-EE7308T																																													
Additional Specifications:																																														
0																																														
0																																														
EQUIV CKT (OHMS / PHASE)																																														
R1	R2	X1	X2	Xm																																										
0.5400	0.4880	2.0930	3.2090	51.1200																																										

Speed -Torque Curve

