

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 213TTGCD6528

Catalog No: C366C

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



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.  
©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord

### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>7.50 &amp; 5 Hp</b>
Output KW	<b>5.6 &amp; 3.7 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1768 &amp; 1475 rpm</b>	Service Factor	<b>1.15 &amp; 1.00</b>
Frame	<b>213TC</b>	Enclosure	<b>Explosion Proof Fan cooled</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>91.7 &amp; 90.2 %</b>
Ambient Temperature	<b>50 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>19/9.5 &amp; 16.2/8.1 A</b>	Power Factor	<b>79.3</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>H</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6208</b>
UL	<b>UL Listed And CSA Certified</b>	CSA	<b>Y</b>
CE	<b>N</b>	IP Code	<b>54</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C</b>

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>1.473 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Cast Iron</b>
Shaft Type	<b>T</b>	Shaft Diameter	<b>1.375 in</b>
Assembly/Box Mounting	<b>F1 ONLY</b>	Inverter Load	<b>CONSTANT 10:1</b>
Connection Drawing	<b>A-EE7308T</b>	Outline Drawing	<b>037702-912</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:12/12/2023

4

3

Uncontrolled Copy

2

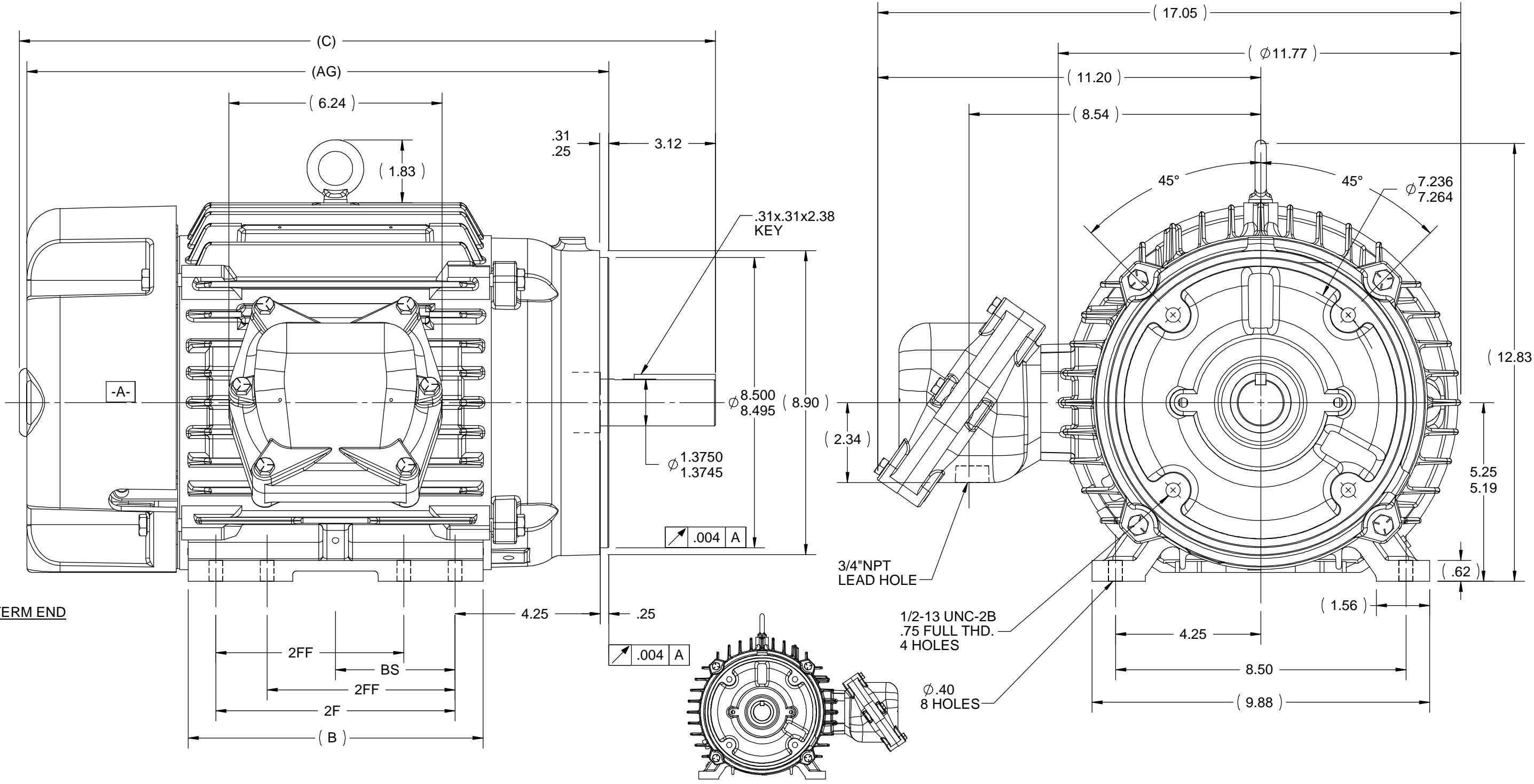
1

B

B

A

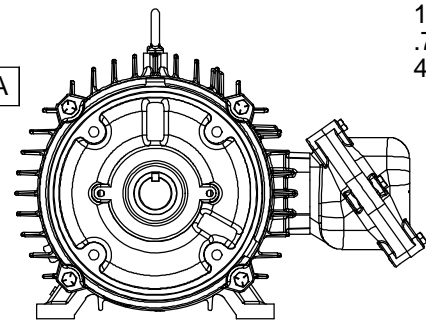
A



TERM END

.004 A

.004 A



F2 VIEW

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	23.45	11.76	10	7	5	20.11
912	213/215	20.45	8.63	7	5.5	3.5	17.11
DASH	FRAME	C	B	2F	2FF	BS	AG

DRAWING REVISION F	REVISION BY MVG	DATE 02/14/2018
ECO ECO-0139688	APPROVED BY ST	DATE 02/14/2018
ECO DESCRIPTION UPDATED PER ECO		
<small>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.</small>		

TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7° 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
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]			

DRAWN BY PN 9/2/2010	DATE
APPROVED BY	DATE
REFERENCE 037660	THIRD ANGLE PROJECTION

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 210 FR. - EPFC	PROCESS/FINISH
MATERIAL	SIZE <b>B</b>
DRAWING NUMBER <b>037702</b>	SHEET 1 OF 1

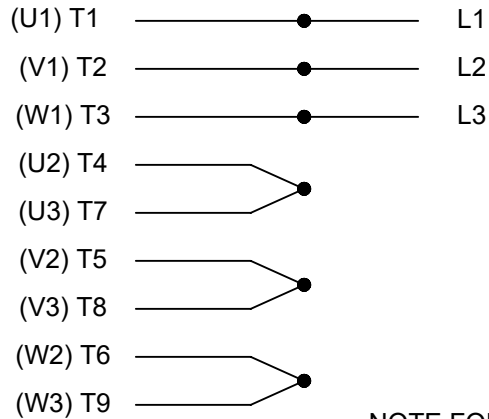
4

3

2

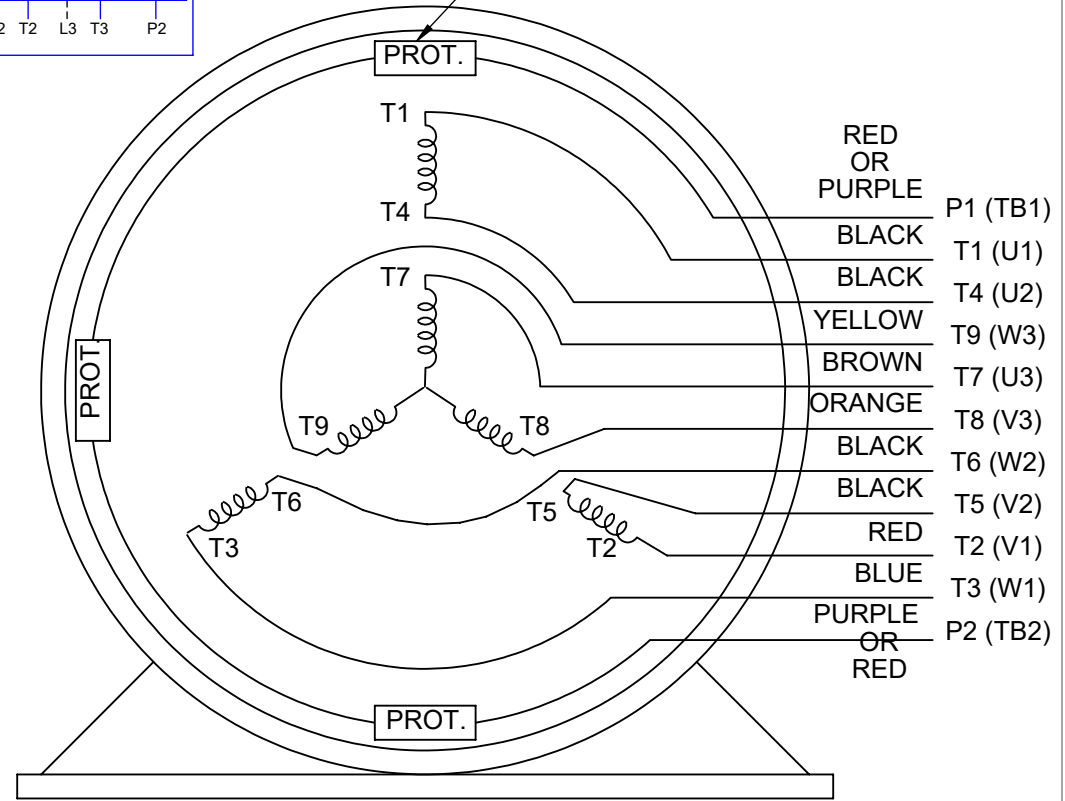
1

**HIGH VOLTAGE**



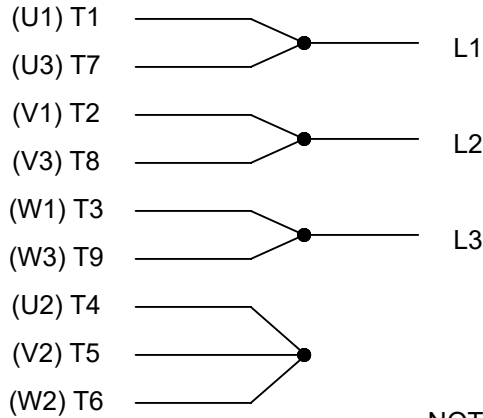
**THREE PHASE  
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS  
CONNECTED IN SERIES



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**



**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		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION <b>ADDED TERMINAL CONNECTION DIAGRAM</b>				APPROVED BY TB	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b> 3 PHASE - DUAL VOLTAGE MOTOR
<small>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.</small>				DATE 05-13-1992	MATERIAL
			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T



P.O. BOX 8003  
WAUSAU, WI 54401-8003  
PH. 715-675-3311

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_  
ORDER #: \_\_\_\_\_  
CONN. DIAGRAM: A-EE730BT  
OUTLINE: 037702-912  
WINDING: HA31324015 R2 2  
SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
REFERENCE MODEL #: 213TTGCCD6528  
CAT #: \_\_\_\_\_  
CUSTOMER PART #: \_\_\_\_\_  
MOUNTING: F1 ONLY

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	1800	1768	213TC	EPFC	TFC	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	19/9.5&16.2/8.1	LINE OR INVERTER	CONT	F	1.15	50	3300

F.L. EFF	3/4 LD EFF	93.0	1/2 LD EFF	90.0	GTD EFF	91.0	ELECT. TYPE
91.7	93.0	93.0	90.0	91.0	91.0	91.0	SQ CAGE INV RATED
F.L. PF	3/4 LD PF	73.4	1/2 LD PF	63.8			

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
22.3 LB-FT	62.0	45.0 LB-FT	59.0 LB-FT	40
		202%	265%	

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
62 dBA	71 dBA	0.99 LB-FT <sup>2</sup>	65 LB-FT <sup>2</sup>	25 SEC.	2	249 LB.	

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C	NO	NONE	BLUE - RAL 5003 (EPOXY)

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL BALL						
6309 6208						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.911	0.548	2.661	3.081	56.889	0.080	ODE

* N O T E S *	INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1
	INV. HP SPEED RANGE: NONE
	ENCODER: NONE
	NONE PPR
	NONE

PREPARED BY: _____	BRAKE: NONE
DATE: 1/24/2023	NONE
	FT-LB: NA
	VOLTAGE: NONE
FORM: 3531 REV. 4 2/27/06	HZ: _____
	UL: NO LETTER - ALL BRANDS-UL LISTED AND CSA CERTIFIED DIV. 1 XP MOTORS

Data Sheet

Date: 9/7/2023  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: RAMYA



213TTGCD6528

Submittal

Data @ 460 V

Motor Load Data

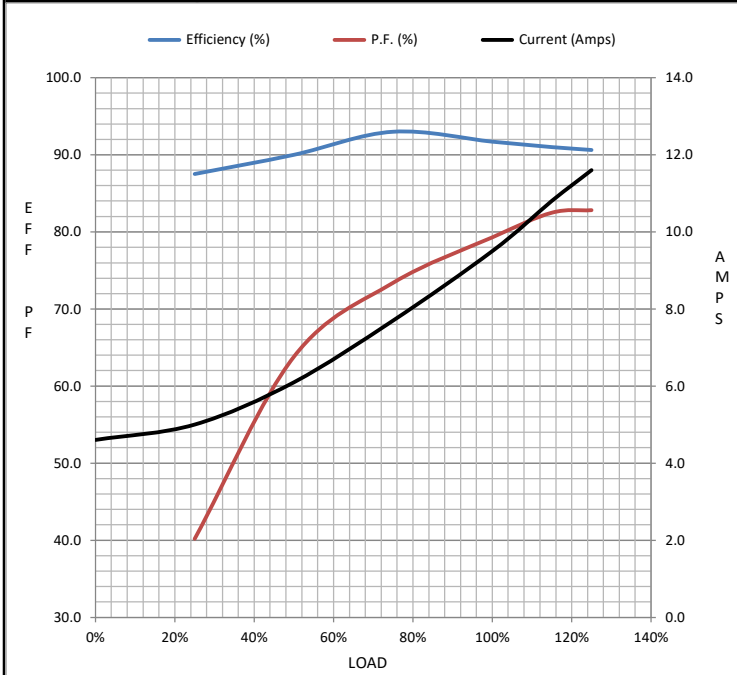
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.6	5.0	6.1	7.7	9.5	10.8	11.6	62.0
Torque (ft-lb)	0.00	5.5	11.0	16.6	22.3	25.6	28.0	45.0
RPM	1800	1792	1785	1775	1768	1,762	1758	0
Efficiency (%)		87.5	90.0	93.0	91.7	91.0	90.6	
P.F. (%)	12.3	40.2	63.8	73.4	79.3	82.5	82.8	43.0

Motor Speed Data

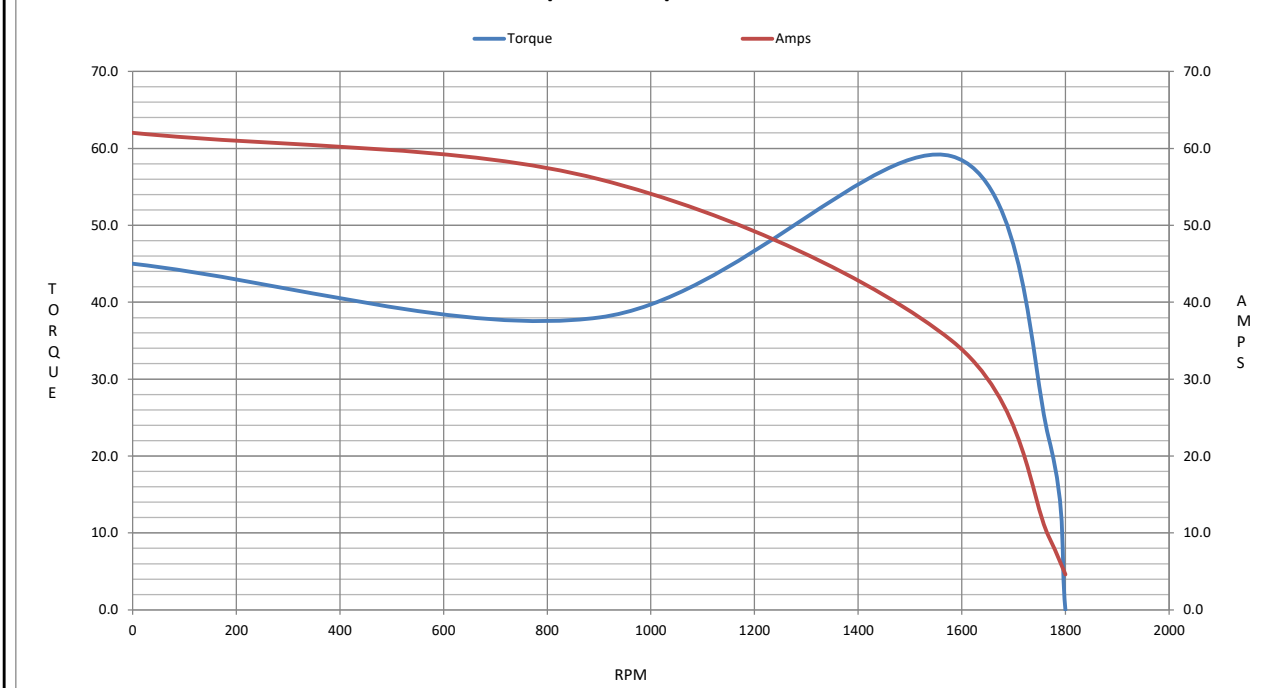
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1580	1768	1800
Current (Amps)	62.0	56.0	35.0	9.5	4.6
Torque (ft-lb)	45.0	38.0	59.0	22.3	0.00

Information Block

HP	7.5			
Sync. RPM	1800			
Frame	213			
Enclosure	EPFC			
Construction	TFC			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	50 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	0.99 Lb-Ft <sup>2</sup>			
Ref Wdg	HA31324015 R2			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 10:1/VARIABLE 10:1			
Outline Dwg				
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.9110	0.5480	2.6610	3.0810	56.8890



Speed - Torque Curve





# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20220222- E12044  
**Report Reference** E12044-20090313  
**Issue Date** 2022-FEBRUARY-22

**Issued to:** REGAL BELOIT AMERICA INC  
 1946 W COOK RD  
 FORT WAYNE IN 46818

Tradename: Marathon

**This certificate confirms that  
 representative samples of**

MOTORS FOR USE IN HAZARDOUS LOCATIONS  
 Electric motors for use in hazardous locations; Class I,  
 Groups C and D; Class II, Groups F and G; Inclusive of  
 Model Number 213TTGCD6528 (may have prefix and/or  
 suffix characters).

Have been investigated by UL in accordance with the  
 Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** UL 674 - Electric Motors and Generators for Use in Division  
 1 Hazardous (Classified) Locations,  
 CSA C22.2 No. 145, Electric Motors and Generators for  
 Use in Hazardous (Classified) Locations

**Additional Information:** See the UL Online Certifications Directory at  
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up  
 Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's  
 Follow-Up Services.

Look for the UL Certification Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested  
 according to the current UL requirements.



Bruce Mahrenholz, Director North American Certification Program  
 UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please  
 contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>

