

# PRODUCT INFORMATION PACKET

Model No: 256TTGCD6501

Catalog No: E505A

Hazardous Duty® Explosion Proof Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
3600 & 3000 RPM, 256T 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

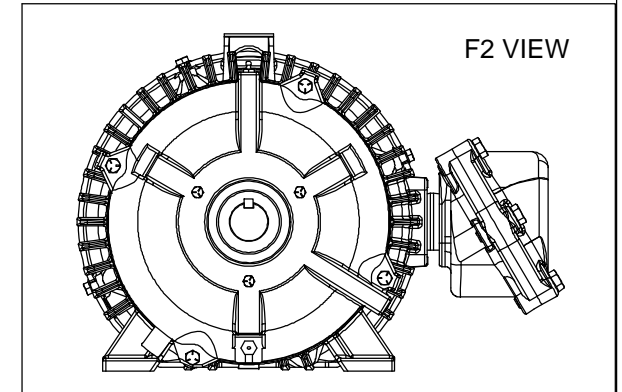
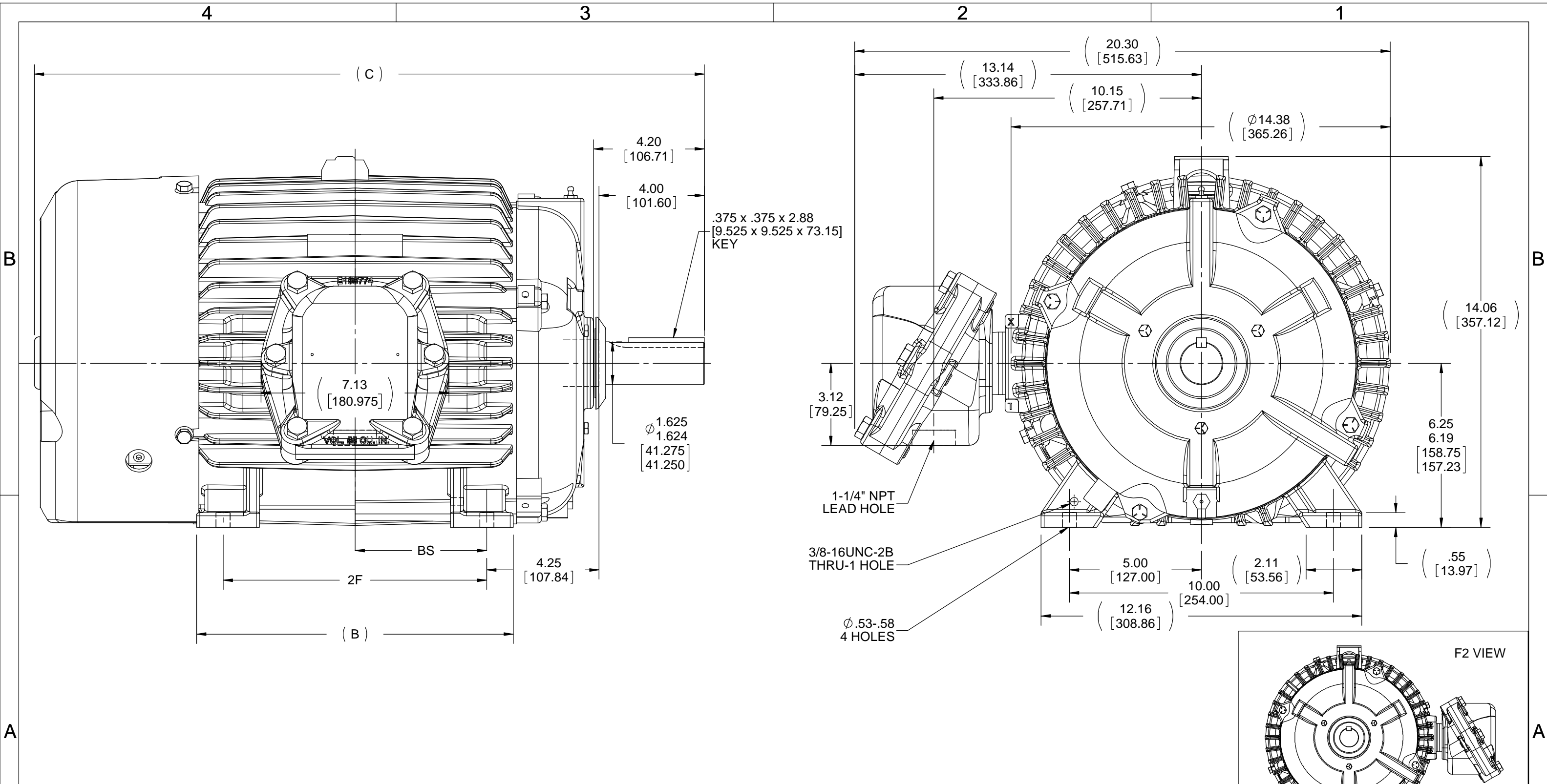
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>20 &amp; 15 Hp</b>
Output KW	<b>14.9 &amp; 11.2 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>3540 &amp; 2945 rpm</b>	Service Factor	<b>1.00 &amp; 1.00</b>
Frame	<b>256T</b>	Enclosure	<b>Explosion Proof Fan cooled</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>91 &amp; 90.2 %</b>
Ambient Temperature	<b>50 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>47.5/23.7 &amp; 43.5/21.7 A</b>	Power Factor	<b>87.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6210</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>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.546 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>1.625 in</b>
Assembly/Box Mounting	<b>F1 ONLY</b>	Inverter Load	<b>CONSTANT 10:1</b>
Outline Drawing	<b>SS203001-1225</b>	Connection Drawing	<b>EE7308AD</b>

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:11/27/2023



NOTES:  
 1. CONDUIT BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.  
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS
1050	254T	10.25 [260.35]	23.65 [600.71]	---	8.25 [209.55]	4.12 [104.65]
1225	256T	12.00 [304.80]	25.40 [645.16]	---	10.00 [254.00]	5.00 [127.00]

DRAWING REVISION F	REVISION BY SD	DATE 11/18/2019
ECO ECO-0177002	APPROVED BY VMR	DATE 11/18/2019
ECO DESCRIPTION OUTLINE DESCRIPTION AND C DIMENSION UPDATED		
<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 [0.076/.381]  
 CORNER FILLETS: .02 [0.51]  
 MACHINED SURFACES: 200 INCH/mm 5.1  
 mm SHOWN IN [BRACKETS]

DRAWN BY  
RM

DATE  
12-14-1993

APPROVED BY  
FG

DATE  
12-15-1993

REFERENCE

THIRD ANGLE PROJECTION

**REGAL**™ Regal Beloit America, Inc.

DESCRIPTION  
250T FR. EXP. PR. - BB - T - STD.

MATERIAL

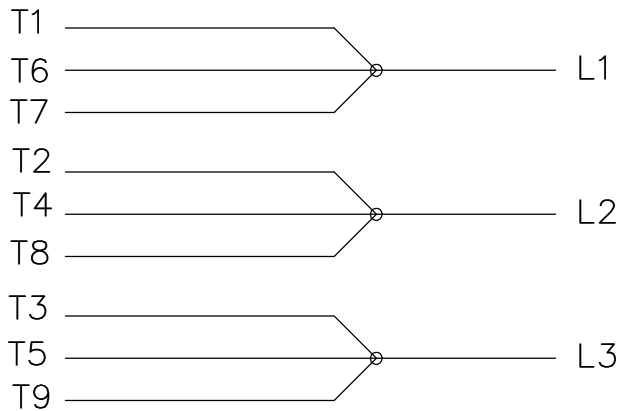
PROCESS/FINISH

SIZE  
B

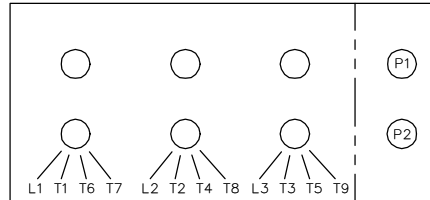
DRAWING NUMBER  
SS203001

SHEET  
1 OF 1

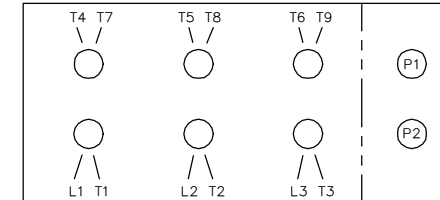
LOW VOLTAGE



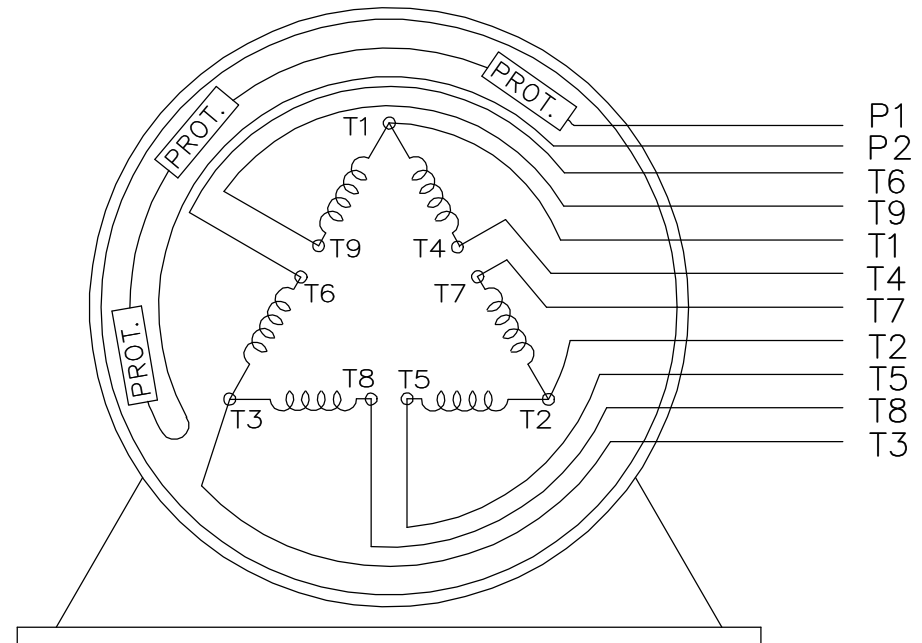
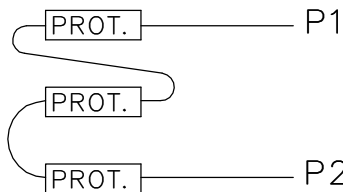
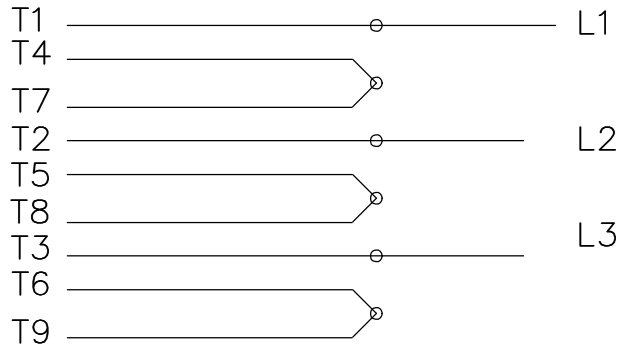
LOW VOLTAGE



HIGH VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

WHEN MORE THAN ONE PROT. IS USED; PROT. ARE CONNECTED IN SERIES

DRAWING REVISION <b>L</b>		REVISION BY <b>JP</b>	REV DATE/© DATE <b>06-21-2019</b>	TOLERANCES (EXCEPT AS NOTED): DEC. INCH mm ANGLE		DRAWN BY <b>MJD</b>		Regal Beloit America, Inc.	
ECO <b>ECO-0168744</b>		APPROVED BY <b>MH</b>	DATE <b>06-21-2019</b>	.X ±0.1 [±3]	±7' 30"	DATE <b>12-19-1997</b>	DESCRIPTION <b>CONN DIAGRAM-EXTERNAL</b>		
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>				REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°		APPROVED BY <b>GK</b>		MATERIAL	
COPYRIGHT (PER REVISION DATE) 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.				CORNER FILLETS: R.02 [.5]		DATE <b>01-07-1998</b>		PROCESS/FINISH	
				MACHINED SURFACES: 200/ 5.1 INCH mm		REFERENCE		SIZE	
				mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY		THIRD ANGLE PROJECTION		<b>A</b>	
								<b>EE7308AD</b>	
								SHEET <b>1 OF 1</b>	



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

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER: \_\_\_\_\_  
 ORDER #: \_\_\_\_\_  
 CONN. DIAGRAM: EE7308AD  
 OUTLINE: SS203001-1225  
 WINDING: HA31602007 NONE 2  
 SPEED: \_\_\_\_\_

CUSTOMER P.O. #: \_\_\_\_\_  
 REFERENCE MODEL #: 256TTGCD6501  
 CAT #: E505A  
 CUSTOMER PART #: \_\_\_\_\_  
 MOUNTING: F1 ONLY  
 FAN: 504205B

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	3600	3540	256T	EPFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	47.5/23.7&43.5/21.7	ACROSS THE LINE	CONT	F	1.00	50	3300

F.L. EFF	91.0	3/4 LD EFF	91.0	1/2 LD EFF	89.5	GTD EFF	ELECT. TYPE
F.L. PF	87.5	3/4 LD PF	84.0	1/2 LD PF	76.5	90.2	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
29.7 LB-FT	143	49.0 LB-FT 165%	74.0 LB-FT 249%	65

SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR
75 dBA	84 dBA	1.39 LB-FT²	25 LB-FT²	20 SEC.	2	435 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	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	6210						

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
0.362	0.192	1.122	0.937	33.938	0.080	ODE

* N O T E S *	_____	INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE ENCODER: NONE NONE NONE
	_____	
	_____	
	_____	
	_____	

PREPARED BY: _____ DATE: 7/28/2022	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE HZ: _____
FORM: 3531 REV. 4 2/27/06 UL: NO LETTER - ALL BRANDS-UL LISTED AND CSA CERTIFIED DIV. 1 XP MOTORS	

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20220314- E12044  
**Report Reference** E12044-19950413  
**Issue Date** 2022-MARCH-14

**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 256TTGCD6501 (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:**

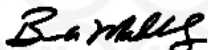
See the UL Online Certifications Directory at <https://iq.ulprospector.com> for additional information.

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/>

