

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 256TTGCD6528

Catalog No: C501

Hazardous Duty® Explosion Proof Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 256TC Frame, EPFC



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RegalRexnord

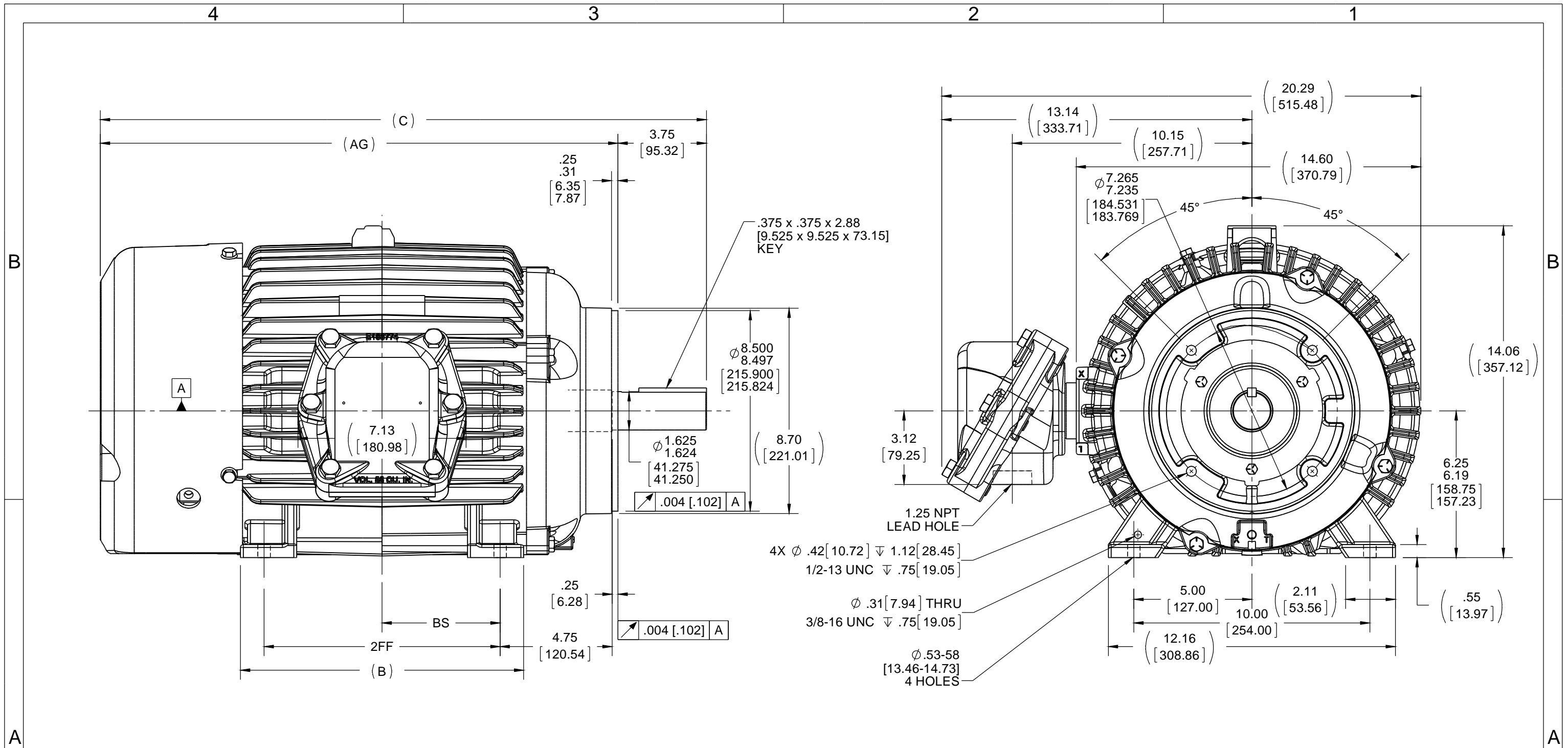
Nameplate Specifications

Phase	3	Output HP	20 & 15 Hp
Output KW	14.9 & 11.2 kW	Voltage	230/460 & 190/380 V
Speed	1768 & 1472 rpm	Service Factor	1.0 & 1.0
Frame	256TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	93 & 92.7 %
Ambient Temperature	50 °C	Frequency	60 & 50 Hz
Current	48.5/24.2 & 44.5/22.3 A	Power Factor	83.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.513 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	1.625 in
Assembly/Box Mounting	F1 ONLY	Inverter Load	CONSTANT 10:1
Connection Drawing	EE7308T	Outline Drawing	SS203036-1225

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- NOTES:
 1. CONDUIT BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	2FF	BS	AG
1050	254TC	10.25 [260.35]	23.93 [607.82]	---	8.25 [209.55]	4.12 [104.65]	20.18 [512.57]
1225	256TC	12.00 [304.80]	25.68 [652.27]	---	10.00 [254.00]	5.00 [127.00]	21.93 [557.02]

DRAWING REVISION A	REVISION BY	DATE	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]	DRAWN BY JWO	Regal Beloit America, Inc.	
ECO-0069925	APPROVED BY	DATE	REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] CORNER FILLETS: .02 [0.51] MACHINED SURFACES: 200 INCH 5.1 mm mm SHOWN IN [BRACKETS]	DATE 01-27-2015		
ECO DESCRIPTION NMR-0076993, MU119210			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.	APPROVED BY TB	DESCRIPTION OUTLINE 250T FR. - EXP. PR. - TGN - C'FACE	
				DATE 01-27-2015	MATERIAL	PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS203036

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 ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR	
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T	SHEET 1 OF 1
			THIRD ANGLE PROJECTION			



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #: _____
CONN. DIAGRAM: EE7308T
OUTLINE: SS203036-1225
WINDING: HA31604018 NONE 9
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: 256TTGCD6528
CAT #: C501
CUSTOMER PART #: _____
MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	1800	1768	256TC	EPFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	48.5/24.2&44.5/22.3	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	3/4 LD EFF	93.0	1/2 LD EFF	91.7	GTD EFF	ELECT. TYPE
F.L. PF	3/4 LD PF	83.5	79.0	69.0	92.4	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
59.4 LB-FT	144	119 LB-FT	146 LB-FT	60

SOUND PRESSURE @ 3 FT.	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APPROX. MOTOR WGT
65 dBA	74 dBA	2.70 LB-FT ²	125 LB-FT ²	20 SEC.	2	455 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	PROOF CL I GR CD CL II	NO	NONE	BLUE - RAL 5003 (EPOXY)

DE	ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6309	BALL 6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (NIC)	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
0.341	0.203	1.037	1.25	26.98	0.080	ODE

NOTES	INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1					
	INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE PPR					

PREPARED BY: _____	BRAKE: NONE
DATE: 10/29/2021	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

Data Sheet

Date: 10/29/2021
 Customer: _____
 Attention: _____
 Submitted by: _____



256TTGCD6528

Submittal

Data @ 460 V

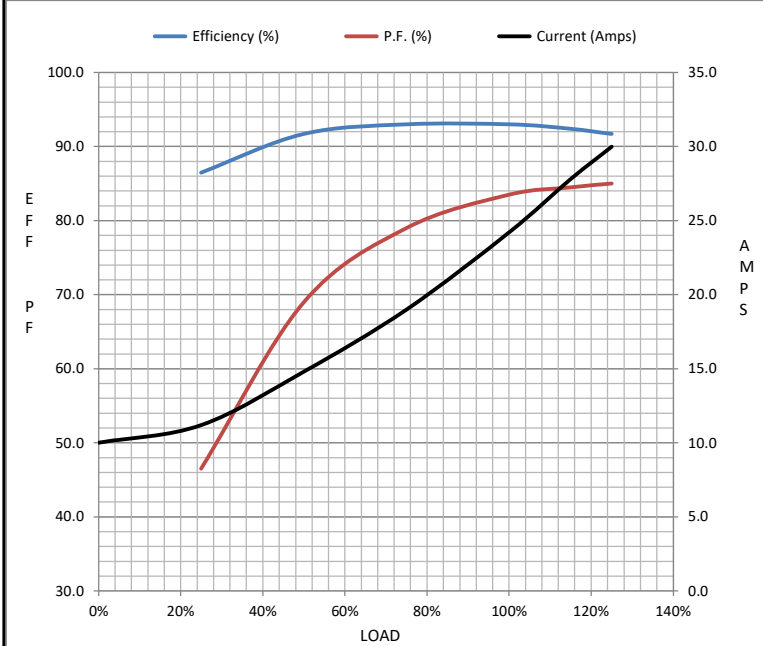
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.0	11.2	14.8	19.0	24.2	27.8	30.0	144
Torque (ft-lb)	0.00	14.6	29.5	44.4	59.4	68.5	74.7	119
RPM	1800	1792	1785	1778	1768	1,762	1760	0
Efficiency (%)		86.5	91.7	93.0	93.0	92.4	91.7	
P.F. (%)	5.0	46.5	69.0	79.0	83.5	84.5	85.0	42.0

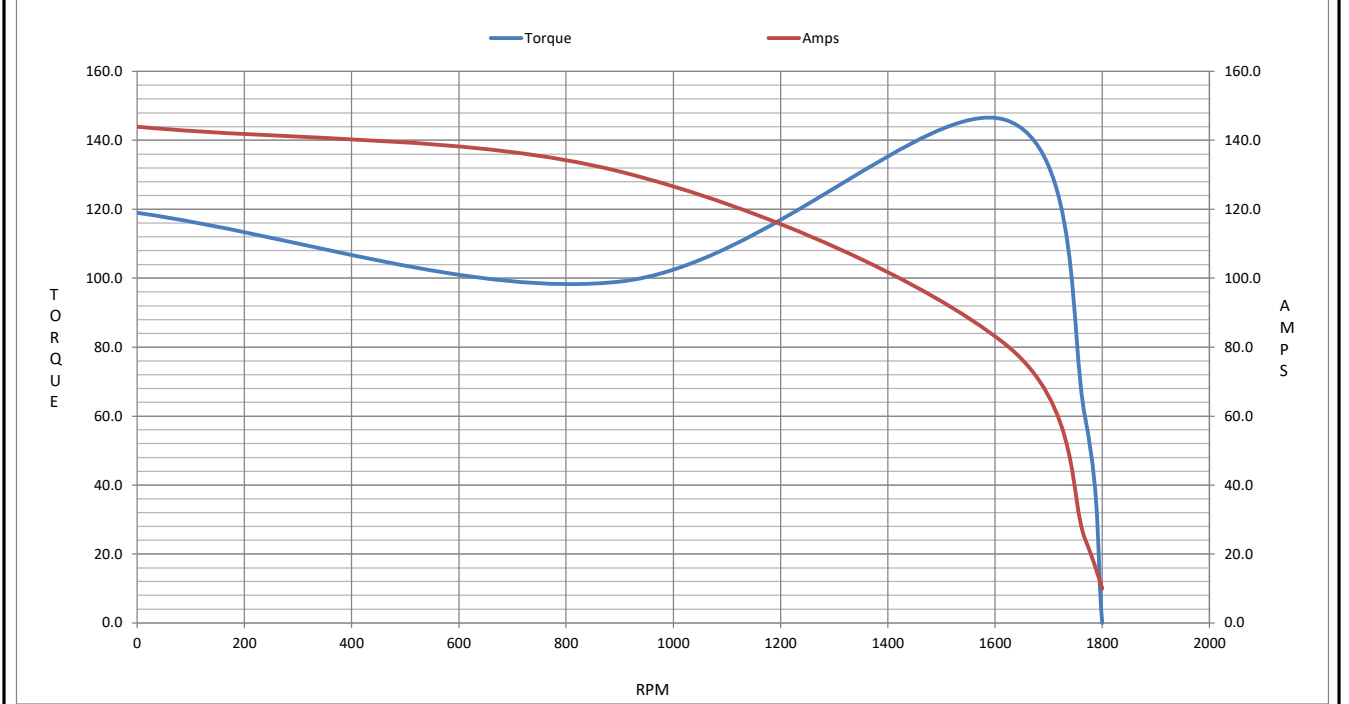
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1618	1768	1800
Current (Amps)	144	131	81.0	24.2	10.0
Torque (ft-lb)	119	99.0	146	59.4	0.00

Information Block				
HP	20.0			
Sync. RPM	1800			
Frame	256			
Enclosure	EPFC			
Construction	TFC			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	60 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	2.70 Lb-F ²			
Ref Wdg	HA31604018 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 10:1/VARIABLE 10:1			
Outline Dwg	SS203036-1225			
Conn. Diag	EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3410	0.2030	1.0370	1.2500	26.9800



Speed - Torque Curve



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 256TTGCD6528 (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

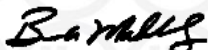
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Look for the UL Certification Mark on the product.

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

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