

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 256TTGN16034

Catalog No: C328B

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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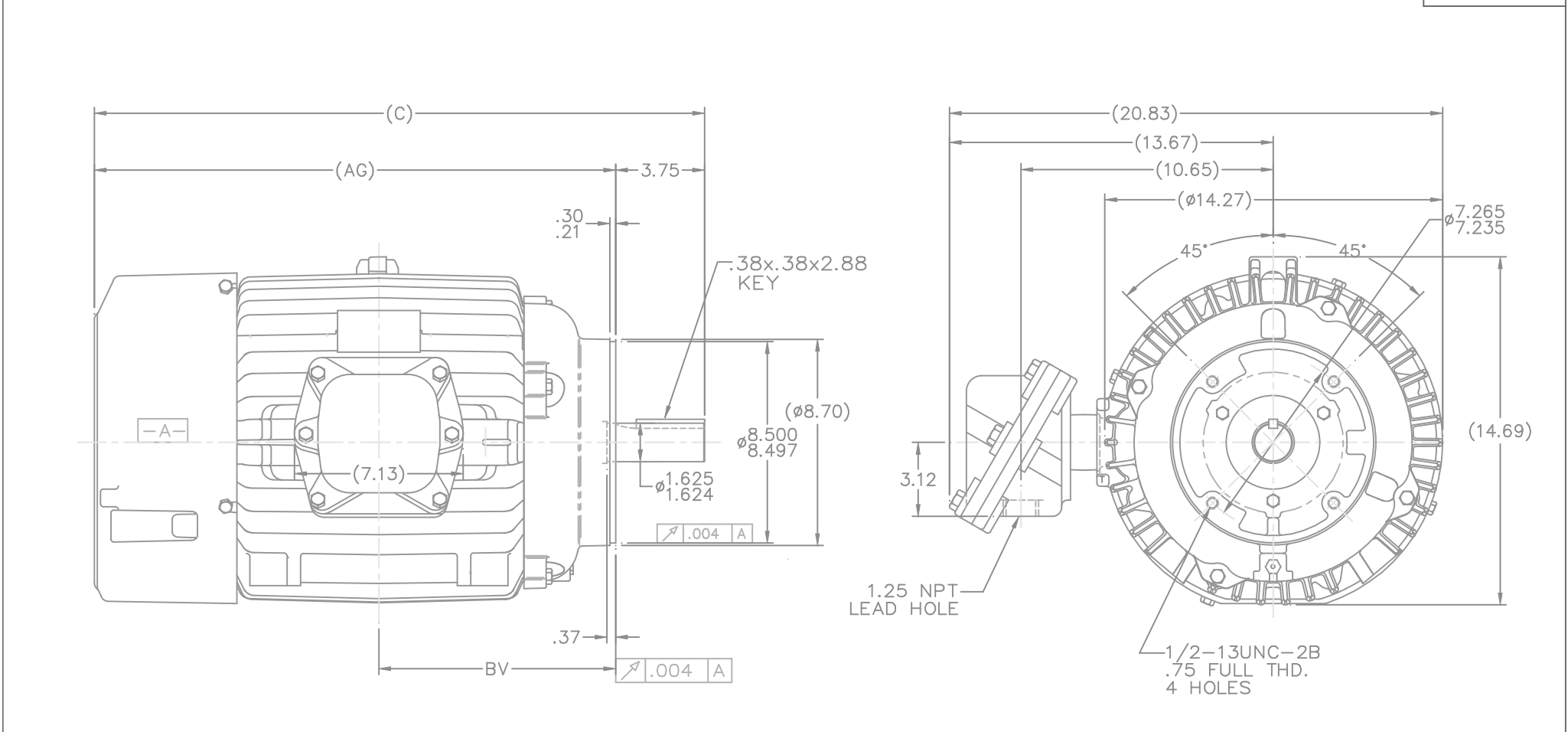
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	20 & 15 Hp
Output KW	14.9 & 11.2 kW	Voltage	230/460 & 190/380 V
Speed	1775 & 1470 rpm	Service Factor	1.0 & 1.0
Frame	256TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	93 & 92.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	48/24.1 & 44/22 A	Power Factor	84
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	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	.474 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	25.77 in
Frame Length	12.25 in	Shaft Diameter	1.625 in
Shaft Extension	3.75 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 2:1		
Connection Drawing	A-EE7308T	Outline Drawing	B-SS207446-1225



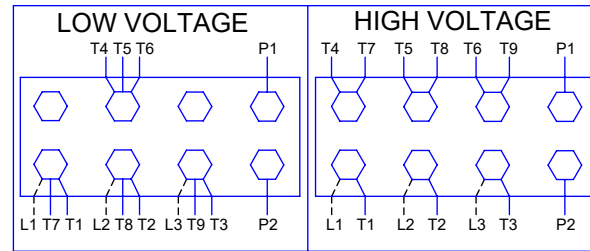
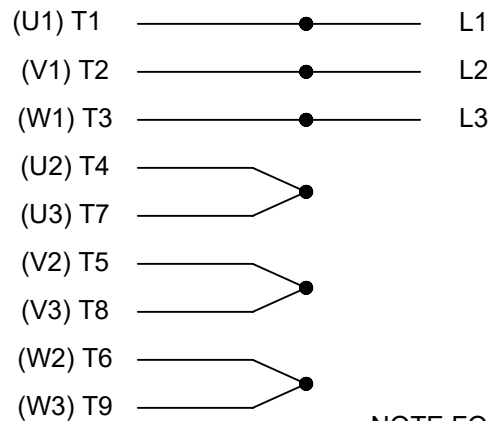
NOTES:

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

DASH	FRAME	C	AG	BV	
1225	254-6TC	25.77	22.02	10.00	

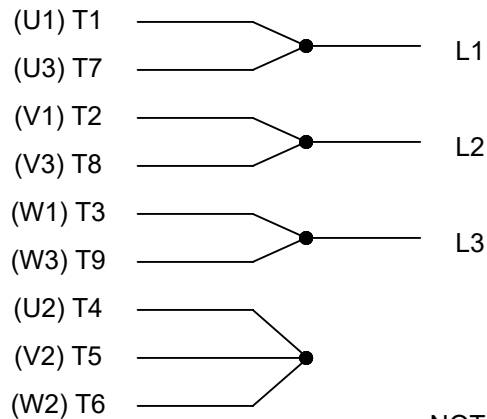
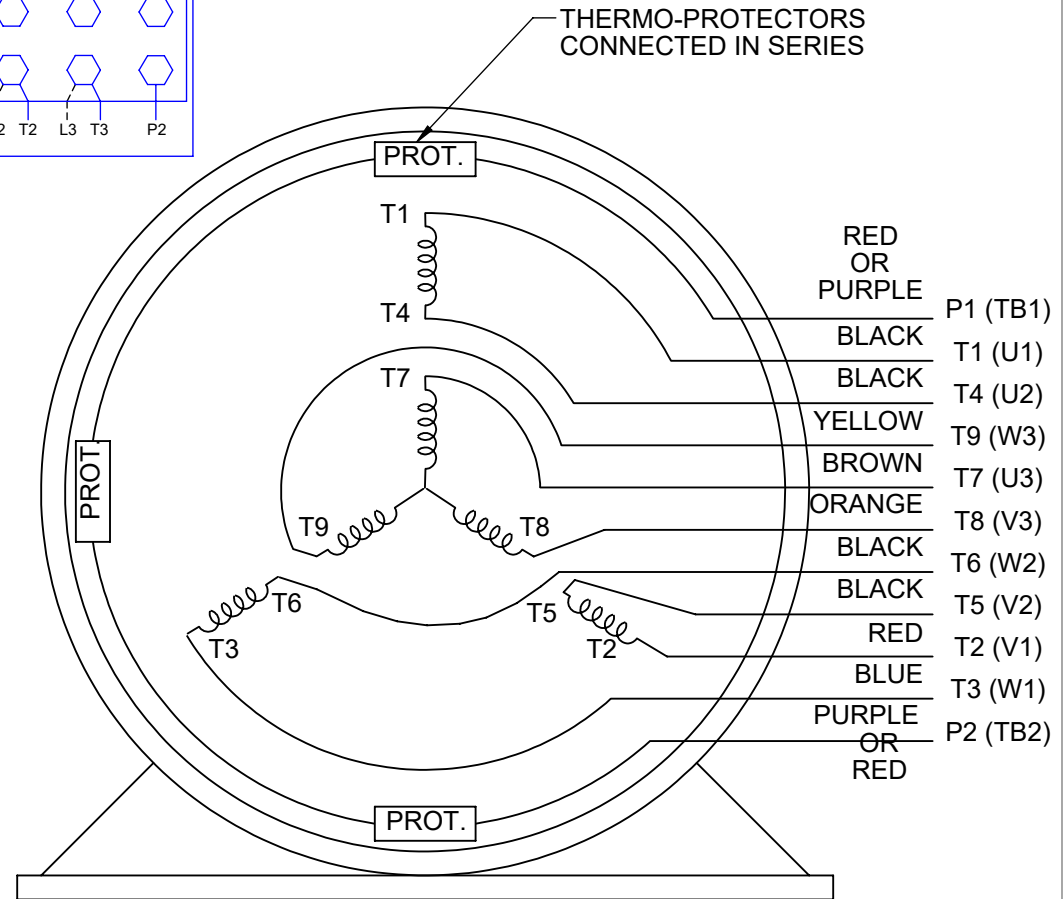
					DEC.	INCHES		CHK	ML 02-06-1998					
					J	±.1		APPD	TB 02-06-1998					
					XX	±.03	TITLE OUTLINE 254-6TC FR. -EXP. PR. - 'C' FACE	SCALE	1=4					
2	REDRAWN IN AUTOCAD		RWR 09-27-2004		XXX	±.005		REF						
1	NEW DRAWING MU18309		MH 02-06-1998	ML	XXX	±.0005	MATL.	FIMF						
NO.	REVISION		BY & DATE	CHK	ANG	±7'30"	FINISH		PREV					
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							DIST	LB			B	SS207446		2

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

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™ 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#: 256TTGN16034 AA
CONN. DIAGRAM: A-EE7308T
OUTLINE: B-SS207446-1225

WINDING#: K2564164 NONE 6
ASSEMBLY: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&15	14.9&11.2	1800	1775&1475	256TC	EPFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	48/24.1&44/22	LINE OR INVERTER	CONTINUOU S	F3	1.0/1.0	40	3300

FULL LOAD EFF: 93&92.5	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 84&83.5	3/4 LOAD PF: 81	1/2 LOAD PF: 72	92.4	SQ CAGE INV RATED	17 / 8.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
59.2 LB-FT	276 / 138	105 LB-FT 177	146 LB-FT 247	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	3.2 LB-FT^2	125 LB-FT^2	25 SEC.	2	400 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	FALSE	EXP PROOF CL I GR C&D CL II GR F&G T3B	FALSE	NONE	BLUE (ENAMEL)

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
6309	6210						

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

*
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S
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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: 06/23/2017 07:19:42 AM
 FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 6/20/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



256TTGN16034

Submittal

Data @ 460 V

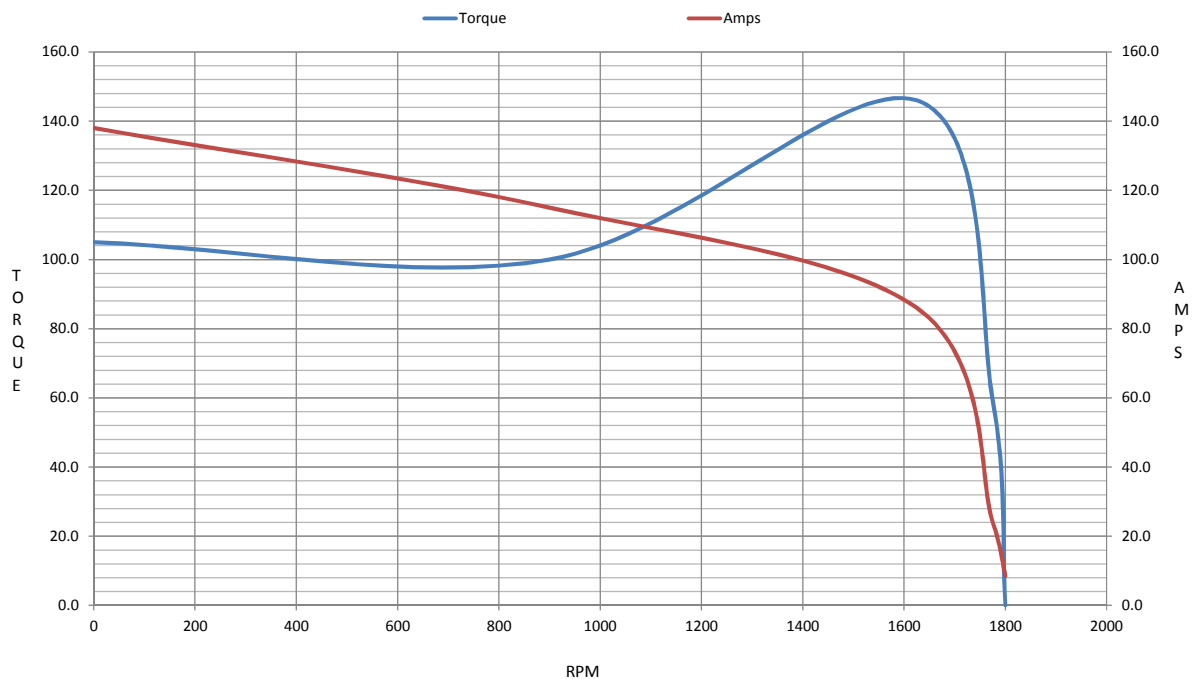
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	8.5	10.5	14.0	18.5	24.1	27.0	30.0	138	
Torque (ft-lb)	0.00	14.5	29.5	44.5	59.2	68.0	74.5	105	
RPM	1800	1795	1785	1780	1775	1,770	1760	0	
Efficiency (%)		90.0	93.0	93.6	93.0	92.4	91.7		
P.F. (%)	8.5	51.0	72.0	81.0	84.0	84.5	85.0	40.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block																																
Speed (RPM)	0	900	1625	1775	1800	HP	20.0																															
Current (Amps)	138	115	86.0	24.1	8.5	Sync. RPM	1800																															
Torque (ft-lb)	105	100	146	59.2	0.00	Frame	256																															
<div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div><table><thead><tr><th>LOAD</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>20%</td><td>90.0</td><td>50.0</td><td>10.0</td></tr><tr><td>40%</td><td>93.0</td><td>75.0</td><td>14.0</td></tr><tr><td>60%</td><td>94.0</td><td>82.0</td><td>18.0</td></tr><tr><td>80%</td><td>93.5</td><td>85.0</td><td>22.0</td></tr><tr><td>100%</td><td>93.0</td><td>86.0</td><td>26.0</td></tr><tr><td>120%</td><td>92.0</td><td>85.0</td><td>30.0</td></tr></tbody></table></div>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	20%	90.0	50.0	10.0	40%	93.0	75.0	14.0	60%	94.0	82.0	18.0	80%	93.5	85.0	22.0	100%	93.0	86.0	26.0	120%	92.0	85.0	30.0	Enclosure	TEFC			
						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)																													
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						100%	93.0	86.0	26.0																													
						120%	92.0	85.0	30.0																													
						Construction	TFN																															
						Voltage	30/460#190/381V																															
						Frequency	60 Hz																															
						Design	B																															
						LR Code letter	G																															
						Service Factor	1.15																															
						Temp Rise @ FL	65 ° C																															
						Duty	CONT																															
						Ambient	40 ° C																															
Elevation	1,000 feet																																					
Rotor/Shaft wk²	3.2 Lb-Ft²																																					
Ref Wdg	K2564164 NONE																																					
Sound Pressure @ 1M	65 dBA																																					
VFD Rating	CONSTANT 2:1																																					
Outline Dwg	B-SS207446-1225																																					
Conn. Diag	A-EE7308T																																					
Additional Specifications:																																						
0																																						
0																																						
EQUIV CKT (OHMS / PHASE)																																						
R1		R2		X1		X2		Xm																														
0.2670		0.2070		0.9900		1.4910		28.4000																														

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 256TTGN16034 (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

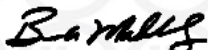
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Look for the UL Certification Mark on the product.

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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