

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 184TTGN6544

Catalog No: U990-P

Hazardous Duty® Explosion Proof Motor, 5 & 3 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
1800 & 1500 RPM, 184T Frame, EPFC



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**RegalRexnord**

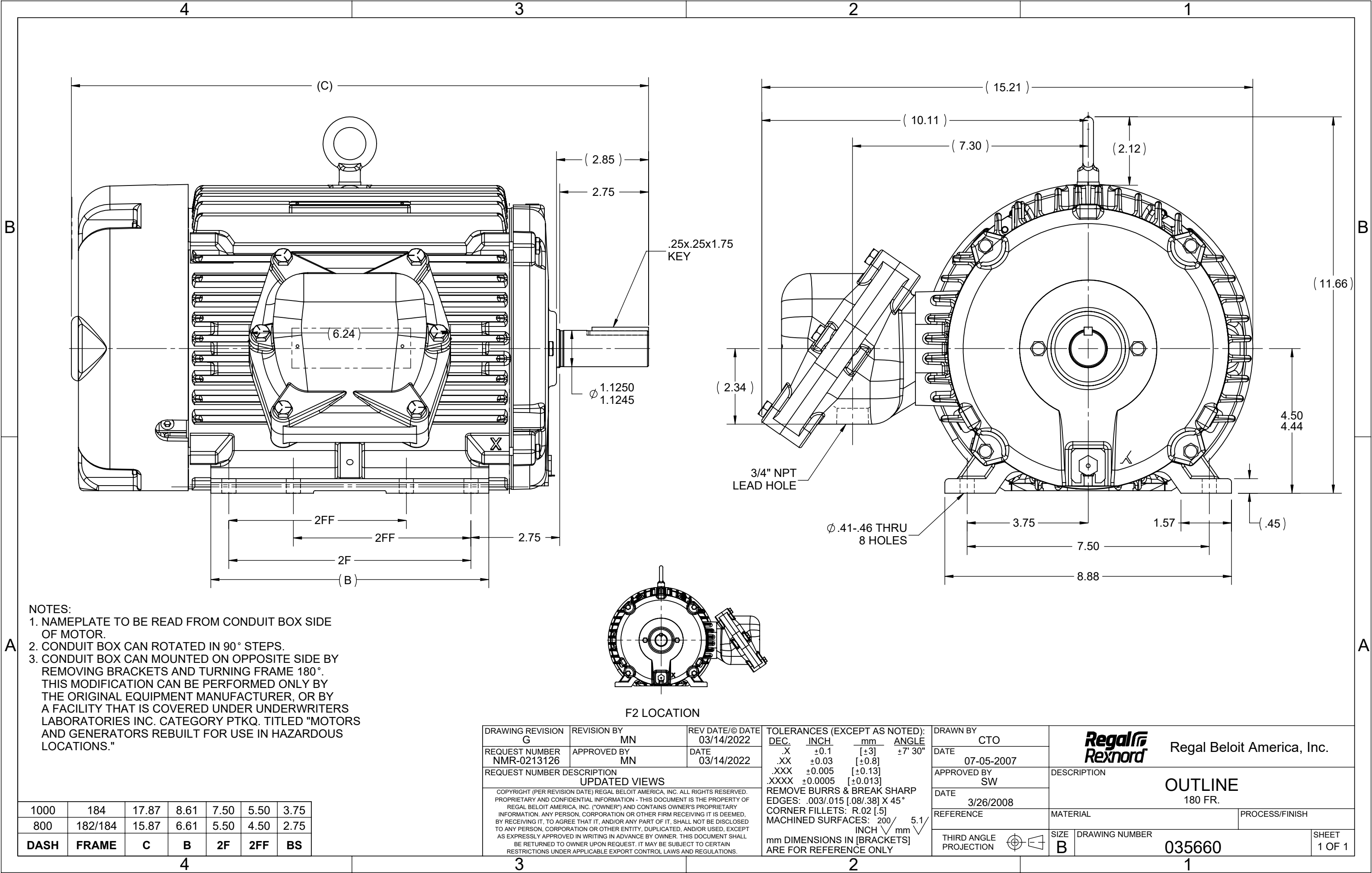
## Nameplate Specifications

Phase	3	Output HP	5 & 3 Hp
Output KW	3.7 & 2.2 kW	Voltage	230/460 & 190/380 V
Speed	1755 & 1465 rpm	Service Factor	1.15 & 1.15
Frame	184T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	90.2 & 90.2 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	12.4/6.2 & 9.6/4.8 A	Power Factor	83.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	J
Drive End Bearing Size	6206	Opp Drive End Bearing Size	6206
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

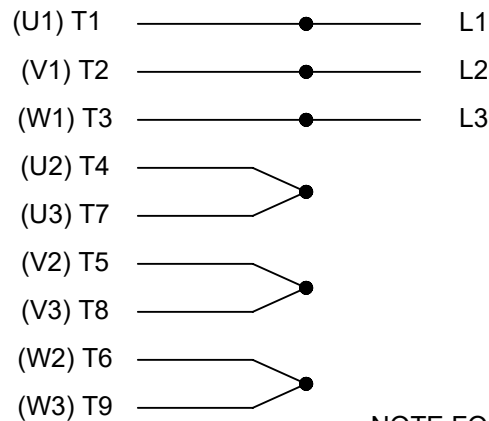
## Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	2.62 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	17.87 in
Frame Length	10.00 in	Shaft Diameter	1.125 in
Shaft Extension	2.85 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 10:1		
Outline Drawing	035660-1000	Connection Drawing	A-EE7308T





## 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 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#: 184TTGN6544 AA  
 CONN. DIAGRAM: A-EE7308T  
 OUTLINE: 035660-1000

WINDING#: K1844215 NONE 1  
 ASSEMBLY: F1 ONLY

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
5&3	3.7&2.24	1800	1755&1465	184T	EPFC	J	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	12.4/6.2&9.6/4 .8	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 90.2&90.2	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 83.5&79	3/4 LOAD PF: 78.5	1/2 LOAD PF: 70	89.5	SQ CAGE INV RATED	5.6 / 2.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
15 LB-FT	92 / 46	34.5 LB-FT 230	45 LB-FT 300	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.5 LB-FT^2	50 LB-FT^2	25 SEC.	2	130 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	TRUE	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	1144 STRESSPROOF (C-223)	CAST IRON
6206	6206						

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 10:1 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: 06/28/2017 07:37:34 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

## Data Sheet

Date: 6/19/2017

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



184TTGN6544

Submittal

Data @ 460 V

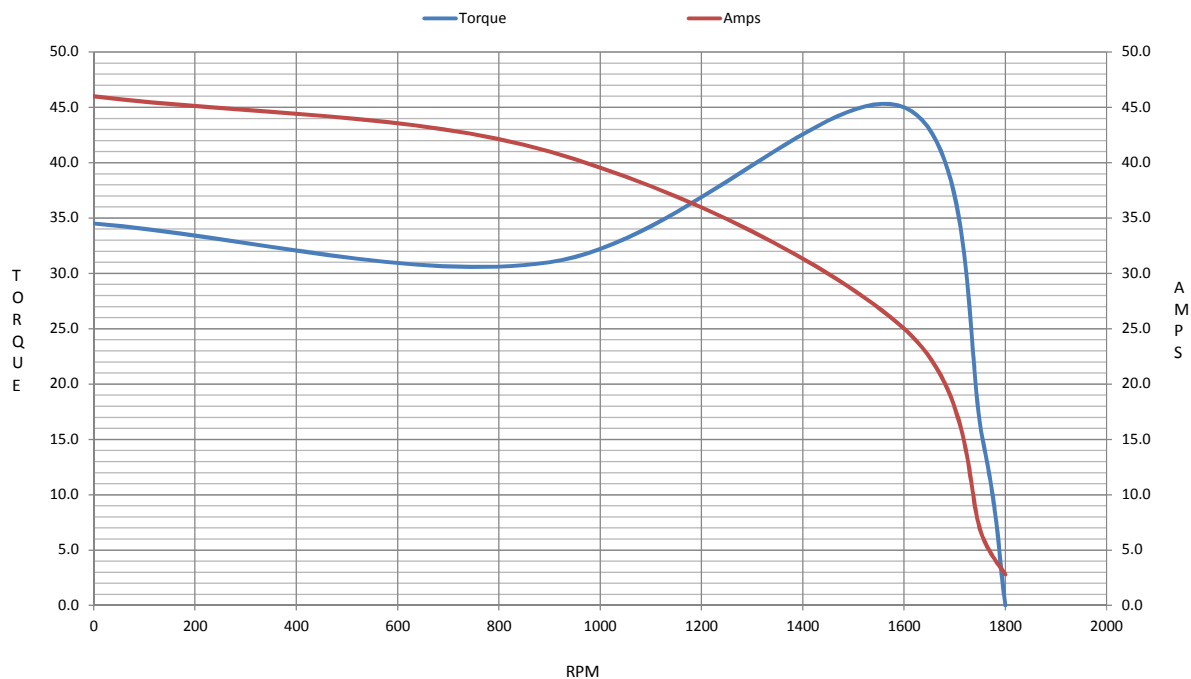
## Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	2.80	3.0	3.8	5.0	6.2	7.2	7.8	46.0	
Torque (ft-lb)	0.00	3.7	7.4	11.5	15.0	17.5	19.0	34.5	
RPM	1800	1790	1780	1765	1755	1,745	1740	0	
Efficiency (%)		85.5	90.2	90.2	90.2	89.5	88.5		
P.F. (%)	6.5	47.0	70.0	78.5	83.5	84.5	86.0	48.0	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																													
Speed (RPM)	0	900	1600	1755	1800	Information Block																												
Current (Amps)	46.0	41.0	25.0	6.2	2.80	HP	5.0																											
Torque (ft-lb)	34.5	31.0	45.0	15.0	0.00	Sync. RPM	1800																											
<div><div>— Efficiency (%) — P.F. (%) — Current (Amps)</div><table><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>25</td><td>85</td><td>2.0</td><td>3.0</td></tr><tr><td>50</td><td>90</td><td>6.5</td><td>4.5</td></tr><tr><td>75</td><td>90</td><td>7.5</td><td>6.0</td></tr><tr><td>100</td><td>90</td><td>8.0</td><td>7.5</td></tr><tr><td>125</td><td>88</td><td>8.5</td><td>8.0</td></tr></tbody></table></div>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	85	2.0	3.0	50	90	6.5	4.5	75	90	7.5	6.0	100	90	8.0	7.5	125	88	8.5	8.0	Frame	184			
						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)																									
						25	85	2.0	3.0																									
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						100	90	8.0	7.5																									
						125	88	8.5	8.0																									
						Enclosure	TEFC																											
						Construction	TFN																											
						Voltage	30/460#190/381 V																											
						Frequency	60		Hz																									
						Design	B																											
						LR Code letter	J																											
						Service Factor	1.15																											
						Temp Rise @ FL	50		° C																									
						Duty	CONT																											
						Ambient	40		° C																									
Elevation	1,000 feet																																	
Rotor/Shaft wk²	0.50		Lb-Ft²																															
Ref Wdg	K1844215 NONE																																	
Sound Pressure @ 1M	62		dBA																															
VFD Rating	CONSTANT 10:1																																	
Outline Dwg	035660-1000																																	
Conn. Diag	A-EE7308T																																	
Additional Specifications:																																		
0																																		
EQUIV CKT (OHMS / PHASE)																																		
R1	R2	X1	X2	Xm																														
1.5080	1.1280	3.6910	5.6930	104.3280																														

## Speed -Torque Curve





# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20220221- E12044  
**Report Reference** E12044-20090313  
**Issue Date** 2022-FEBRUARY-21

**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 184TTGN6544 (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

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