

PRODUCT INFORMATION PACKET

Model No: 254TTGCD6531

Catalog No: E503A

Hazardous Duty® Explosion Proof Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 254T Frame, EPFC



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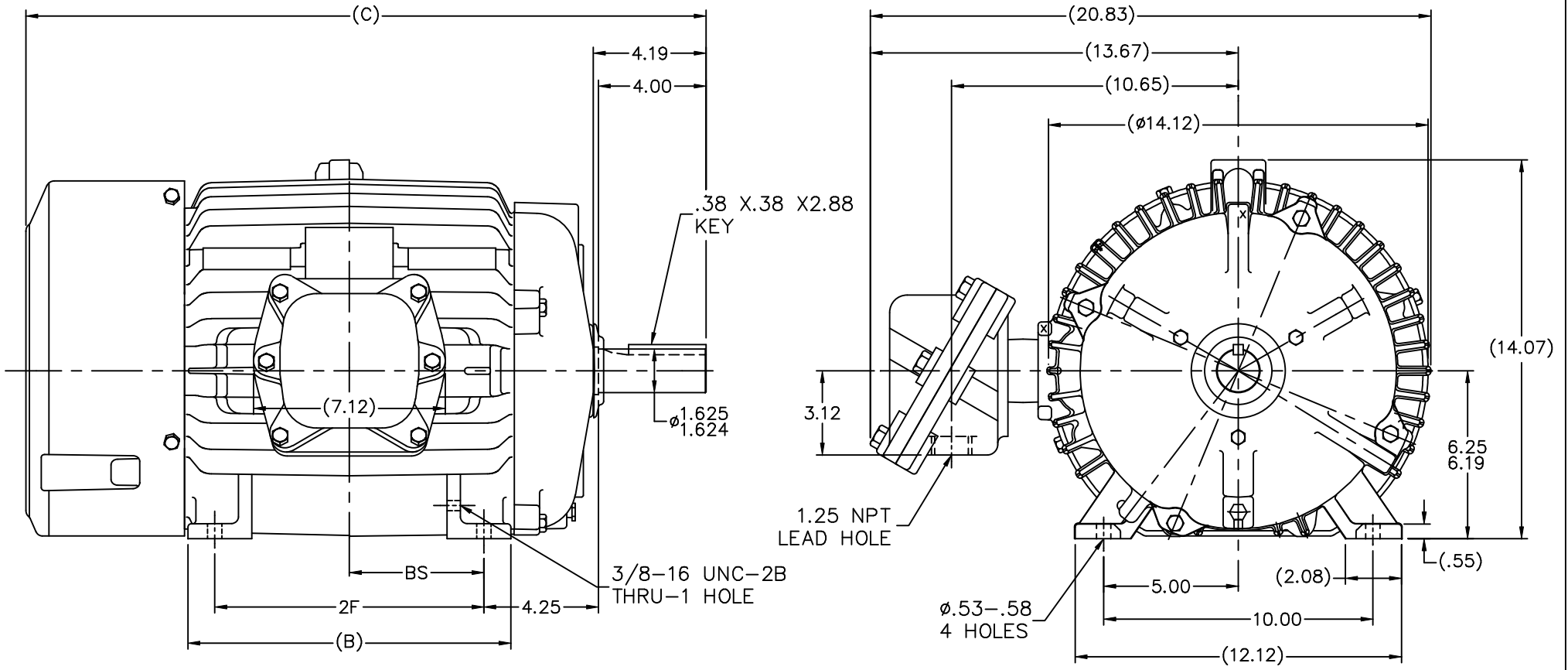
Nameplate Specifications

Phase	3	Output HP	15 & 10 Hp
Output KW	11.2 & 7.5 kW	Voltage	230/460 & 190/380 V
Speed	1770 & 1475 rpm	Service Factor	1.00 & 1.00
Frame	254T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	92.4 & 91.8 %
Ambient Temperature	50 °C	Frequency	60 & 50 Hz
Current	36.5/18.4 & 31/15.5 A	Power Factor	83
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	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.713 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	EE7308AD	Outline Drawing	SS203001-1050

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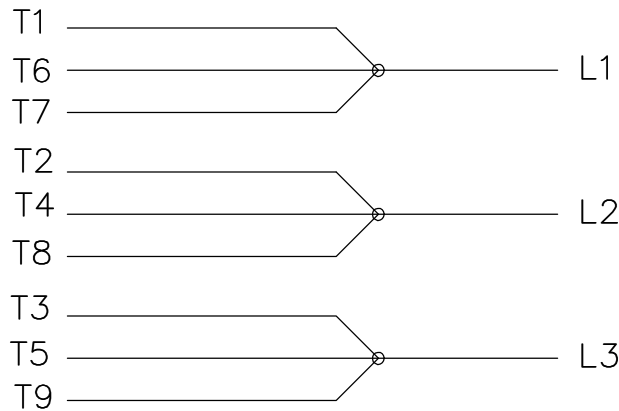
- NOTES:
 1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

(B-SS203004)

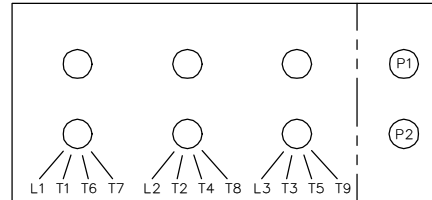
DASH	FRAME	B	C	2F	BS
1050	254T	10.25	23.52	8.25	4.12
1225	256T	12.00	25.27	10.00	5.00

		TOLERANCES UNLESS SPECIFIED				DRAWN TJB 04-04-2000				
		DEC.	INCHES			CHK ML 04-04-2000				
		.X	±.1	TITLE OUTLINE - EXP.PR		APPD TB 04-04-2000				
		.XX	±.03	250T FR. - BB - TS - STD.		SCALE 9-32				
		.XXX	±.005	MATL		REF				
1	NEW DRAWING MU29933	TJB	04-06-2000	ML	.XXXX ±.0005	FMF				
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	PREV				
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT				RFP	04-04-2000	CAD FILE SS203001LN	SIZE B	DRAWING NO. SS203001LN	PAGE OF 1	REV. 1

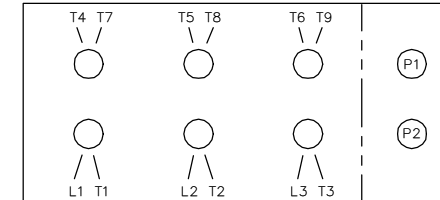
LOW VOLTAGE



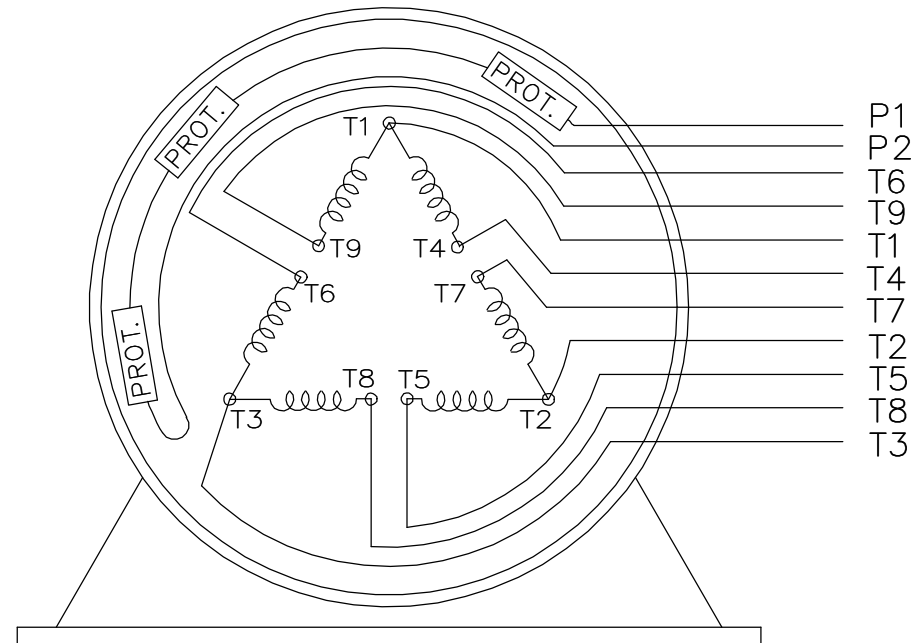
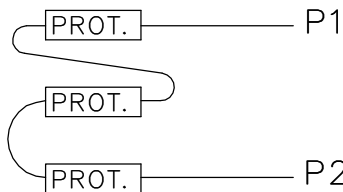
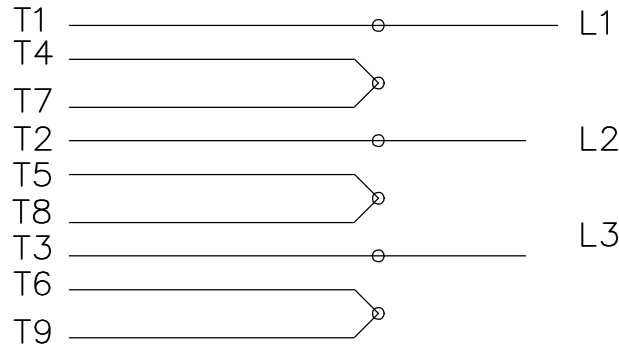
LOW VOLTAGE



HIGH VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

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

DRAWING REVISION L	REVISION BY JP	REV DATE/© DATE 06-21-2019	TOLERANCES (EXCEPT AS NOTED): DEC. INCH mm ANGLE .X ±0.1 [±3] ±7' 30" .XX ±0.02 [±0.5] .XXX ±0.005 [±0.13] .XXXX ±0.0005 [±0.013]	DRAWN BY MJD	Regal Beloit America, Inc.
ECO ECO-0168744	APPROVED BY MH	DATE 06-21-2019		DATE 12-19-1997	
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS			REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45° CORNER FILLETS: R.02 [.5] MACHINED SURFACES: 200/ 5.1 INCH/mm	APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL
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			SIZE A	DRAWING NUMBER EE7308AD	SHEET 1 OF 1



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____
ORDER #: _____
CONN. DIAGRAM: EE7308AD
OUTLINE: SS203001-1050
WINDING: HA31604019 NONE 2
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: 254TTGCD6531
CAT #: E503A
CUSTOMER PART #: _____
MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
15	11.2	1800	1772	254T	EPFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	37.5/18.8&31/15.4	ACROSS THE LINE	CONT	F	1.15	50	3300

F.L. EFF	92.4	3/4 LD EFF	92.4	1/2 LD EFF	91.7	GTD EFF	ELECT. TYPE
F.L. PF	83.0	3/4 LD PF	76.5	1/2 LD PF	65.5	91.7	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
44.5 LB-FT	116	110 LB-FT	138 LB-FT	55

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
65 dBA	74 dBA		2.40 LB-FT²	110 LB-FT²	20 SEC.	2	400 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	PROOF CL I GR CD CL II	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
0.44	0.244	1.304	1.467	31.563	0.080	ODE

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

PREPARED BY: _____	BRAKE: NONE	NONE	NONE
DATE: 7/26/2022	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: 7/27/2022
 Customer: _____
 Attention: _____
 Submitted by: _____



254TTGCD6531

Submittal

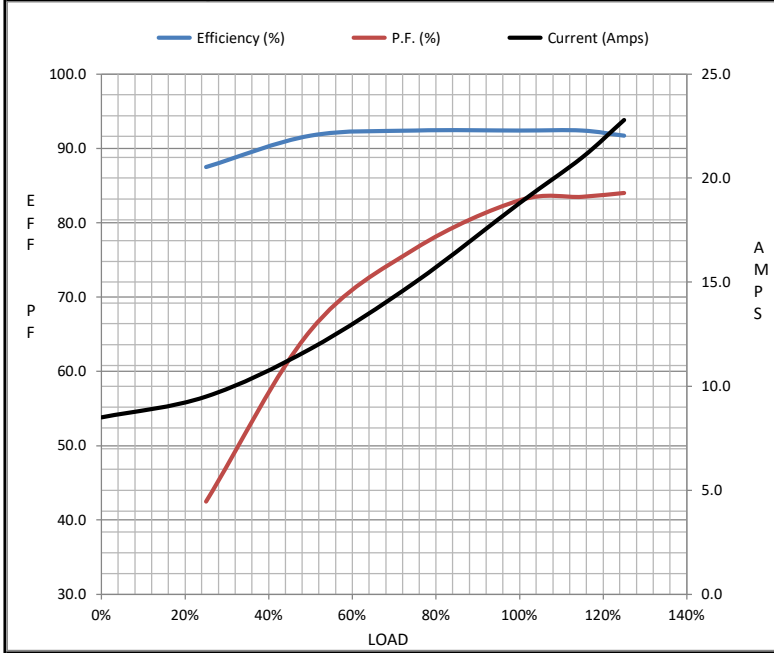
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	8.5	9.5	11.8	15.0	18.8	21.0	22.8	116
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.5	51.5	56.0	110
RPM	1800	1792	1785	1780	1772	1,768	1762	0
Efficiency (%)		87.5	91.7	92.4	92.4	92.4	91.7	
P.F. (%)	5.0	42.5	65.5	76.5	83.0	83.5	84.0	41.0

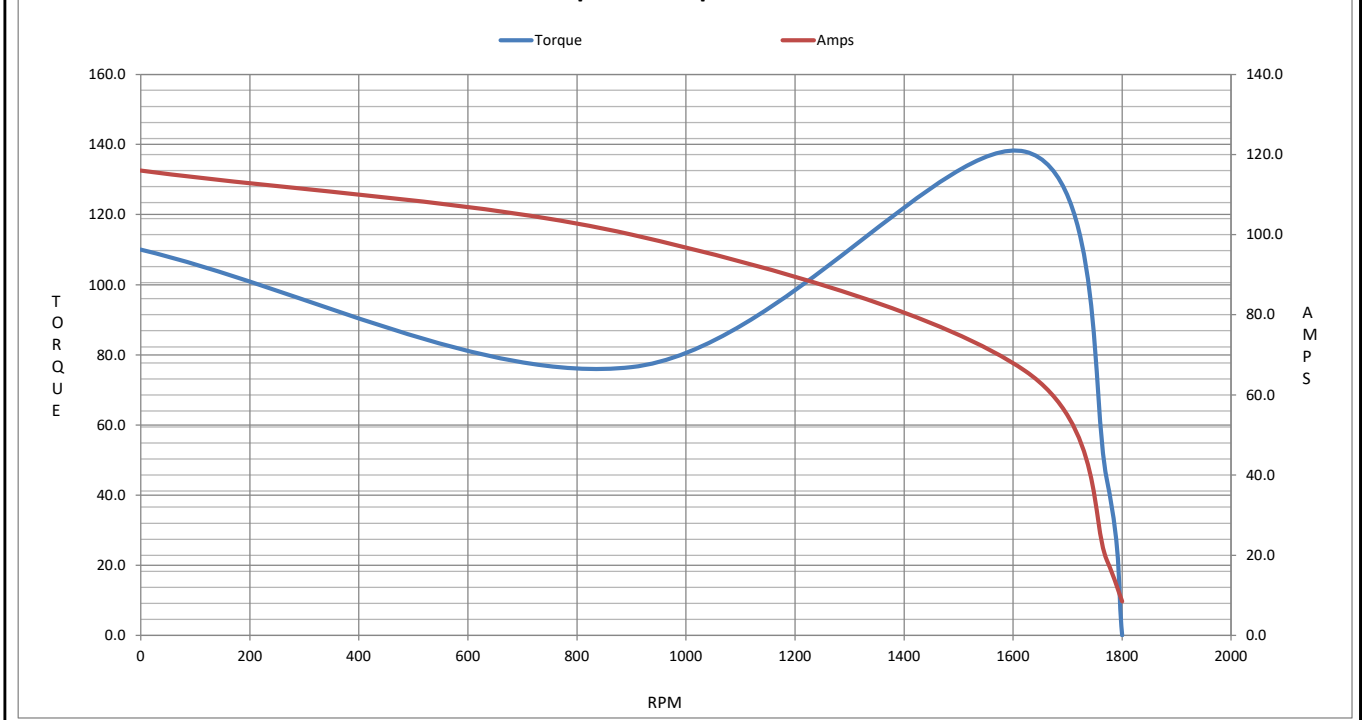
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block	
Speed (RPM)	0	900	1622	1772	1800	HP	15.0
Current (Amps)	116	100	66.0	18.8	8.5	Sync. RPM	1800
Torque (ft-lb)	110	76.5	138	44.5	0.00	Frame	254



Enclosure	EPFC			
Construction	TFC			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.0			
Temp Rise @ FL	55 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	2.40 Lb-Ft ²			
Ref Wdg	HA31604019 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	NONE			
Outline Dwg				
Conn. Diag	EE7308AD			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4400	0.2440	1.3040	1.4670	31.5630

Speed -Torque Curve



CERTIFICATE OF COMPLIANCE

Certificate Number 20220311- E12044
Report Reference E12044-19950413
Issue Date 2022-MARCH-11

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 254TTGCD6531 (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
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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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