

PRODUCT INFORMATION PACKET

Model No: 254TTGCD6531

Catalog No: E503A

Hazardous Duty® Explosion Proof Motor, 15 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 254T Frame, EPFC



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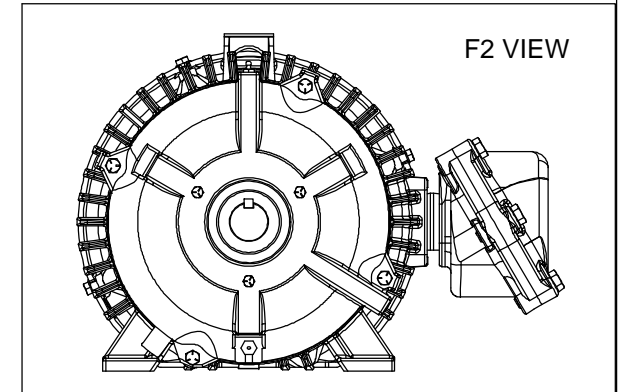
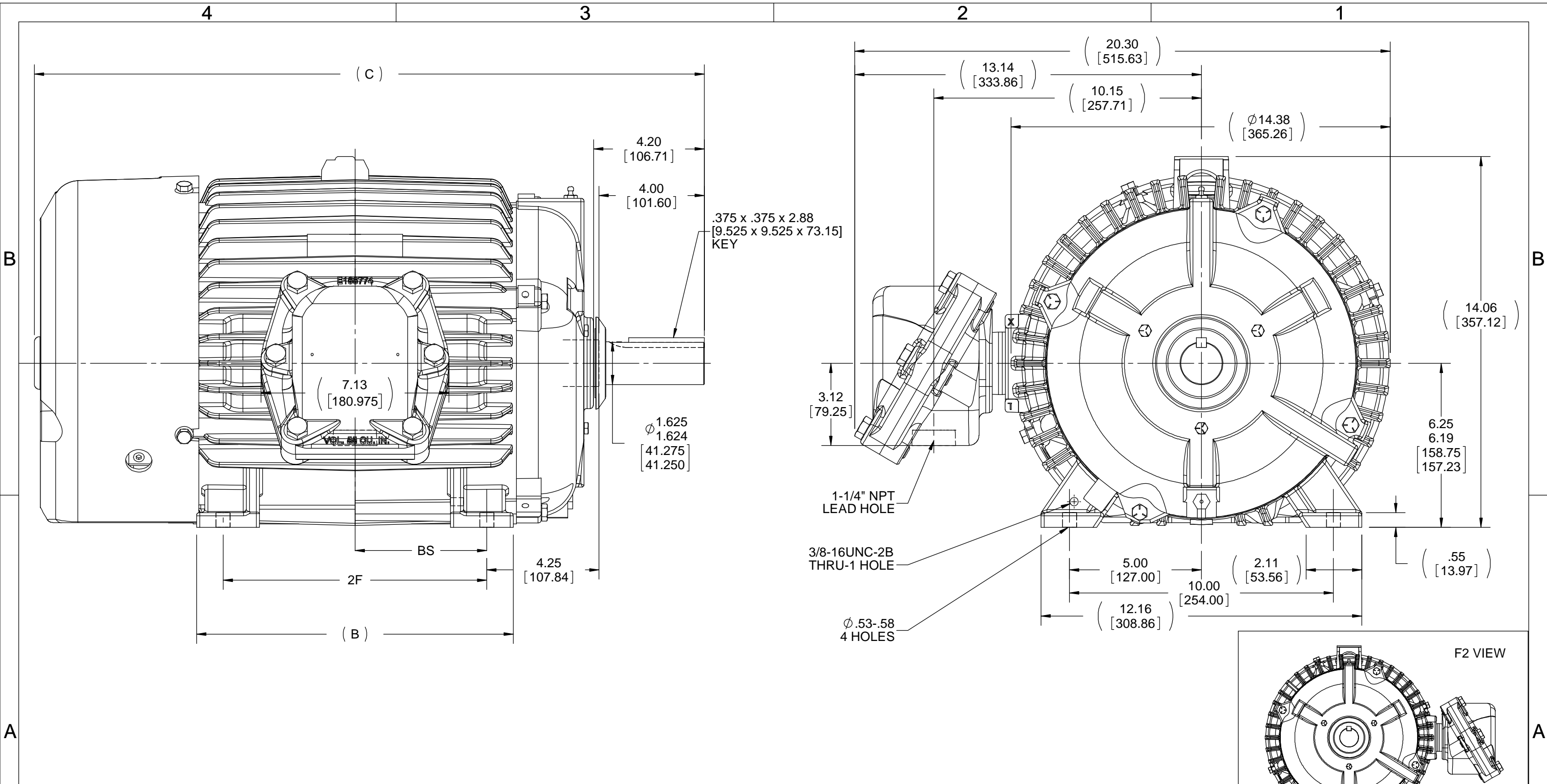


Nameplate Specifications

Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	230/460 V
Current	37.5/18.8 A	Speed	1772 rpm
Service Factor	1	Phase	3
Efficiency	92.4 %	Power Factor	82
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	254T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Ambient Temperature	50 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR FG T3C	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	.61 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		
Connection Drawing	EE7308AD	Outline Drawing	SS203001-1050



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		

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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	± 0.1	[± 2.5]	$\pm 7' 30"$
.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 [51]
 MACHINED SURFACES: 200 INCH $\sqrt{\text{mm}}$ 5.1
 mm SHOWN IN [BRACKETS]

DRAWN BY RM
DATE 12-14-1993
APPROVED BY FG
DATE 12-15-1993
REFERENCE
THIRD ANGLE PROJECTION

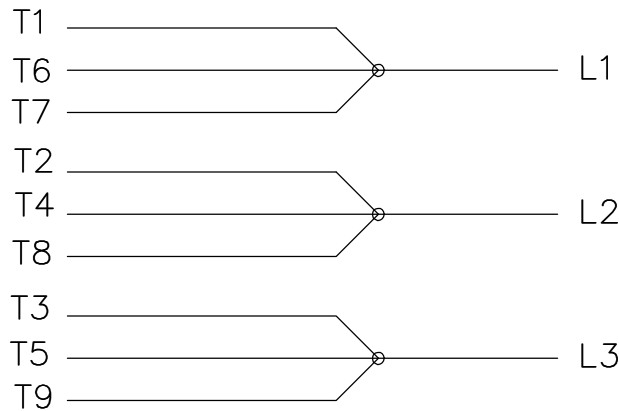
REGAL™ Regal Beloit America, Inc.

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

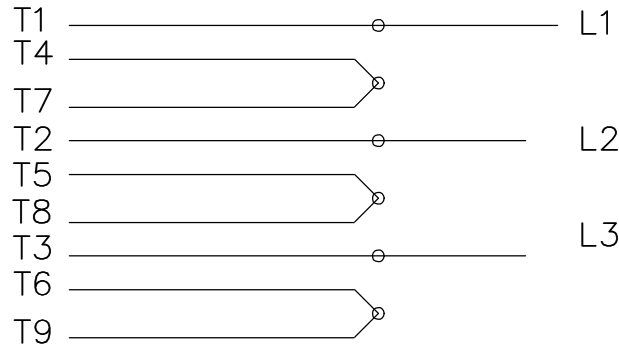
MATERIAL PROCESS/FINISH

SIZE B DRAWING NUMBER SS203001 SHEET 1 OF 1

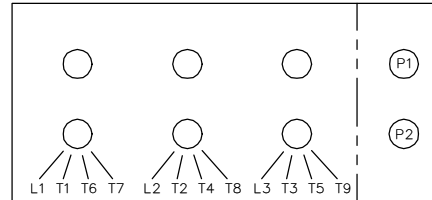
LOW VOLTAGE



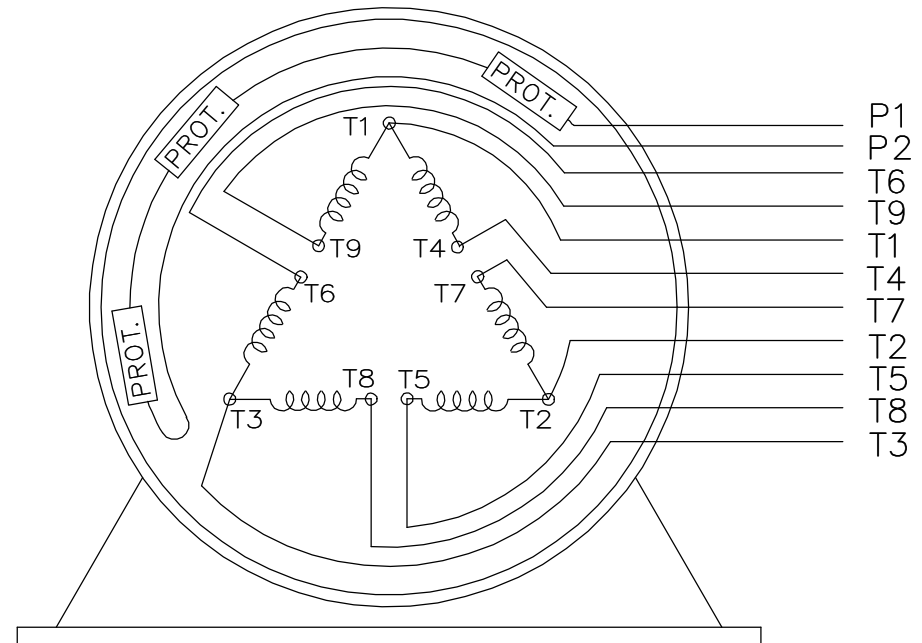
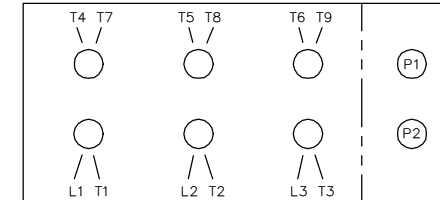
HIGH VOLTAGE



LOW 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	DRAWN BY MJD	 Regal Beloit America, Inc.		
ECO ECO-0168744	APPROVED BY MH	DATE 06-21-2019	.X ±0.1 [±3] .XX ±0.02 [±0.5] .XXX ±0.005 [±0.13] .XXXX ±0.0005 [±0.013]	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/ mm 5.1 INCH mm	APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL		
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				REFERENCE	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						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
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	

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

254TTGCD6531



Date: 7/27/2022
 Customer: _____
 Attention: _____
 Submitted by: _____

Submittal

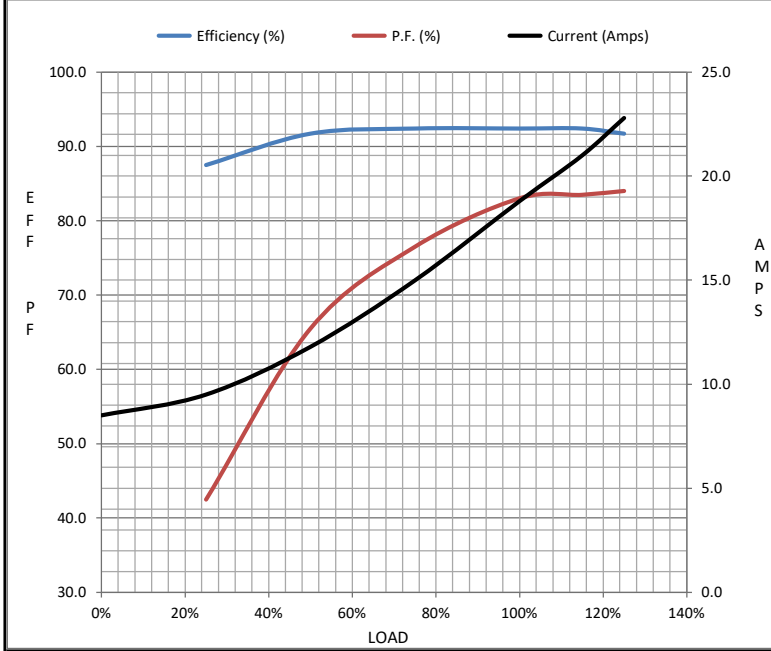
Data @ 460 V

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

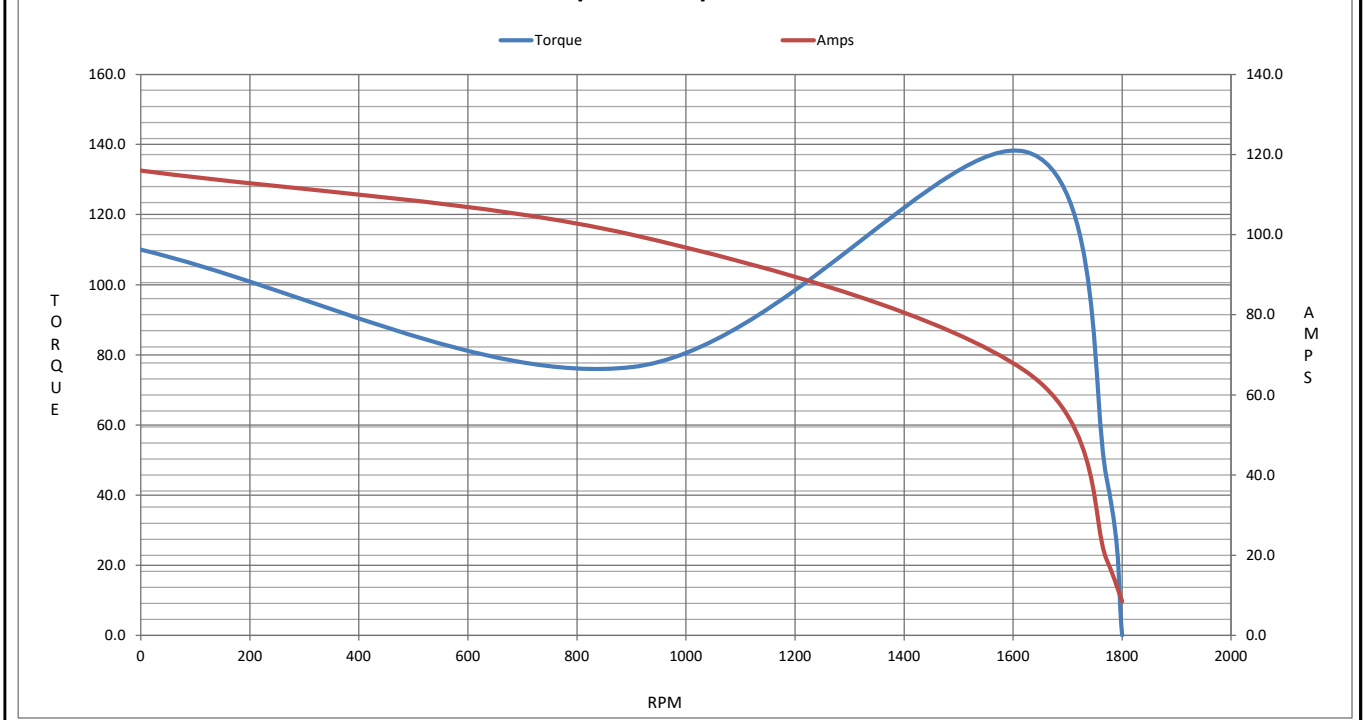
Motor Speed Data

	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

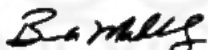
Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

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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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