

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 284TTGCD16539

Catalog No: U029B

Hazardous Duty[®] Explosion Proof Motor, 25 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 284T Frame, EPFC

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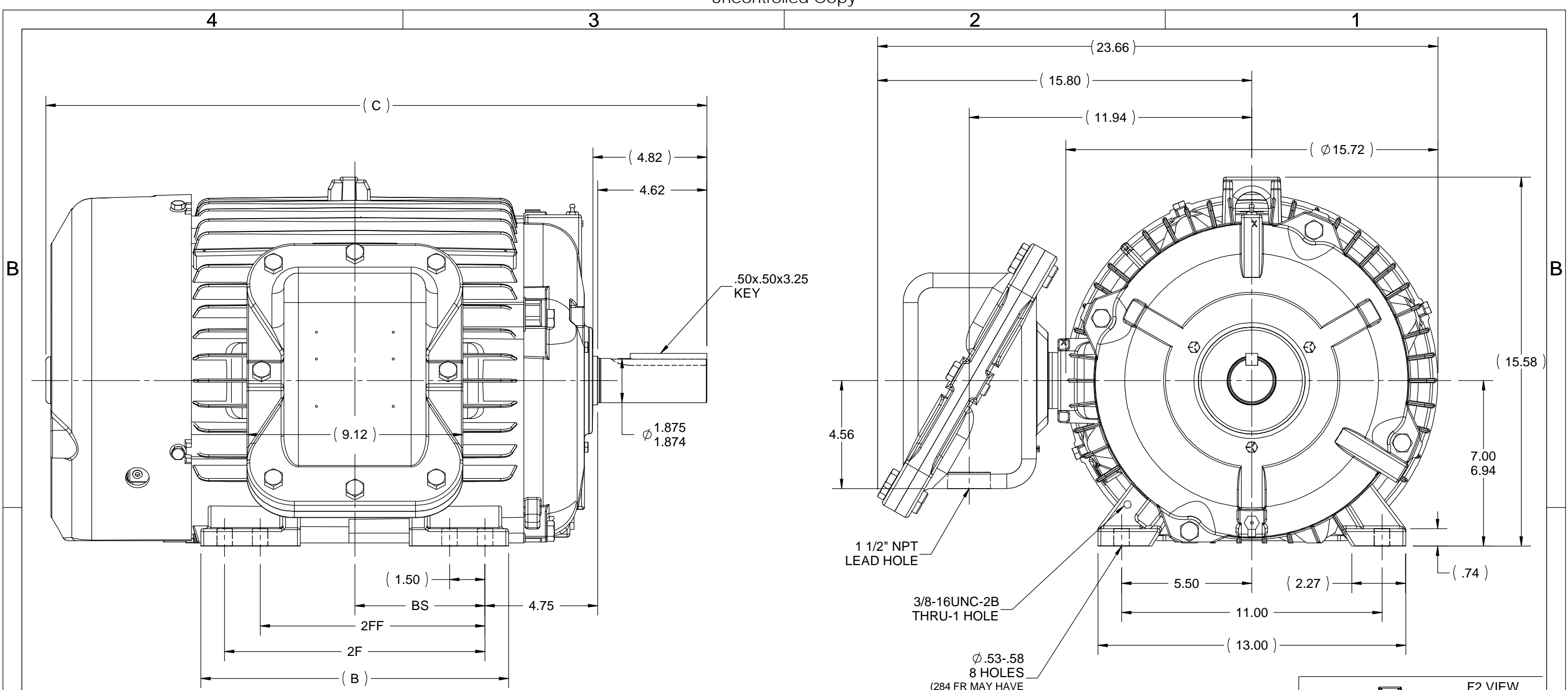
RegalRexnord

Nameplate Specifications

Output HP	25 Hp	Output KW	18.7 kW
Frequency	60 Hz	Voltage	575 V
Current	24.0 A	Speed	1772 rpm
Service Factor	1	Phase	3
Efficiency	93.6 %	Power Factor	83
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	284T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Ambient Temperature	50 °C
Drive End Bearing Size	6311	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	.2988 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	1.875 in
Assembly/Box Mounting	F1 ONLY		
Outline Drawing	SS311106-1275	Connection Drawing	EE7300T



- 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°. THIS MODIFICATION CAN BE PERFORMED ONLY BY THE ORIGINAL EQUIPMENT MANUFACTURER OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. CATEGORY PTKQ, TITLED "MOTORS AND GENERATORS, REBUILT FOR USE IN HAZARDOUS LOCATIONS".
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	BS	2F	2FF
1275	284T	12.50	26.43	4.75	9.50	---
1425	284/6T	13.00	27.93	5.50	11.00	9.50

DRAWING REVISION C	REVISION BY SD	REV DATE/© DATE 11/19/2019
ECO ECO-0177183	APPROVED BY VMR	DATE 11/19/2019
ECO DESCRIPTION TITLE BOX UPDATED PER ECO		
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TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7' 30"
.XX	±0.03	[±0.8]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°
 CORNER FILLETS: R.02 [.5]
 MACHINED SURFACES: 200 INCH/mm 5.1
 mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY
HLB

DATE
10/10/2002

APPROVED BY
DD

DATE
10/10/2002

REFERENCE

THIRD ANGLE PROJECTION

REGAL Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
280T FR. - BB - STD - 12.50 LAM

MATERIAL

PROCESS/FINISH

SIZE
B

DRAWING NUMBER
SS311106

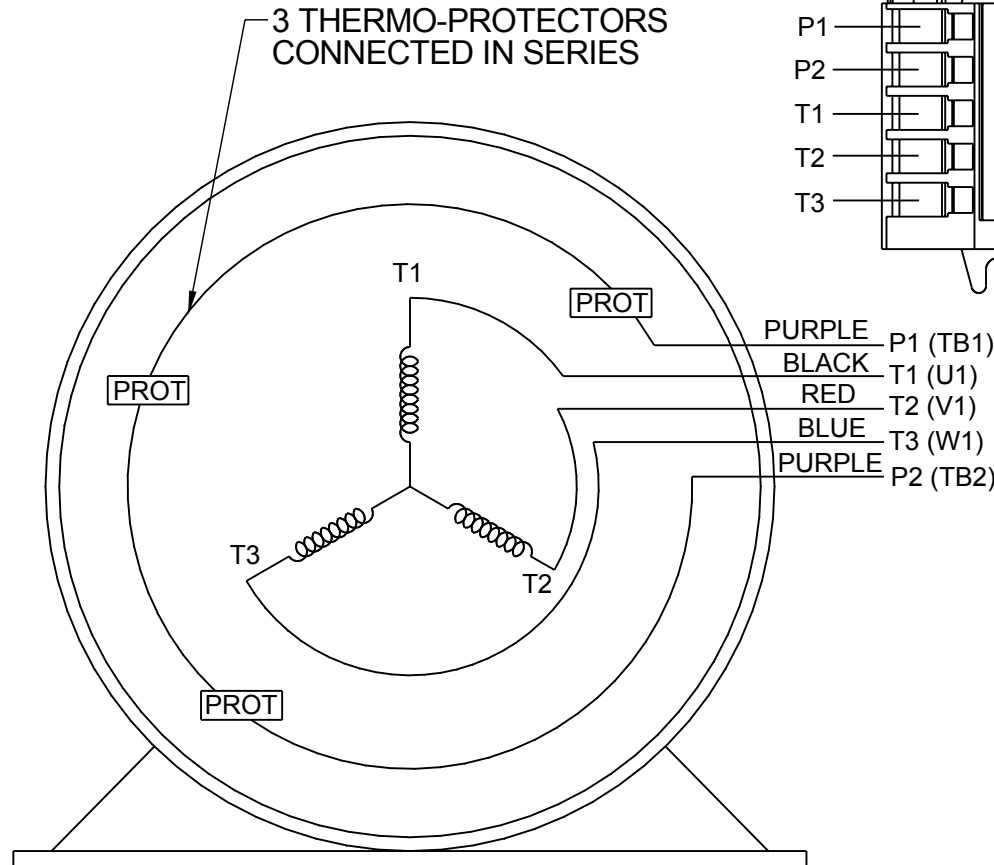
SHEET
1 OF 1

**THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS**

**NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1**

TERMINAL BLOCK WHEN SPECIFIED

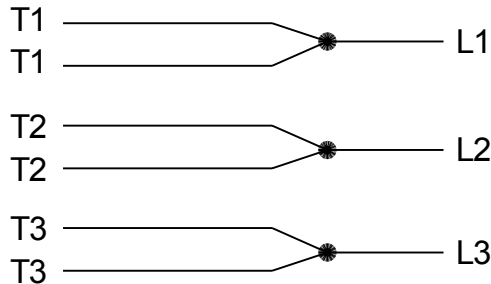


VIEW OF TERMINAL END

- PURPLE P1 (TB1)
- BLACK T1 (U1)
- RED T2 (V1)
- BLUE T3 (W1)
- PURPLE P2 (TB2)

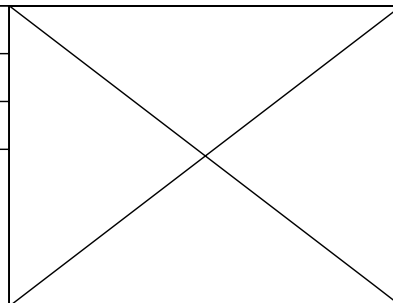
- T2BM
- T6AW
- T6AL
- T6Z
- T4EG
- T4BF
- T8A
- T6H
- T6A
- T4AX
- T4A
- T2A
- T2F

**IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S**



A-9806 DECAL

DRAWING REVISION AB	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T.VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC-60034-8		
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DRAWN BY LZ	Regal Beloit America, Inc.	
DATE 01-04-1994		
APPROVED BY GK	CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR	
DATE 01-20-1994	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE A	DRAWING NUMBER EE7300T
THIRD ANGLE PROJECTION	SHEET 1 OF 1	



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

DATA VOLTS: 575

CERTIFICATION DATA SHEET

CUSTOMER:
 ORDER #:
 CONN. DIAGRAM: EE7300T
 OUTLINE: SS311106-1275
 WINDING: HA31804014 NONE 4
 SPEED: _____

CUSTOMER P.O. #:
 REFERENCE MODEL #: 284TTGCD16539
 CAT #: U029B
 CUSTOMER PART #:
 MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
25	18.7	1800	1772	284T	EPFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	575	24	ACROSS THE LINE	CONT	F	1.15	50	3300

F.L. EFF	3/4 LD EFF	1/2 LD EFF	GTD EFF	ELECT. TYPE
93.6	93.6	93.0	93.0	SQ CAGE IND RUN
F.L. PF	3/4 LD PF	1/2 LD PF		
83.0	79.0	69.0		

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
74.0 LB-FT	146	144 LB-FT	195%	190 LB-FT 257%
				60

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
75 dBA	84 dBA		4.8 LB-FT ²	175 LB-FT ²	20 SEC.	2	575	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)

DE	ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6311	6210						

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
0.4890625	0.30625	1.8125	2.371875	47.4515625	0.080	ODE

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

PREPARED BY: CHANDANA DESU	BRAKE: NONE
DATE: 6/15/2022	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: 6/15/2022
 Customer: _____
 Attention: _____
 Submitted by: CHANDANA DESU



284TTGCD16539

Submittal

Data @ 575 V

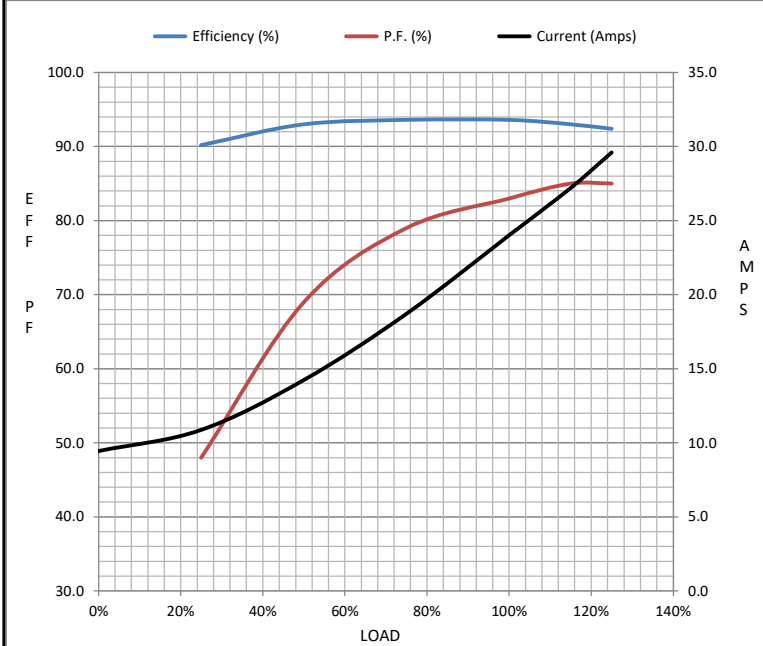
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	9.4	10.9	14.2	18.7	24.0	27.2	29.6	146
Torque (ft-lb)	0.00	18.3	36.7	55.2	74.0	85.2	93.0	144
RPM	1800	1795	1788	1782	1772	1,768	1765	0
Efficiency (%)		90.2	93.0	93.6	93.6	93.0	92.4	
P.F. (%)	4.5	48.0	69.0	79.0	83.0	85.0	85.0	36.0

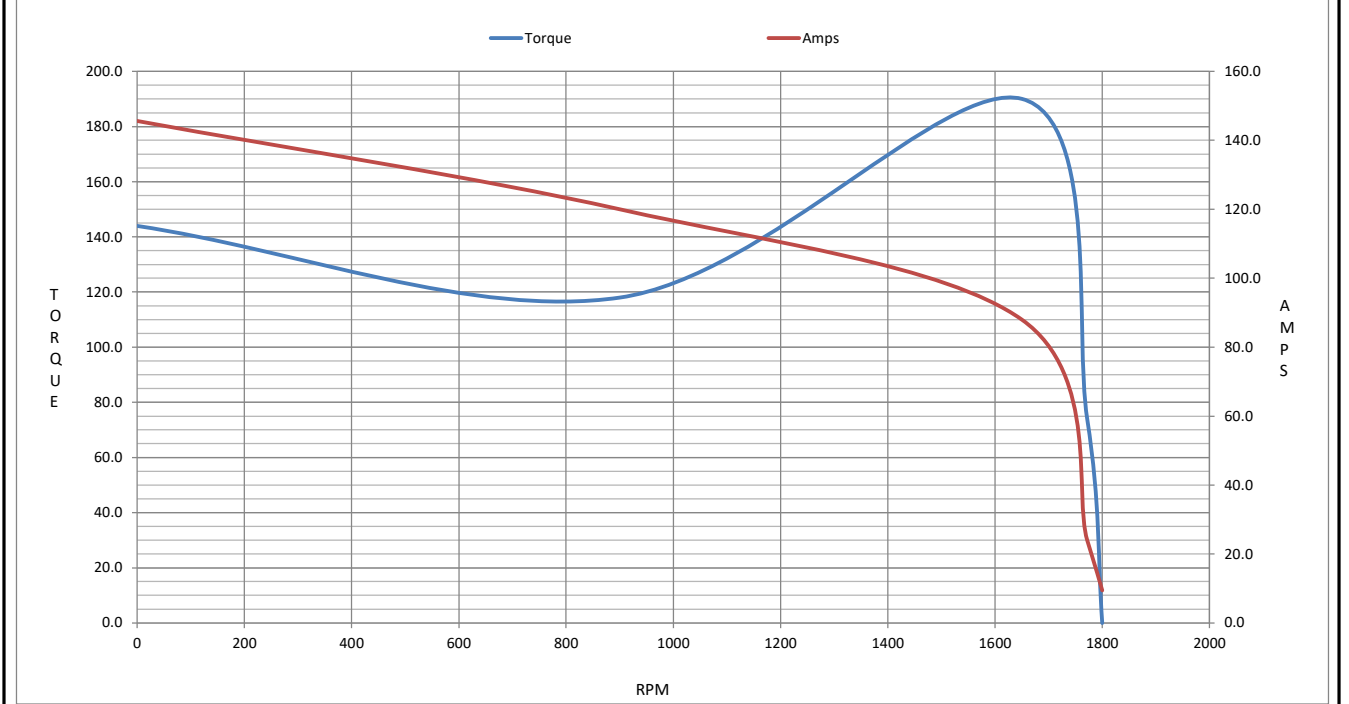
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1650	1772	1800
Current (Amps)	146	120	88.0	24.0	9.4
Torque (ft-lb)	144	118	190	74.0	0.00

Information Block				
HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	EPFC			
Construction	TFC			
Voltage	575 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	4.8 Lb-F ²			
Ref Wdg	HA31804014 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	NONE			
Outline Dwg	SS311106-1275			
Conn. Diag	EE7300T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3130	0.1960	1.1600	1.5180	30.3690



Speed - Torque Curve



CERTIFICATE OF COMPLIANCE

Certificate Number 20220325- E12044
Report Reference E12044-19991213
Issue Date 2022-MARCH-25

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 284TTGCD16539 (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

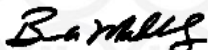
Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up
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Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's
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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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