

# PRODUCT INFORMATION PACKET

Model No: 101780.00

Catalog No: 101780.00

General Purpose Motor, 0.50 HP, 3 Ph, 60 Hz, 208-230/460 V, 1800 RPM, S56C Frame, TEFC



Regal and are trademarks of Regal Rexnord Corporation or one of its affiliated companies.  
©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

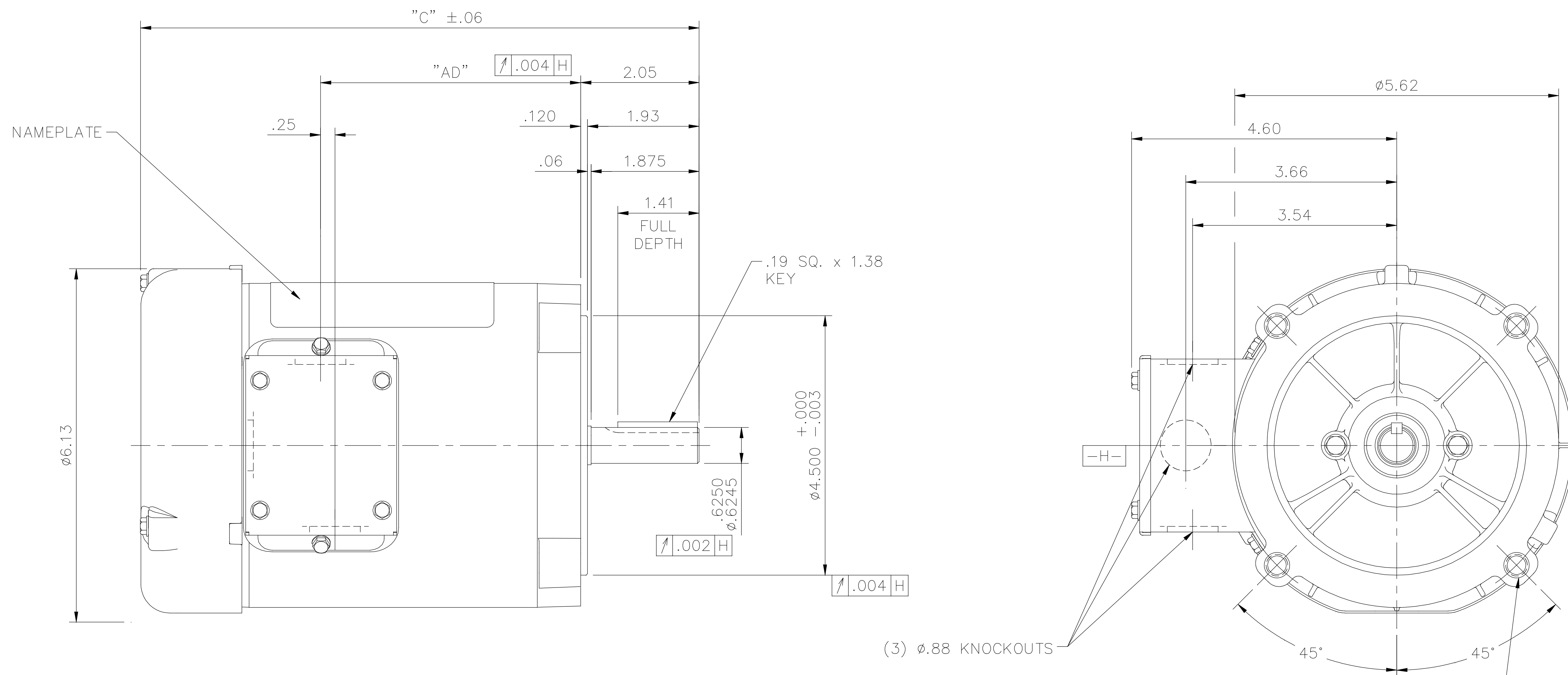
**Nameplate Specifications**

Output HP	<b>0.50 Hp</b>	Output KW	<b>0.37 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>208-230/460 V</b>
Current	<b>1.8-1.8/0.90 A</b>	Speed	<b>1725 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>77 %</b>	Power Factor	<b>69</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>NO DESIGN CODE</b>	KVA Code	<b>M</b>
Frame	<b>S56C</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>Thermostat</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6203</b>	Opp Drive End Bearing Size	<b>6203</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

**Technical Specifications**

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>9.166 Ohms</b>	Mounting	<b>Round</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Rolled Steel</b>
Shaft Type	<b>NEMA 56</b>	Overall Length	<b>10.69 in</b>
Frame Length	<b>6.00 in</b>	Shaft Diameter	<b>0.625 in</b>
Shaft Extension	<b>1.88 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Outline Drawing	<b>031637-600</b>	Connection Drawing	<b>005010.20</b>





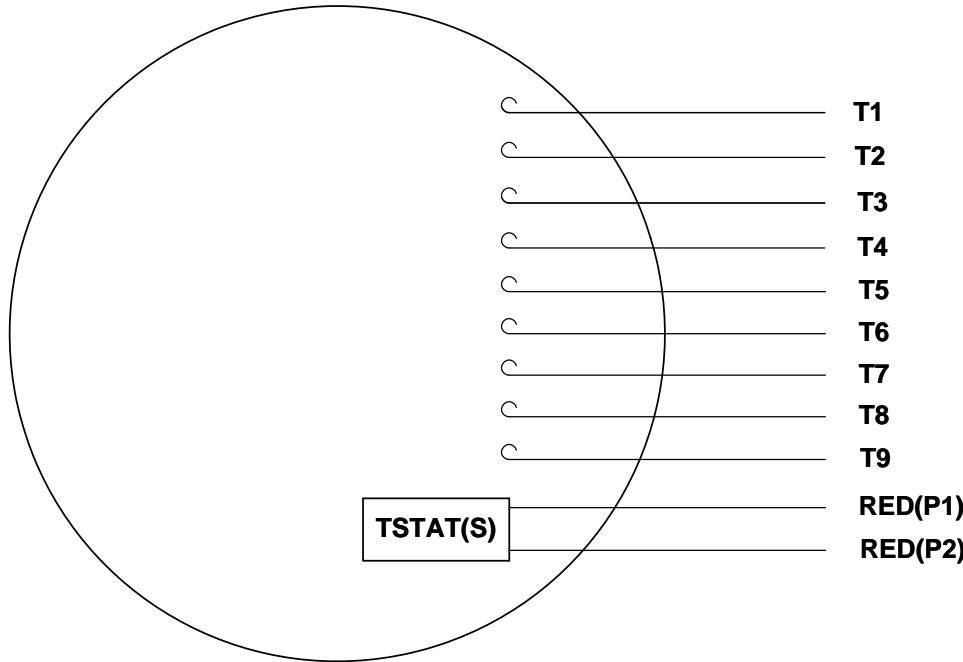
DASH NO.	"C"	"AD"
475	9.44	4.25
500	9.69	4.50
525	9.94	4.75
550	10.19	5.00
575	10.44	5.25
600	10.69	5.50
625	10.94	5.75
650	11.19	6.00
675	11.44	6.25
700	11.69	6.50
725	11.94	6.75
750	12.19	7.00

3/8-16 UNC 2B TAP x .56 DEEP  
(4) REQ'D. ON A ø5.875 B.C.

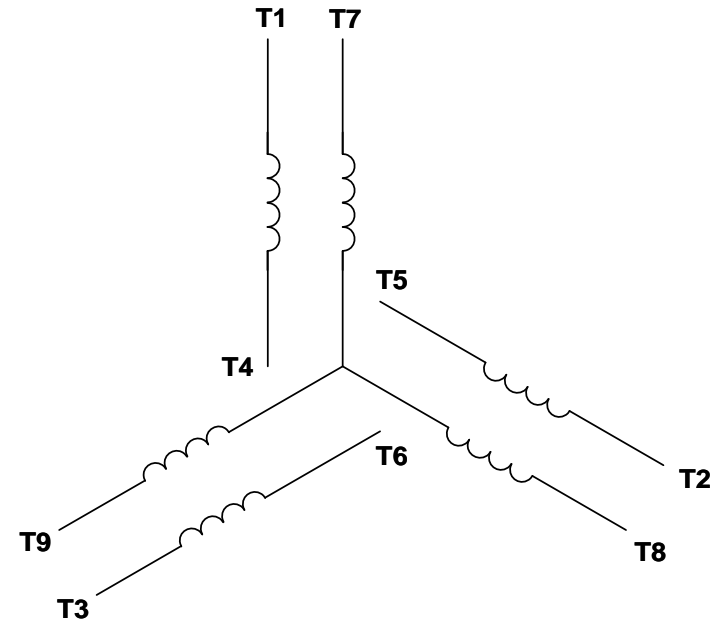
GASKETS THROUGHOUT

			TOLERANCES UNLESS SPECIFIED		REGAL™ Regal Beloit America, Inc.	DRAWN PG 7/12/01	
			DEC.	INCHES		CHK	
			.X	±.1		APPD	PG 7/12/01
03	UPDATED SHAFT KEYWAY VIEW	UD 11/27/18	.XX	±.03	TITLE	SCALE	1=2
02	ADDED DASH NO. 475 TO TABLE (102184.00)	PG 9/19/02	.XXX	±.005		REF	
01	REVISED CALLOUT FOR GD&T	KMM 6/6/02	PG .XXXX	±.0005	MAT'L.	3 PHASE	FMF
NO.	REVISION	BY & DATE	CHK	ANG ±1/2'	FINISH	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		CAD FILE	031637	SIZE B
			DIST			DRAWING NO. 031637	REV. 02

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END. Uncontrolled Copy



LINE LEADS



VOLTAGE	L1	L2	L3	JOIN & INSULATE
HIGH	T1	T2	T3	(T4,T7) (T5,T8) (T6,T9)
LOW	T1,T7	T2,T8	T3,T9	T4,T5,T6

DRAWING REVISION **G** REVISION BY **MVG** DATE **04/05/2017**

ECO **ECO-0121253** APPROVED BY **SM** DATE **04/05/2017**

ECO DESCRIPTION  
**ADDED P1 & P2 FOR TSTAT**

COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.  
PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF  
REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY  
INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED,  
BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED  
TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT  
AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL  
BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN  
RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.01	[±0.25]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

**REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°**  
**CORNER FILLETS: R.02 [.51]**  
**MACHINED SURFACES: 125/3.2 INCH/mm**  
**mm SHOWN IN [BRACKETS]**

DRAWN BY **DBT 12/16/97**

DATE

APPROVED BY **KH 12/17/97**

DATE

REFERENCE

THIRD ANGLE PROJECTION

**REGAL**™ Regal Beloit America, Inc.

DESCRIPTION  
**CONN DIAGRAM-EXTERNAL**  
**3 PHASE WITH PROTECTOR**

MATERIAL **DECAL - 004014 (TSTAT) - 080582** PROCESS/FINISH **STOCK**

SIZE **A** DRAWING NUMBER **00501020** SHEET **1 OF 1**



**CERTIFICATION DATA SHEET**

**1051 CHEYENNE AVE.  
GRAFTON, WI 53024  
PH. 262-377-8810**

CATALOG #: 101780.00

CONN. DIAGRAM: 005010.20

OUTLINE: 031637-600

MOUNTING: F1 ONLY

WINDING #: TE48453 FR 3 B

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1/2&1/2	0.37&0.37	1800	1725&1425	S56C	TEFC	M	NO DESIGN CODE

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	208-230/460&190/380	1.8-1.8/.9&2/1	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	77&77	3/4 LOAD EFF:	73.8	1/2 LOAD EFF:	66.9	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	69&74	3/4 LOAD PF:	60.1	1/2 LOAD PF:	47.9	0	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
24 OZ-FT	12.6 / 6.3	91.4 OZ-FT 381 %	98 OZ-FT 408 %	39

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
0 dBA	10 dBA	0.053 LB-FT^2	0 LB-FT^2	10 SEC.	0	- 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	NONE	FALSE	NONE	GREEN - LEESON WATTS AVER

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	MULTEMP SRL	STANDARD 56	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6203	6203						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

\*  
N  
O  
T  
E  
S

<b>INVERTER TORQUE:</b> CONSTANT 10:1
<b>INV. HP SPEED RANGE:</b> NONE
<b>ENCODER:</b> NONE
NONE NONE
NONE NONE PPR
<b>BRAKE:</b> NONE NONE
NONE P/N NONE
NONE NONE
FT-LB NONE V NONE Hz

Data Sheet

Date: 1/18/2018

101780.00



Data @ 460 V

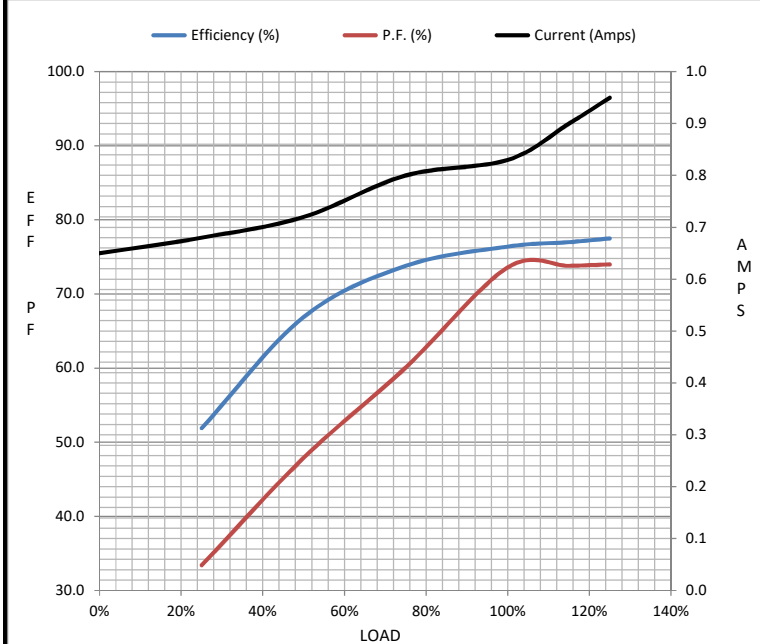
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	0.65	0.68	0.72	0.80	0.83	0.90	0.95	6.3
Torque (ft-lb)	0.00	94.5	186	289	383	415	450	1,459
RPM	1800	1787	1774	1760	1747	1,740	1737	0
Efficiency (%)		51.9	66.9	73.8	76.4	77.0	77.5	
P.F. (%)	23.4	33.4	47.9	60.1	73.6	73.8	74.0	0.0

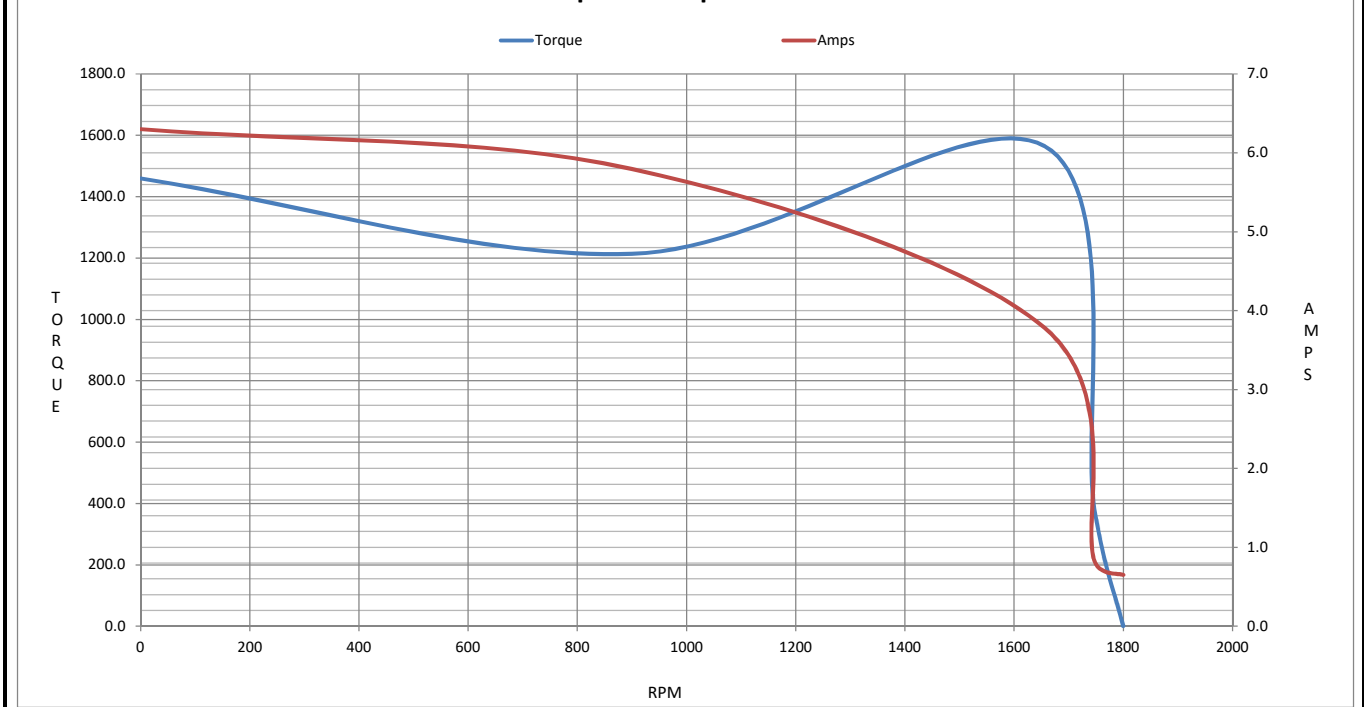
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1656	1747	1800
Current (Amps)	6.3	5.8	3.8	0.83	0.65
Torque (ft-lb)	1,459	1,213	1,565	383	0.00

Information Block				
HP	0.5			
Sync. RPM	1800			
Frame	48			
Enclosure	TEFC			
Construction	NA			
Voltage	208-230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	M			
Service Factor	1.15			
Temp Rise @ FL	39 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.05 Lb-Ft <sup>2</sup>			
Ref Wdg	TE48453 FR			
Sound Pressure @ 1M	0 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	031637-600			
Conn. Diag	005010.20			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed - Torque Curve



## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
100 East Randolph St.  
Wausau, WI 54401

and the authorized representative  
established within the Community:

Marathon Electric UK  
6F Thistleton Road Ind. Estate  
Market Overton  
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 101780.00

(Model No. may contain prefix and/or suffix characters)

Catalog No : 101780.00

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon  
Vice President, Technology

Authorized Representative in the Community:



Julian Clark  
Marketing Engineer

Created on 09/01/2022

**CE 22**