

# PRODUCT INFORMATION PACKET

Model No: 121181.00

Catalog No: 121181.00

General Purpose Motor, 2 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 145TC Frame, TEFC



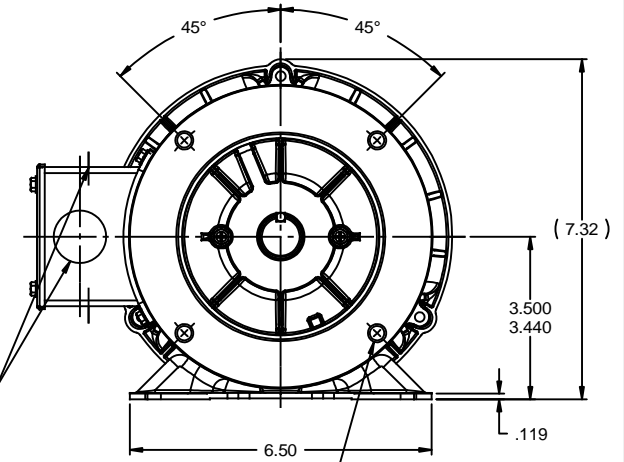
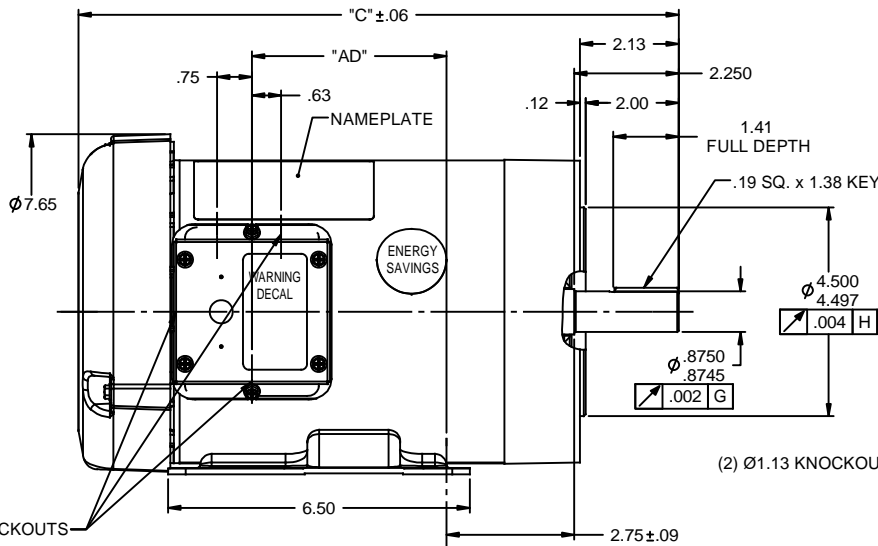
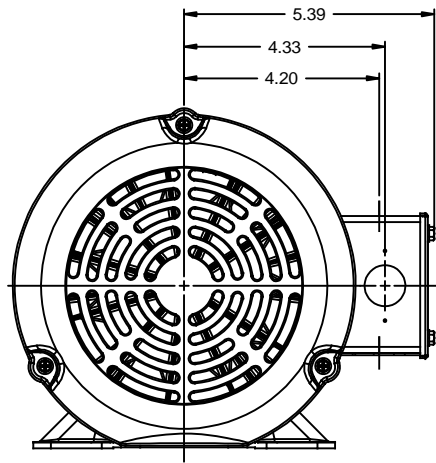
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**Nameplate Specifications**

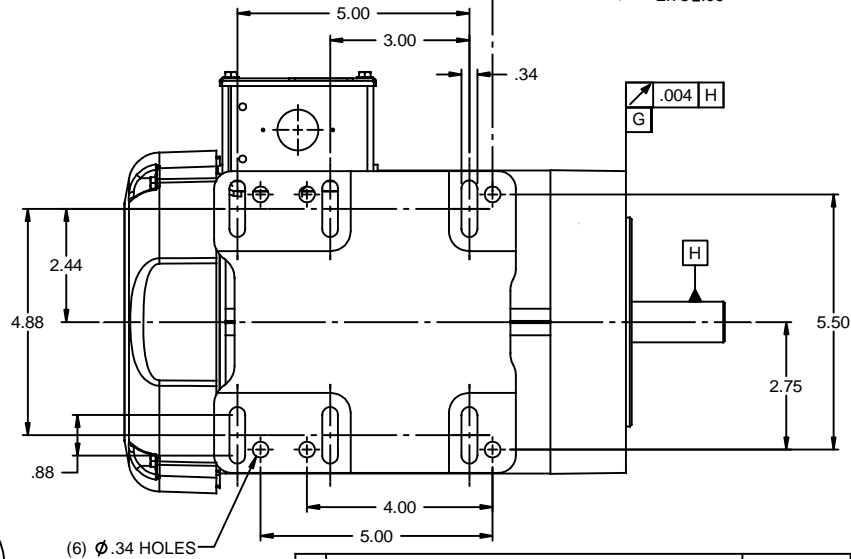
Output HP	<b>2 Hp</b>	Output KW	<b>1.5 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>5.8/2.9 A</b>	Speed	<b>1745 rpm</b>
Service Factor	<b>1.25</b>	Phase	<b>3</b>
Efficiency	<b>86.5 %</b>	Power Factor	<b>75.6</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>L</b>
Frame	<b>145TC</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>Thermostat</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6205</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 Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>6 Ohms</b>	Mounting	<b>Rigid Base</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>T</b>	Overall Length	<b>13.92 in</b>
Frame Length	<b>8.00 in</b>	Shaft Diameter	<b>0.875 in</b>
Shaft Extension	<b>2.25 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Outline Drawing	<b>028911-800</b>	Connection Drawing	<b>005010.20</b>



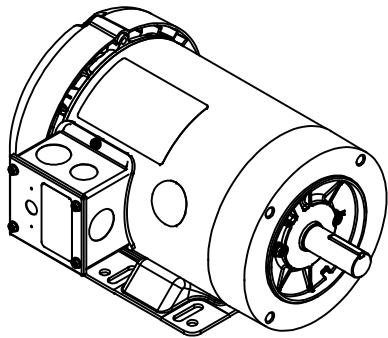
(3) Ø.88 KNOCKOUTS



(6) Ø.34 HOLES

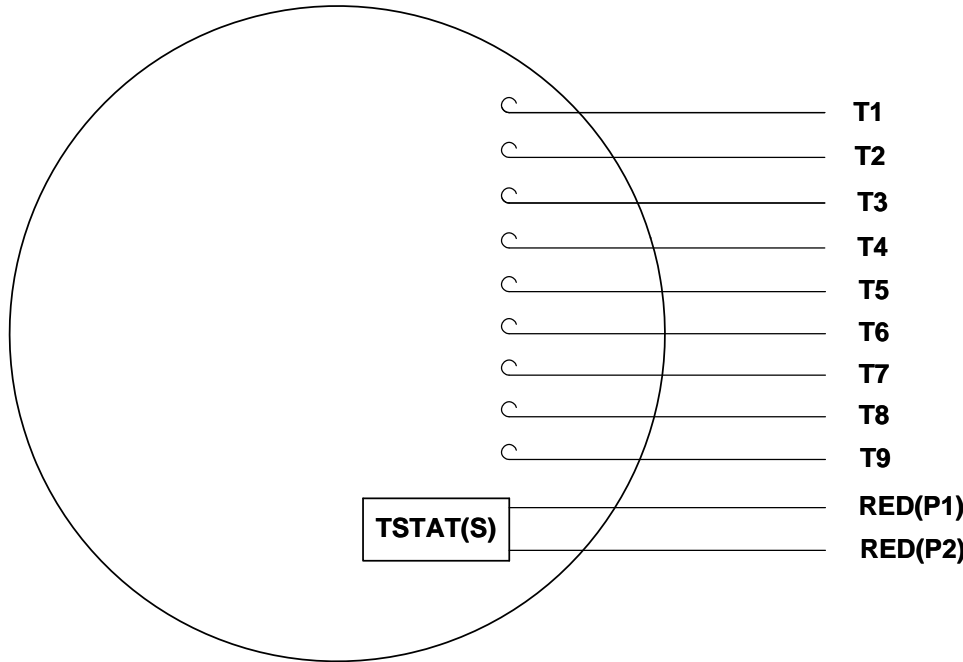
NOTE:  
1) GASKETS THROUGHOUT

DASH NO.	"C"	"AD"
600	11.92	3.19
650	12.42	3.69
700	12.92	4.19
750	13.42	4.69
800	13.92	5.19

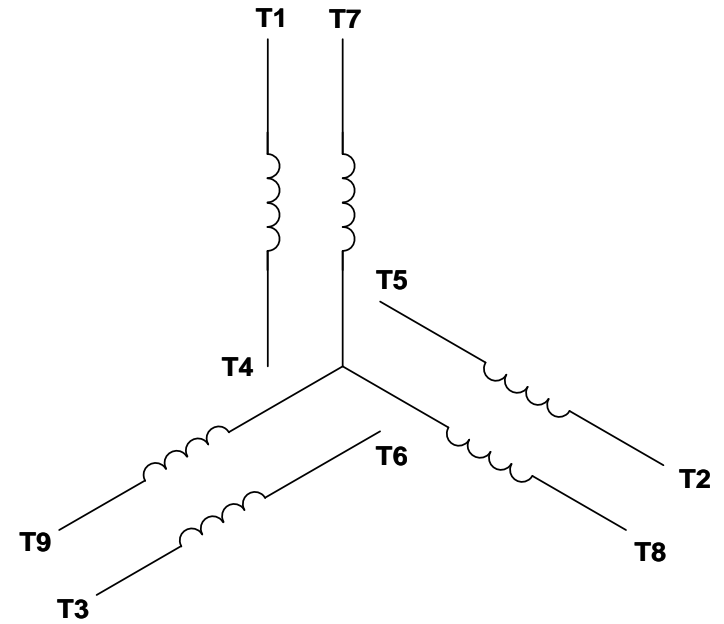


TOLERANCES UNLESS SPECIFIED		LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES		DRAWN GRB 12/05/08	
DEC	INCHES			CHK DJ 12/05/08	
X	±.1			APPR DJ 12/05/08	
.XX	±.03	TITLE OUTLINE - 140TC/56HCZ FRAME		SCALE 3:8	
.XXX	±.005	TEFC - RIGID "C" FACE		REF 028566	
.XXX	±.0005	MAT'L		FMF 120485.00	
01	ADDED BOTTOM VIEW	PG	5/19/2010		
REVISION		BY & DATE	CHK ANG ±1/2°	FINISH GENERAL PURPOSE	
THIRD ANGLE PROJECTION		RFP	12/05/08	PREV	
		NETWORK FILE NAME	028911	SIZE	DRAWING NO
				B	028911
					REV
					01

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**

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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



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**

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



DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: 005010.20  
 OUTLINE: 028911-800  
 WINDING: T634340

CAT #: 121181.00

FR 3

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
2	1.5	1800	1751	145TC	TEFC	TFR	L	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	6/3&6.8/3.4	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	86.5	3/4 LD EFF	85.6	1/2 LD EFF	83.4	GTD EFF	84.0	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	75.6	3/4 LD PF	64.0	1/2 LD PF	51.9				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
6.0 LB-FT	26.5	18.8 LB-FT 313%	24.6 LB-FT 410%	53

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
65 dBA	74 dBA	0.16 LB-FT²	0 LB-FT²	10 SEC.	3	0 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	IN - LEESON WATTS

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6205	6203						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	AUTOMATIC	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	0	0	0	0	0.080	ODE

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

DATE: 1/24/2018	BRAKE: NONE	
	NONE	
	NONE	
	NONE	
FT-LB: NA		
VOLTAGE: NONE		
UL: Y-(LEESON UL REC)		
HZ:		

Data Sheet

Date: 1/24/2018

121181.00



Data @ 460 V

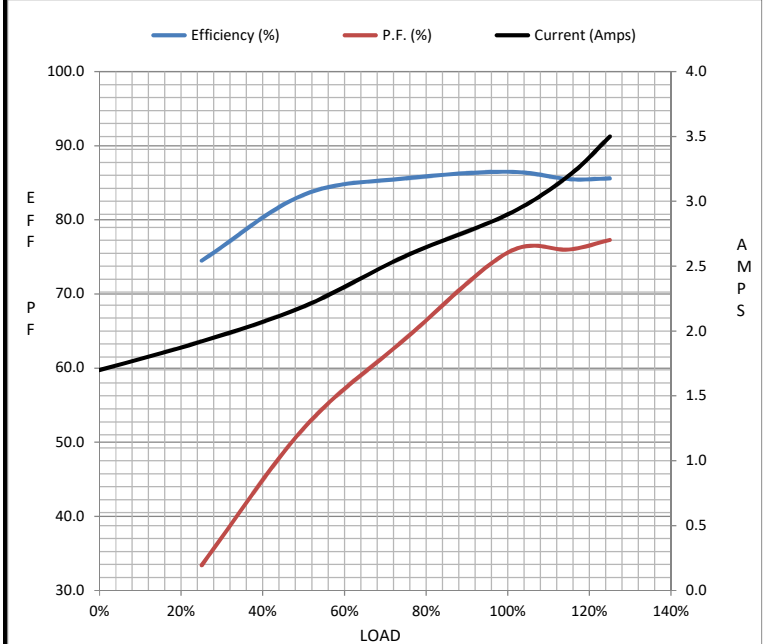
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.70	1.92	2.19	2.58	2.90	3.2	3.5	26.5
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	6.5	7.5	18.8
RPM	1800	1787	1774	1763	1751	1.730	1732	0
Efficiency (%)		74.5	83.4	85.6	86.5	85.5	85.6	
P.F. (%)	7.1	33.4	51.9	64.0	75.6	76.0	77.3	42.0

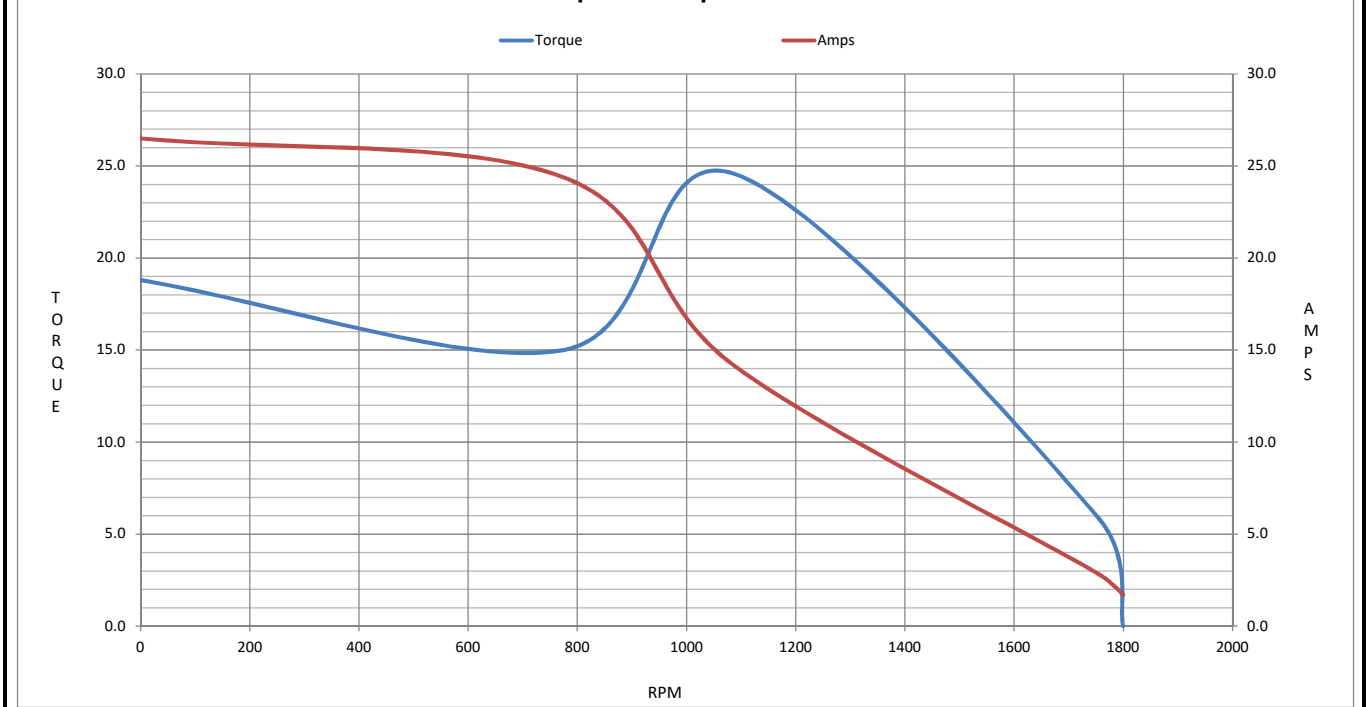
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	775	1085	1751	1800
Current (Amps)	26.5	24.4	14.2	2.90	1.70
Torque (ft-lb)	18.8	15.0	24.6	6.0	0.00

Information Block				
HP	2.0			
Sync. RPM	1800			
Frame	140			
Enclosure	TEFC			
Construction	TFR			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	L			
Service Factor	1.15			
Temp Rise @ FL	53 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.16 Lb-Ft <sup>2</sup>			
Ref Wdg	T634340 FR			
Sound Pressure @ 1M	65 dBA			
VFD Rating	NONE			
Outline Dwg	028911-800			
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 : 121181.00

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

Catalog No : 121181.00

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**