

# PRODUCT INFORMATION PACKET

Model No: 145TTDR6039

Catalog No: U246

General Purpose Motor, 2 HP, 3 Ph, 60 Hz, 230/460 V, 3600 RPM, 145T Frame, DP



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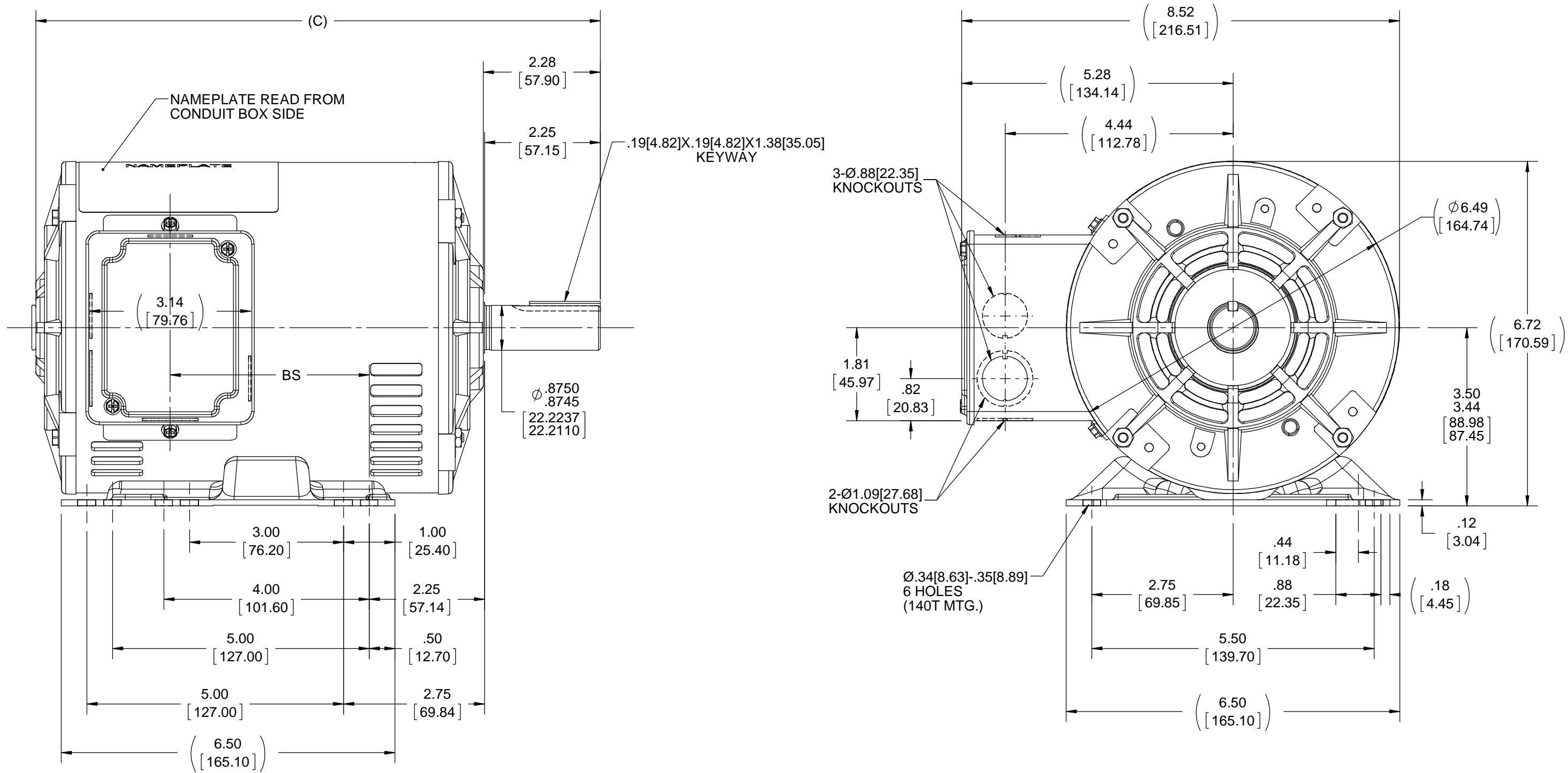
### Nameplate Specifications

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>5.6/2.8 A</b>	Speed	<b>3510 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>86.5 %</b>	Power Factor	<b>78.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>L</b>
Frame	<b>145T</b>	Enclosure	<b>Drip Proof</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>22</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>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>7.6 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>10.99 in</b>
Frame Length	<b>7.06 in</b>	Shaft Diameter	<b>0.875 in</b>
Shaft Extension	<b>2.28 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Connection Drawing	<b>A-EE7308T</b>	Outline Drawing	<b>A-100085-706</b>

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NOTES:  
1.CONDUIT BOX CAN BE ROTATED 180°.

DASH NO.	"C"	"BS"
706	10.99[279.14]	3.87[98.29]
756	11.49[291.84]	4.37[110.99]
806	11.99[304.54]	4.87[123.69]
856	12.49[317.24]	5.37[136.39]
906	12.99[329.94]	5.87[149.09]
956	13.49[342.64]	6.37[161.79]

DRAWING REVISION	REVISION BY	DATE
E	A. KEETHA	01-09-2018
ECO-0143026	APPROVED BY PST	DATE 04/11/2018
ECO DESCRIPTION		
OUTLINE CONVERSION PROJECT		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±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] X 45° CORNER FILLETS: R.02 [0.51]			
MACHINED SURFACES: 200 INCH/mm 5.1			
mm SHOWN IN [BRACKETS]			

DRAWN BY		REGAL™ Regal Beloit America, Inc.	
GK <td colspan="2">DESCRIPTION</td>		DESCRIPTION	
DATE 02-04-1988		OUTLINE	
APPROVED BY FG		140T & 56HZ - DR.PR.	
DATE 02-04-1998		MATERIAL	
REFERENCE 100085		PROCESS/FINISH	
THIRD ANGLE PROJECTION		SIZE B	DRAWING NUMBER 100085
			SHEET 1 OF 1

**HIGH VOLTAGE**



**THREE PHASE  
DUAL VOLTAGE MOTOR**

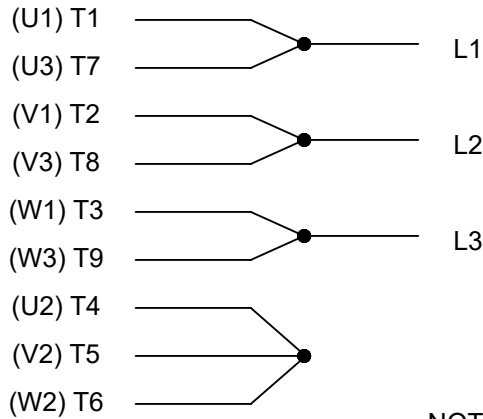
THERMO-PROTECTORS  
CONNECTED IN SERIES



**VIEW OF TERMINAL END**

**NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST FOR COMMON CONNECT:  
HIGH VOLT: CONNECT P1 TO T1  
THEN P2 TO L1  
LOW VOLT: CONNECT P1 TO T1 & T7,  
THEN P2 TO L1**

**LOW VOLTAGE**



**NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT**

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION <b>ADDED TERMINAL CONNECTION DIAGRAM</b>				APPROVED BY TB	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b> 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T

**CERTIFICATION DATA SHEET**

**Model#:** 145TTDR6039 AB  
**CONN. DIAGRAM:** A-EE7308T  
**OUTLINE:** A-100085-706

**WINDING#:** ZT224 DR 3  
**ASSEMBLY:** F1 ONLY

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
2&2	1.49&1.49	3600	3510&2895	145T	DP	L	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	5.6/2.8&6.4/3. 2	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 86.5&84.5	3/4 LOAD EFF: 86	1/2 LOAD EFF: 83	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78.5&84.5	3/4 LOAD PF: 71	1/2 LOAD PF: 58	84	SQ CAGE INV RATED	3 / 1.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
3 LB-FT	48.4 / 24.2	9 LB-FT 300	12.8 LB-FT 427	38

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
68 dBA	78 dBA	0.034 LB-FT^2	4 LB-FT^2	15 SEC.	2	30 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (POWDER)

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

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

If Inverter equals NONE, contact factory for further information

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

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\*

DATE: 06/23/2017 06:53:02 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.



Data Sheet

Date: 6/29/2017

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



145TTDR6039

Submittal

Data @ 460 V

Motor Load Data

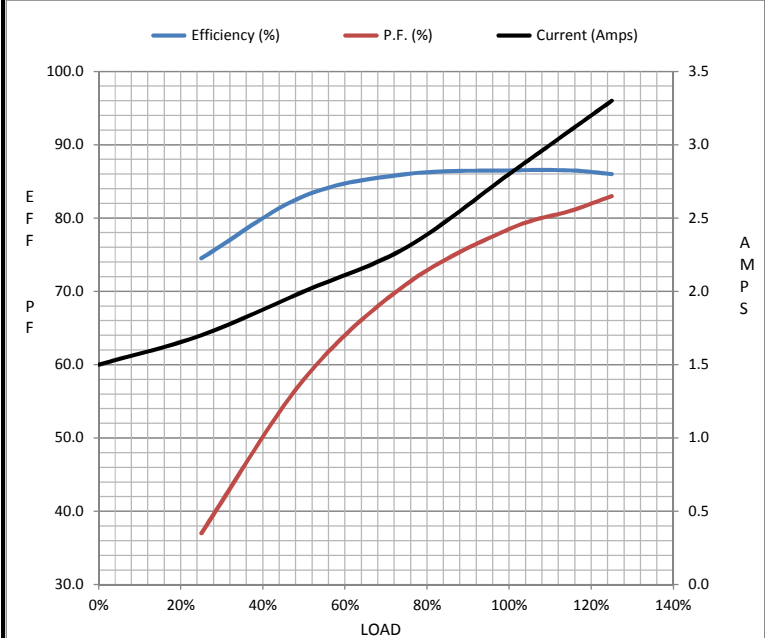
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.50	1.70	2.00	2.30	2.80	3.1	3.3	24.2
Torque (ft-lb)	0.00	0.71	1.50	2.20	3.0	3.5	3.8	9.0
RPM	3600	3580	3560	3540	3510	3,500	3495	0
Efficiency (%)		74.5	83.0	86.0	86.5	86.5	86.0	
P.F. (%)	10.0	37.0	58.0	71.0	78.5	81.0	83.0	64.5

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1500	2570	3510	3600
Current (Amps)	24.2	21.8	16.2	2.80	1.50
Torque (ft-lb)	9.0	11.0	12.8	3.0	0.00

Information Block

HP	2.0
Sync. RPM	3600
Frame	145
Enclosure	DP
Construction	TDR
Voltage	30/460#190/381V
Frequency	60 Hz
Design	B
LR Code letter	L
Service Factor	1.15
Temp Rise @ FL	38 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wk <sup>2</sup>	0.03 Lb-Ft <sup>2</sup>
Ref Wdg	ZT224 DR
Sound Pressure @ 1M	68 dBA
VFD Rating	CONSTANT 10:1
Outline Dwg	A-100085-706
Conn. Diag	A-EE7308T



Additional Specifications:

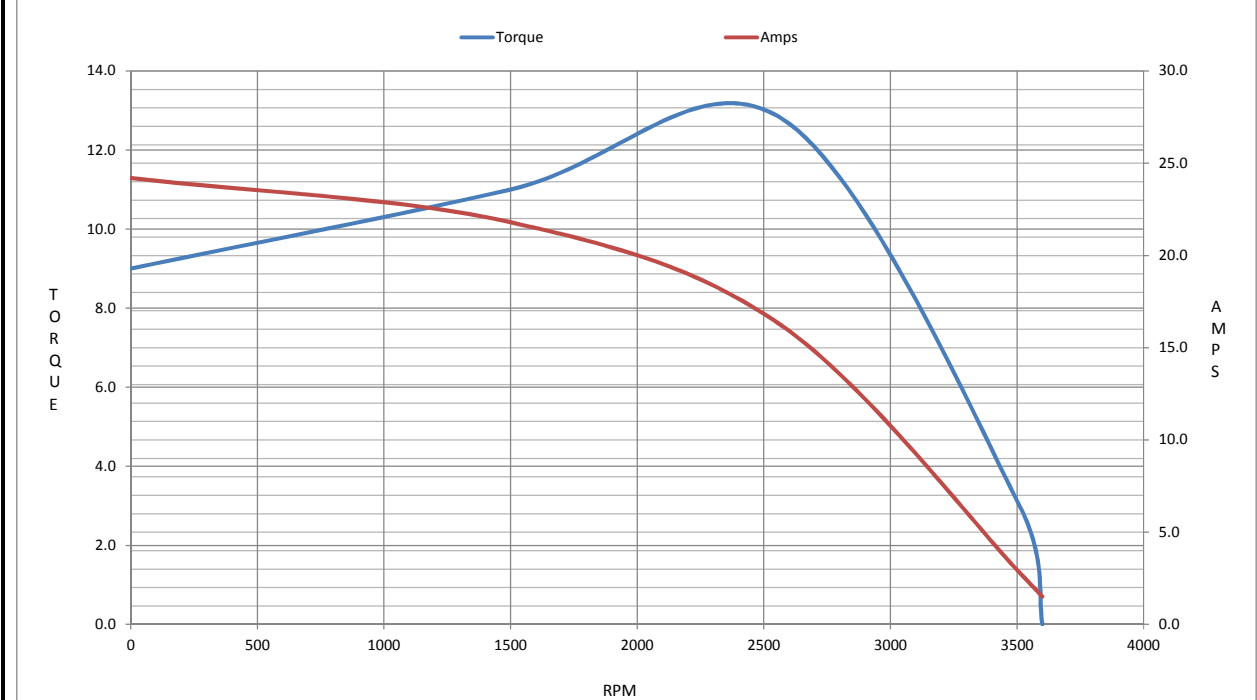
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EQUIV CKT (OHMS / PHASE)

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 : 145TTDR6039

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

Catalog No : U246

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**