

# PRODUCT INFORMATION PACKET



Model No: 145THTN19058

Catalog No: W513A

Severe Duty Motor, 2 HP, 3 Ph, 60 Hz, 460 V, 1800 RPM, 145T Frame, TENV



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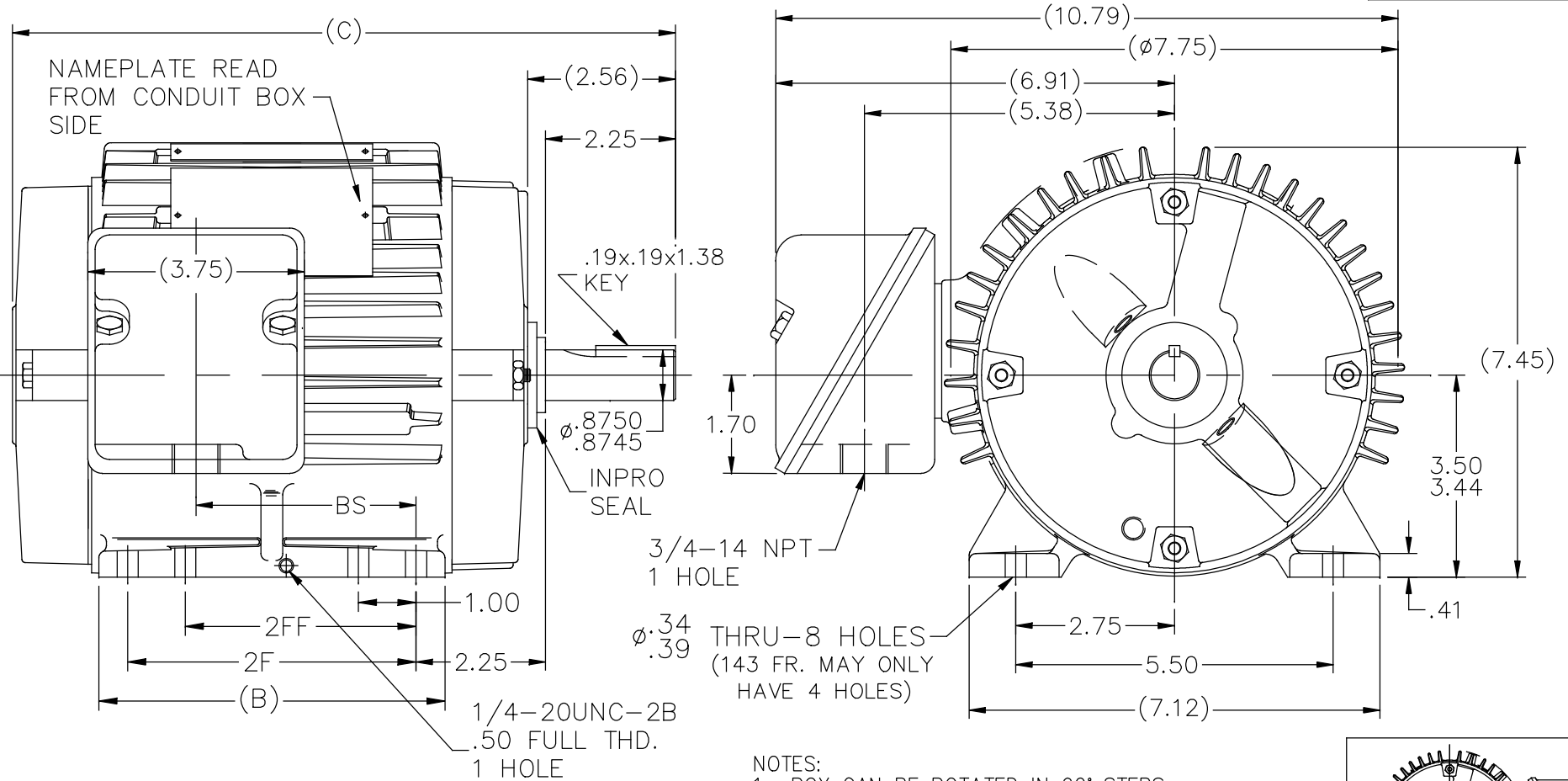
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>2 Hp</b>
Output KW	<b>1.5 kW</b>	Voltage	<b>460 V</b>
Speed	<b>1740 rpm</b>	Service Factor	<b>1.15</b>
Frame	<b>145T</b>	Enclosure	<b>Totally Enclosed Non Ventilated</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>86.5 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>3.0 A</b>	Power Factor	<b>78</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>N</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>56</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>DIVISION 2 T2B</b>

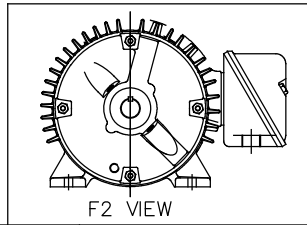
### Technical Specifications

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>6.51 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>Cast Iron</b>
Shaft Type	<b>T</b>	Overall Length	<b>11.43 in</b>
Frame Length	<b>6.25 in</b>	Shaft Diameter	<b>0.875 in</b>
Shaft Extension	<b>2.56 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Connection Drawing	<b>EE7300</b>	Outline Drawing	<b>104326-625</b>

104326

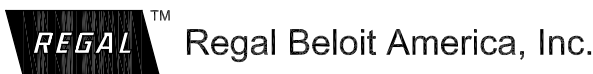


- NOTES:
- 1- BOX CAN BE ROTATED IN 90° STEPS.
  - 2- BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
  - 3- FRONT GREASE HOLE LOCATIONS SHOWN WITH HIDDEN LINES.



DASH	FR.	B	C	BS	2F	2FF
525	143T	5.00	10.43	2.81	4.00	-
625	145T	6.00	11.43	3.81	5.00	4.00

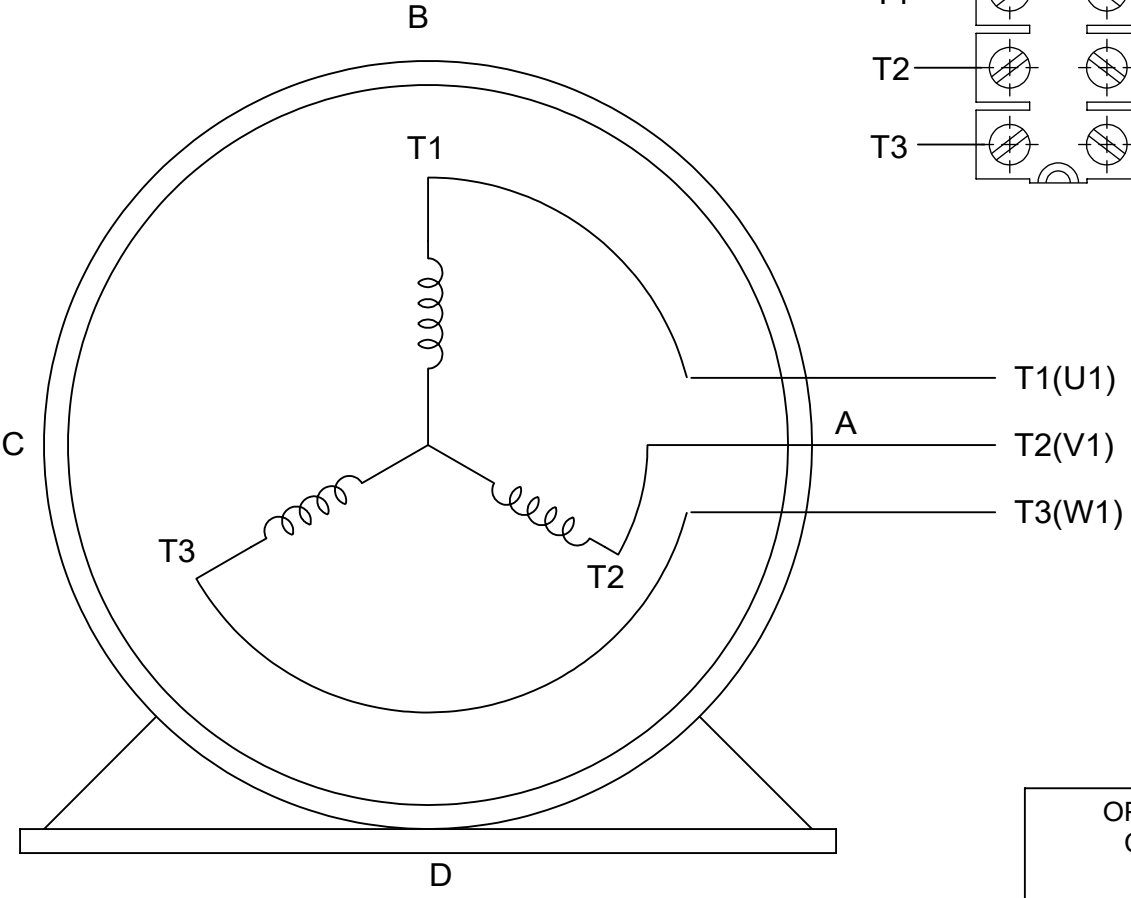
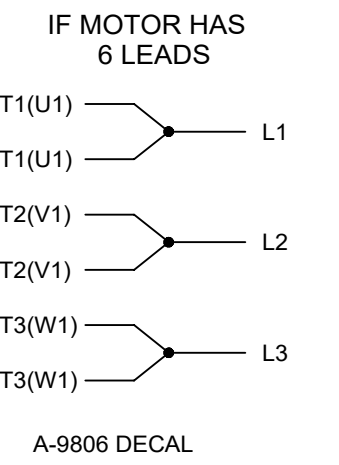
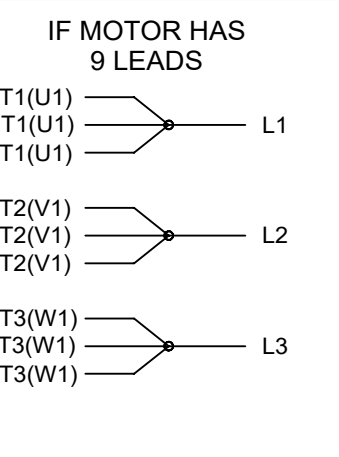
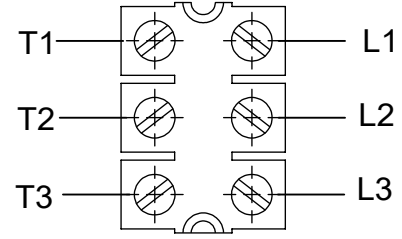
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN PGK 06-24-1997		
						DEC.	INCHES				
8	UPDATED SHAFT EXTENSION	MVG 05/19/2017	PVR						CHK ML 06-27-1997		
7	UPDATED F2 VIEW AND LOGO	SL 04/21/2016							APPD SAT 07-10-1997		
6	ADDED F2 VIEW	UD 11/22/13		.X	±.1				SCALE 3=8		
5	UPDATED PER ECO-0031264	PN 03-07-2013	ML	.XX	±.03			TITLE OUTLINE	REF		
4	CHG'D TO HAVE 8 MTG. HOLES, WAS 4 CN 29200-3715	TAT 08-31-2004	ML	.XXX	±.005			140T FR. - BB - TS - TENV - INPRO SEAL			
3	REDRAWN IN AUTOCAD	TAT 06-29-2004		.XXXX	±.0005			MAT'L.	FMF		
									PREV		
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						DIST WP					



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

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS



VIEW OF TERMINAL END

**OPTIONAL CORD CONNECTION**

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022
REQUEST NUMBER DESCRIPTION DRAWING UPDATED		
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

		Regal Beloit America, Inc.	
DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR			
MATERIAL		PROCESS/FINISH	
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>		SHEET 1 OF 1

**CERTIFICATION DATA SHEET**

**Model#:** 145THTN19058 AA  
**CONN. DIAGRAM:** EE7300  
**OUTLINE:** A-104326-625

**WINDING#:** ZT4166 NONE 5  
**ASSEMBLY:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
2	1.49	1800	1740	145T	TENV	N	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	3	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 86.5	3/4 LOAD EFF: 85.5	1/2 LOAD EFF: 82.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78	3/4 LOAD PF: 70	1/2 LOAD PF: 55	84	SQ CAGE INV RATED	1.6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
6 LB-FT	30	22 LB-FT 367	28 LB-FT 467	80

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.13 LB-FT^2	0 LB-FT^2	20 SEC.	0	69 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	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)	CAST IRON
6205	6203						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

\*  
N  
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S  
\*

INVERTER TORQUE: CONSTANT 10:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: NONE NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

DATE: 06/23/2017 01:55:02 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

Date: 6/19/2017

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

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

Submitted by: FAREEDA DUDEKULA



145THTN19058

**Submittal**

Data @ 460 V

Motor Load Data

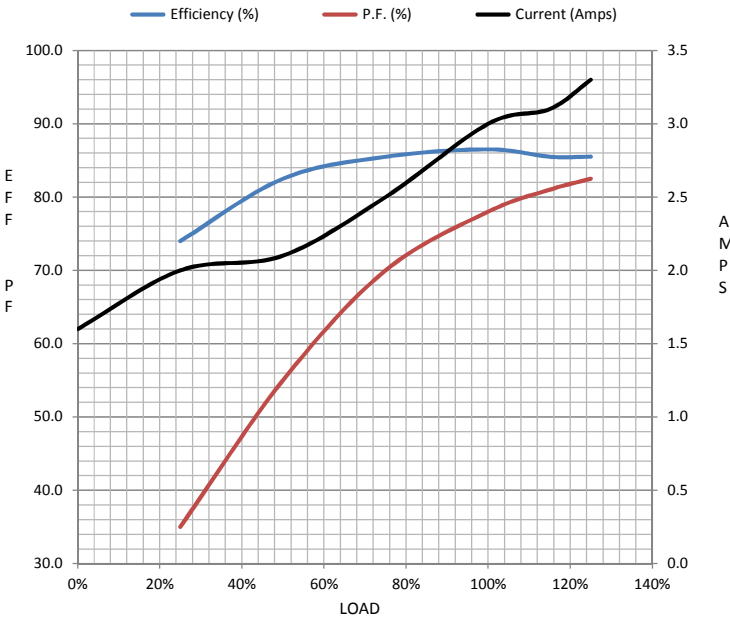
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.60	2.00	2.10	2.50	3.0	3.1	3.3	30.0
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	7.0	7.6	22.0
RPM	1800	1785	1775	1760	1740	1,735	1730	0
Efficiency (%)		74.0	82.5	85.5	86.5	85.5	85.5	
P.F. (%)	9.5	35.0	55.0	70.0	78.0	81.0	82.5	61.0

Motor Speed Data

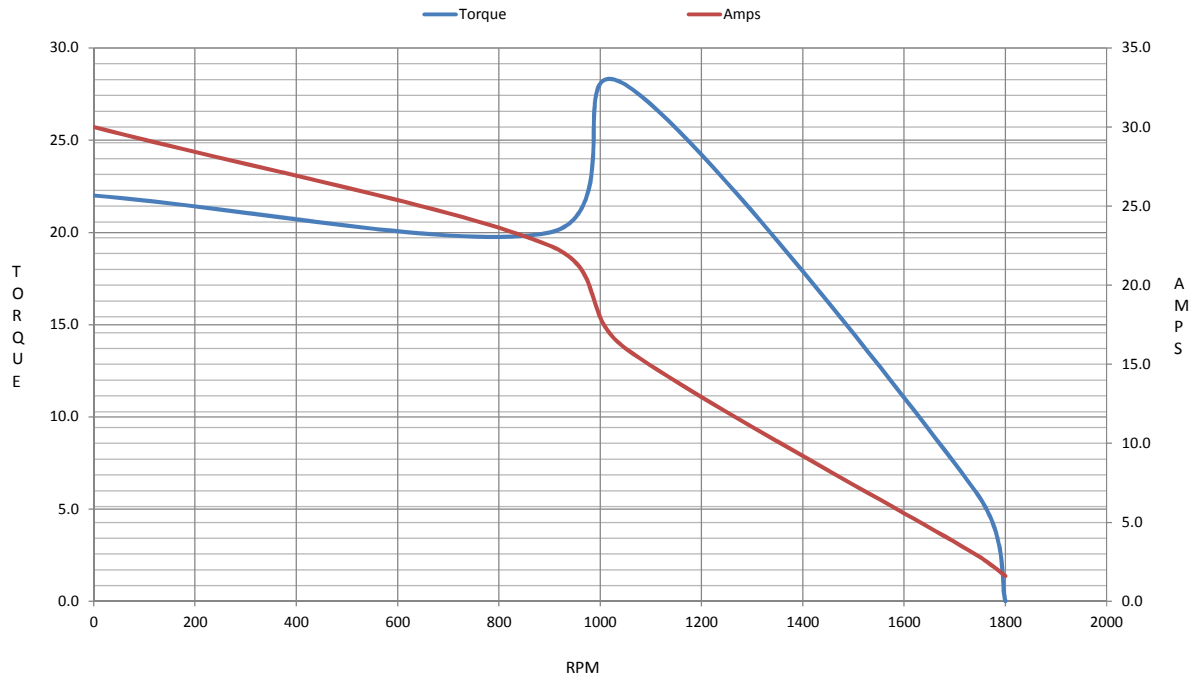
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1050	1740	1800
Current (Amps)	30.0	22.5	16.0	3.0	1.60
Torque (ft-lb)	22.0	20.0	28.0	6.0	0.00

Information Block

HP	2.0			
Sync. RPM	1800			
Frame	145			
Enclosure	TENV			
Construction	TTN			
Voltage	460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	N			
Service Factor	1.15			
Temp Rise @ FL	80 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.13 Lb-Ft <sup>2</sup>			
Ref Wdg	ZT4166 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	A-104326-625			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
4.1750	3.3230	5.8790	6.1490	166.1400



Speed -Torque Curve



## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
1946 West Cook Road  
Fort Wayne, IN 46818

and the authorized representative  
established within the Community:

Regal Beloit Italy  
Via Modena, 18  
24040 Ciserano(BG) - Italy

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 : 145THTN19058

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

Catalog No : W513A

Rework No : N/A

Directives :

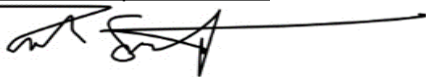
Low Voltage Directive 2014/35/EU

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:



Zach Stauffer  
Vice President, Engineering

Authorized Representative in the Community:



Stefano Casiraghi  
Technology Director, Engineering

Created on 07/08/2025

**CE 25**