

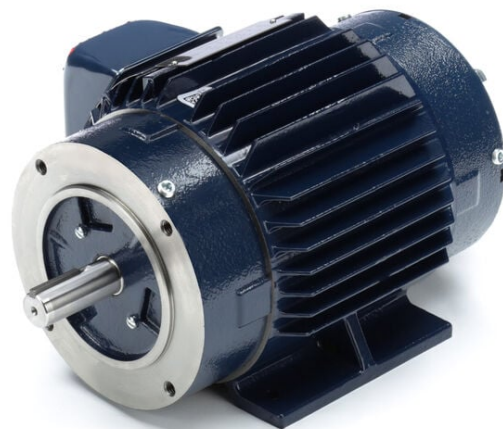
# PRODUCT INFORMATION PACKET



Model No: 145THTN8029

Catalog No: Y526

Encoder Motor, 2 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 145TC Frame, TENV



Regal and LEESON are trademarks of Regal Rexnord Corporation or one of its affiliated companies.  
©2025 Regal Rexnord Corporation, All Rights Reserved. MC017097E





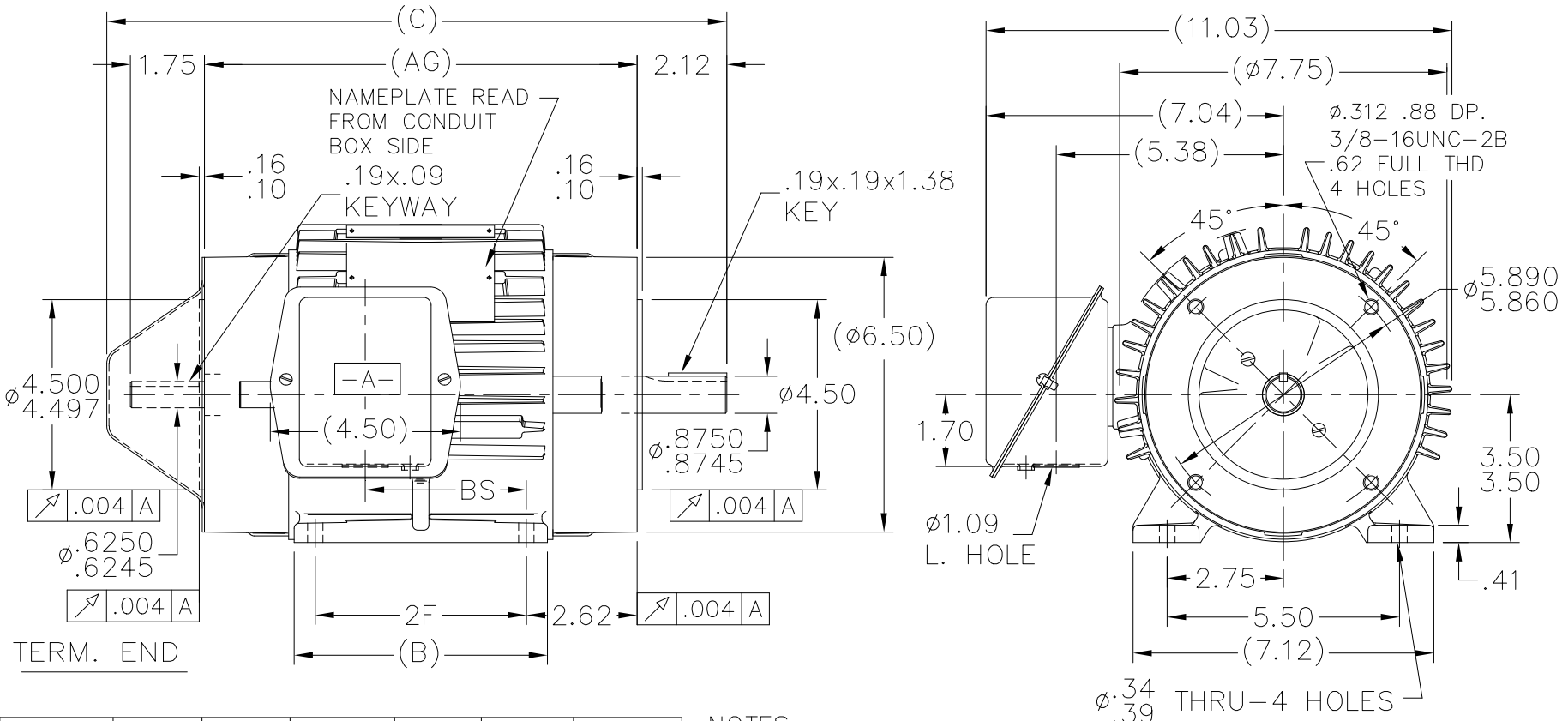
**Nameplate Specifications**

Phase	<b>3</b>	Output HP	<b>2 Hp</b>
Output KW	<b>1.5 kW</b>	Voltage	<b>230/460 V</b>
Speed	<b>1750 rpm</b>	Service Factor	<b>1.0</b>
Frame	<b>145TC</b>	Enclosure	<b>Totally Enclosed Non Ventilated</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>85.5 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>6.0/3.0 A</b>	Power Factor	<b>78</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>INV</b>	KVA Code	<b>M</b>
Drive End Bearing Size	<b>6205</b>	Opp Drive End Bearing Size	<b>6205</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 Duty</b>	Starting Method	<b>Inverter Only</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>6.48 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>14.68 in</b>
Frame Length	<b>6.25 in</b>	Shaft Diameter	<b>0.875 in</b>
Shaft Extension	<b>2.12 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 2000:1</b>		
Connection Drawing	<b>EE7308T</b>	Outline Drawing	<b>104291-625</b>

4 3 2 1



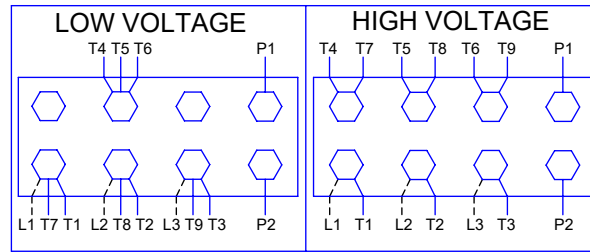
DASH	FR.	B	C	BS	2F	AG
525	143T	5.00	13.68	2.81	4.00	9.25
625	145T	6.00	14.68	3.81	5.00	10.25

NOTES:  
 1- BOX CAN BE ROTATED IN 90° STEPS.  
 2- BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.

DRAWING REVISION C	REVISION BY GKB	REV DATE/ DATE 04/14/2025	TOLERANCES (EXCEPT AS NOTED): DEC. INCH mm ANGLE .X ±0.1 [±3] ±0.5° .XX ±0.01 [±0.3] .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: 125/ 3.2/ mm/ INCH	DRAWN BY MJD	Regal Beloit America, Inc. DESCRIPTION OUTLINE 140T FR. - BB-TS-TENV	
REQUEST NUMBER ECR-0242041	APPROVED BY RK	DATE 04/14/2025	DATE 04/21/1997	APPROVED BY GK		
REQUEST NUMBER DESCRIPTION CHANGED FROM MARATHON TO RRX TEMPLATE			DATE 04/24/1997	DATE 04/24/1997		
COPYRIGHT (PER REVISION DATE) 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.			REFERENCE	MAT'L		PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER 10291	SHEET 1 OF 1

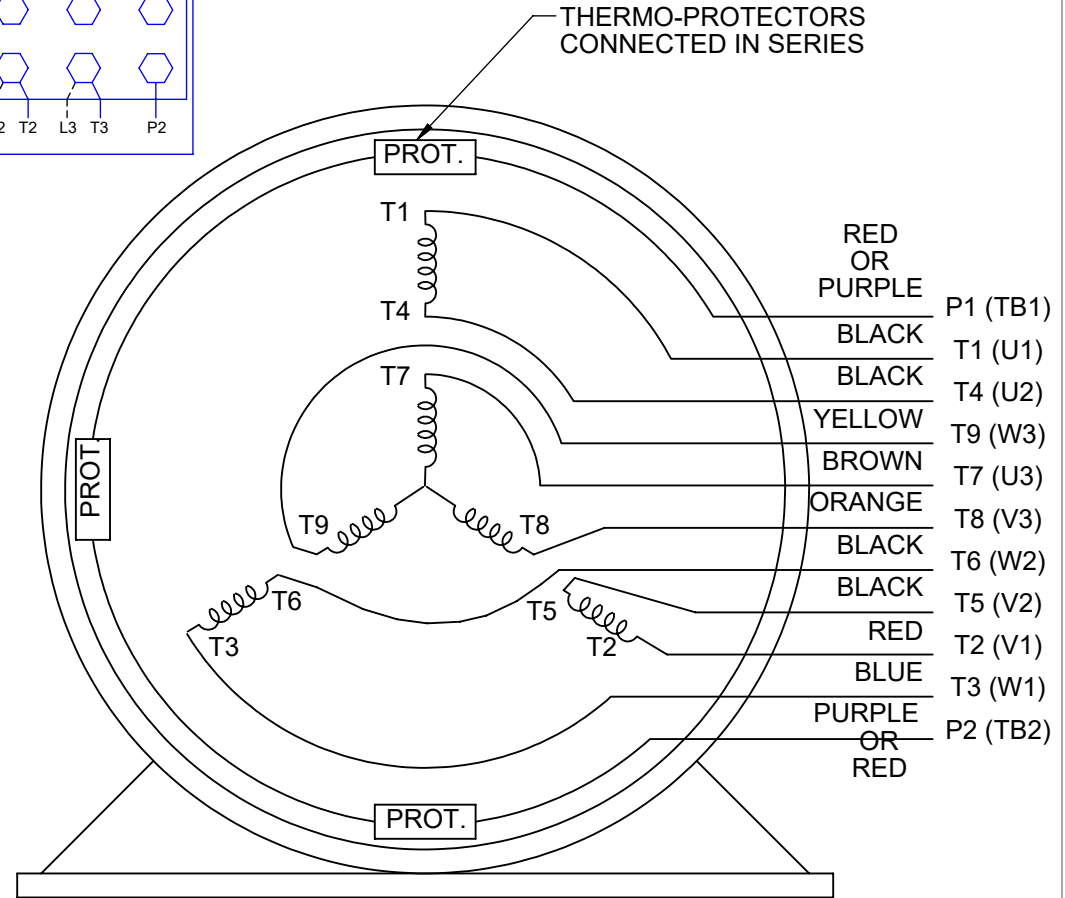
4 3 2 1

**HIGH VOLTAGE**



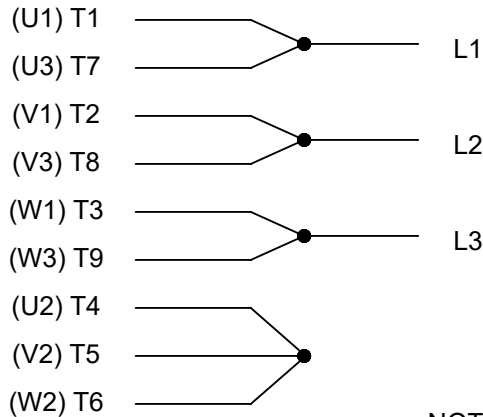
**THREE PHASE  
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS  
CONNECTED IN SERIES



**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**



**VIEW OF TERMINAL END**

**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
<small>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.</small>			DATE 05-13-1992	MATERIAL	PROCESS/FINISH
			REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION	SIZE A



NONE	P/N	NONE	
NONE	NONE		
NONE FT-LB		NONE V	NONE Hz

DATE: 06/23/2017 01:58:28 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

Data Sheet

Date: 20-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



145THTN8029

Submittal

Data @ 460 V

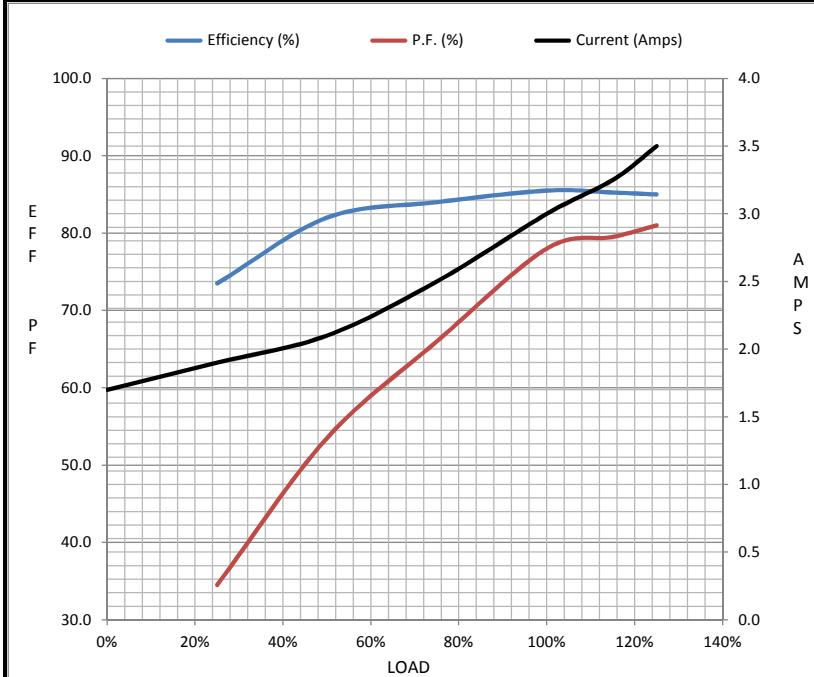
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.70	1.90	2.10	2.50	3.0	3.3	3.5	25.0
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	6.8	7.5	21.8
RPM	1800	1788	1776	1765	1750	1,746	1740	0
Efficiency (%)		73.5	82.0	84.0	85.5	85.3	85.0	
P.F. (%)	7.8	34.5	53.5	66.0	78.0	79.5	81.0	65.0

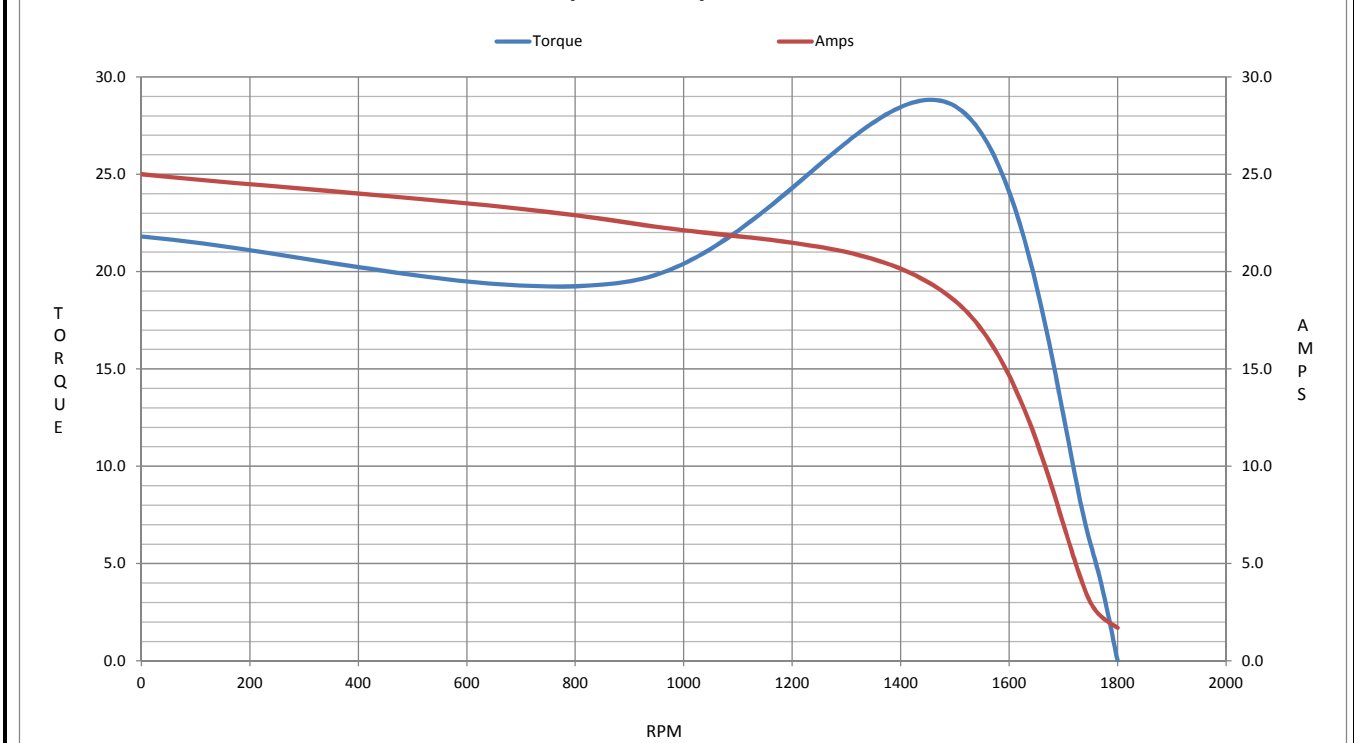
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1500	1750	1800
Current (Amps)	25.0	22.5	18.5	3.0	1.70
Torque (ft-lb)	21.8	19.5	28.5	6.0	0.00

Information Block				
HP	2.0			
Sync. RPM	1800			
Frame	145			
Enclosure	TENV			
Construction	TTN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	M			
Service Factor	1.0			
Temp Rise @ FL	90 ° 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	ZT490 F			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	A-104291-625			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
3.8340	2.8970	5.9500	5.6370	154.7800



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 : 145THTN8029

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

Catalog No : Y526

Rework No : N/A

Directives :

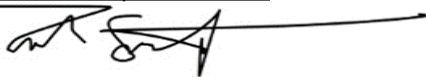
Low Voltage Directive 2014/35/EU

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**