

PRODUCT INFORMATION PACKET

Model No: 213THFS8028

Catalog No: Y595

Blue Max® Inverter Duty Encoder Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 213TC Frame, TEFC



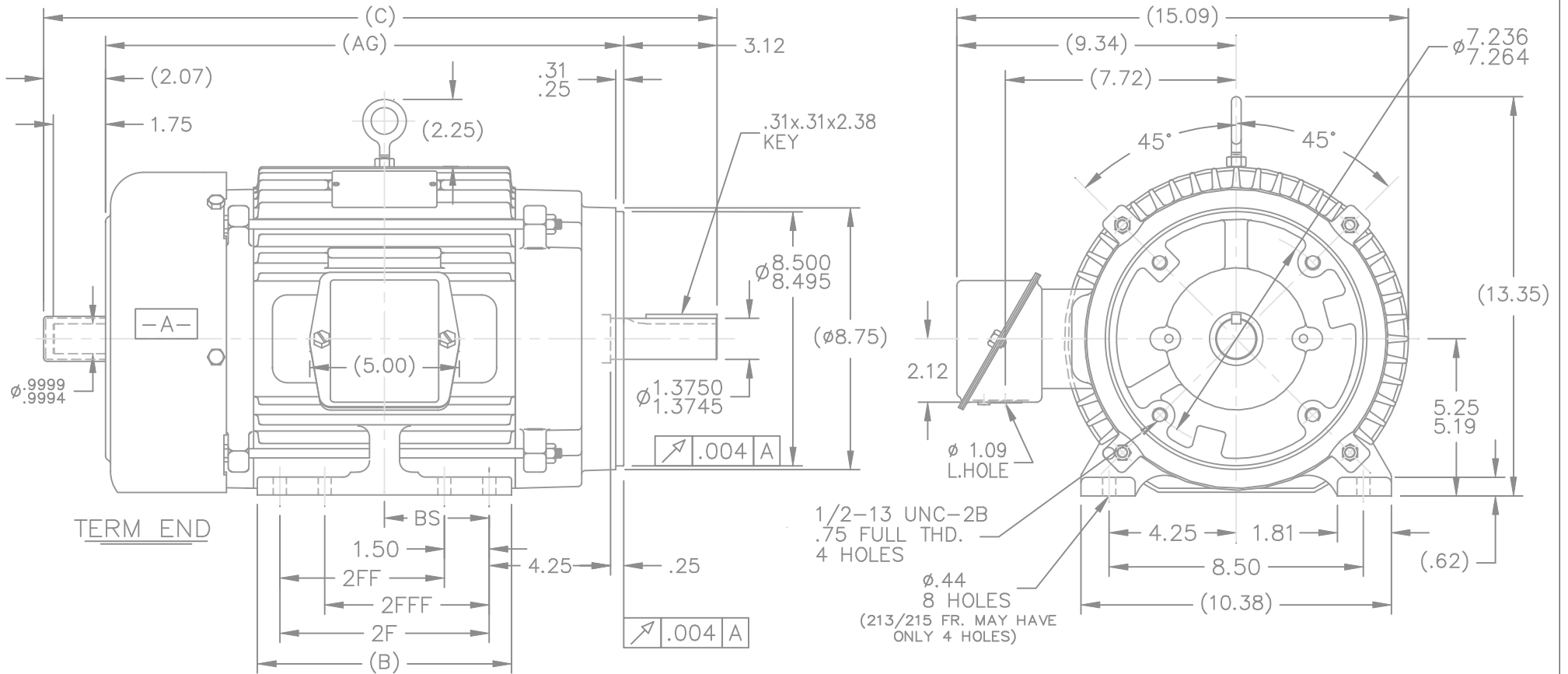
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Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	230/460 V
Current	19.4/9.7 A	Speed	1765 rpm
Service Factor	1	Phase	3
Efficiency	88.5 %	Power Factor	81
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	L
Frame	213TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6207
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	1.26 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	21.03 in
Frame Length	7.25 in	Shaft Diameter	1.375 in
Shaft Extension	3.12 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Connection Drawing	A-EE7308T	Outline Drawing	A-SS88574-725

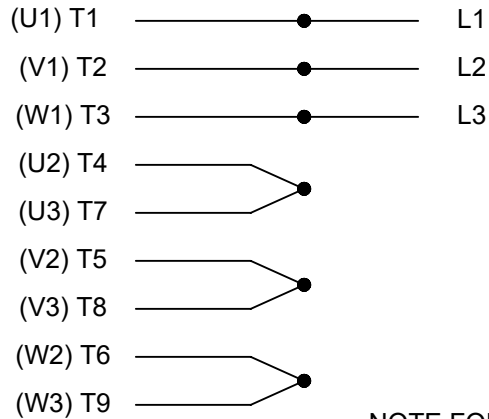


DASH	FRAME	C	AG	B	2F	2FF	2FFF	BS
725	213T	21.03	15.84	7.00	5.50	-	-	2.75
875	215T	22.53	17.34	8.50	7.00	-	-	3.50
875	213/5T	22.53	17.34	8.50	7.00	5.50	5.50	3.50
1000	213T	23.78	18.59	9.75	8.25	5.50	5.50	4.12
1000	215T	23.78	18.59	9.75	8.25	7.00	7.00	4.12

- 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. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

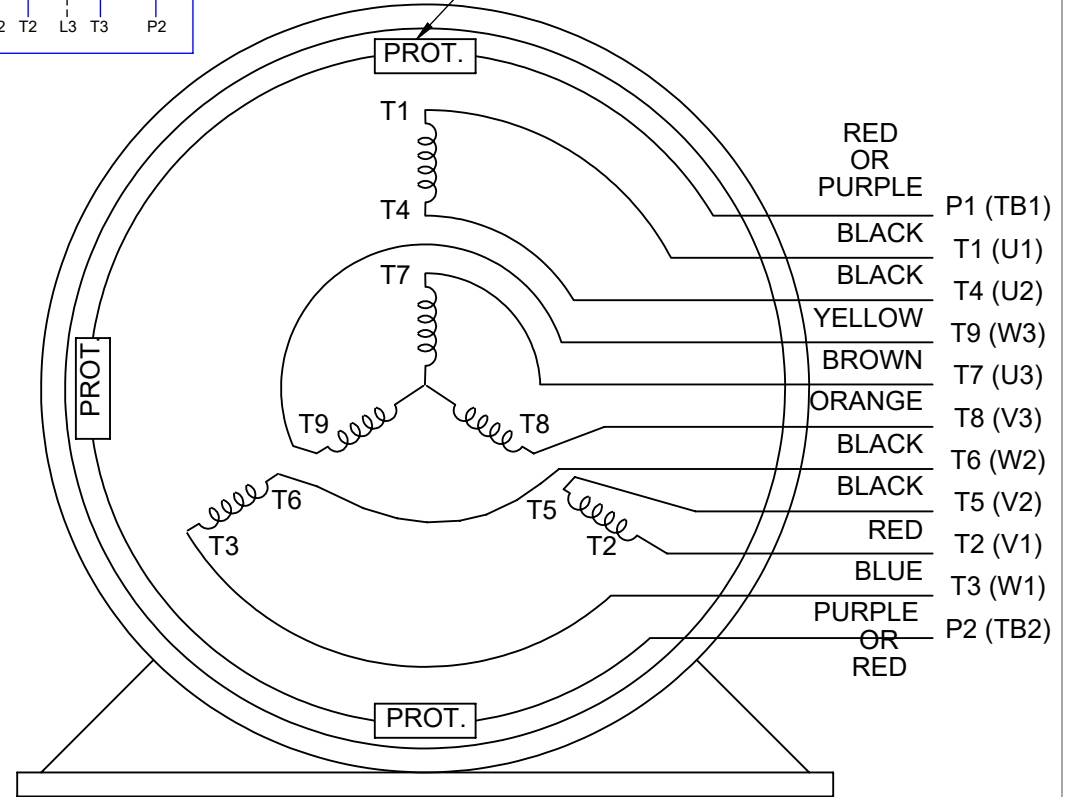
			TOLERANCES UNLESS SPECIFIED			DRAWN DRS 11-15-2001					
			DEC.	INCHES		CHK ML 01-09-2002	APPD TB 01-09-2002				
4	UPDATED DRAWING		TJW	05/04/2007	.X	±.1	SCALE 1=5				
3	REVISED FOOT HOLE NOTE	CN 29200-2241	NJS	02-18-2002	DRS	.XX	±.03				
2	UPDATED C'BOX GEOMETRY	CN 28426	DRS	01-25-2002	ML	.XXX	±.005				
1	NEW DRAWING	CN 28945	DRS	10-09-2002		.XXXX	±.0005				
NO.	REVISION		BY & DATE		CHK	ANG	±'30"				
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 ss88574		SIZE A	DRAWING NO. SS88574	PAGE OF	REV. 4
					DIST LB						

HIGH VOLTAGE



**THREE PHASE
DUAL VOLTAGE MOTOR**

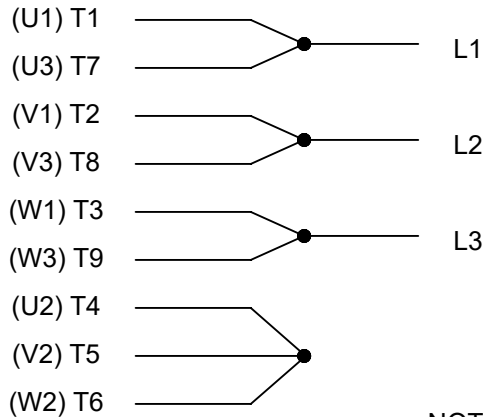
THERMO-PROTECTORS
CONNECTED IN SERIES



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 ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR
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			REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION	SIZE A

CERTIFICATION DATA SHEET

Model#: 213THFS8028 CS WINDING#: K2134181 R2 1
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1/F2 CAPABLE
 OUTLINE: A-SS88574-725

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN			
7 1/2	5.6	1800	1765	213TC	TEFC	L	INV			
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION	
3	60	230/460	19.4/9.7	INVERTER ONLY	CONTINUOUS	H4	1.0	40	3300	
FULL LOAD EFF: 88.5		3/4 LOAD EFF: 88.5		1/2 LOAD EFF: 86.5		GTD. EFF		ELEC. TYPE		NO LOAD AMPS
FULL LOAD PF: 81		3/4 LOAD PF: 76.5		1/2 LOAD PF: 66.5		86.5		SQ CAGE INV DUTY		8.4 / 4.2
F.L. TORQUE		LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE°C		
22.5 LB-FT		176 / 88		60 LB-FT 267		89 LB-FT 396		55		
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT				
72 dBA	82 dBA	0.8 LB-FT^2	0 LB-FT^2	0 SEC.	0	192 LBS.				

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.78624	0.66906	2.50614	3.8934	63.882
RM	ZREF	XR	TD	TD0
2207.52	37.8	2.5	0.011	0.269

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6309	6207						

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 2000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY DYNAPAR HS35 NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE

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NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/22/2017 03:56:09 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/20/2017

213THFS8028

Customer: _____



Attention: _____

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

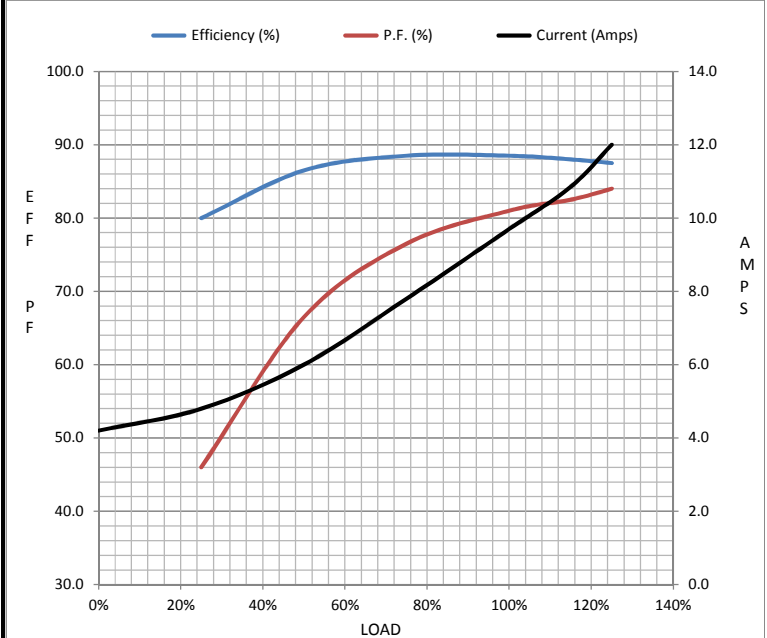
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.2	4.8	6.0	7.8	9.7	10.9	12.0	88.0
Torque (ft-lb)	0.00	5.5	11.0	16.7	22.5	25.3	28.0	60.0
RPM	1800	1790	1780	1775	1765	1,759	1750	0
Efficiency (%)		80.0	86.5	88.5	88.5	88.0	87.5	
P.F. (%)	9.5	46.0	66.5	76.5	81.0	82.5	84.0	45.0

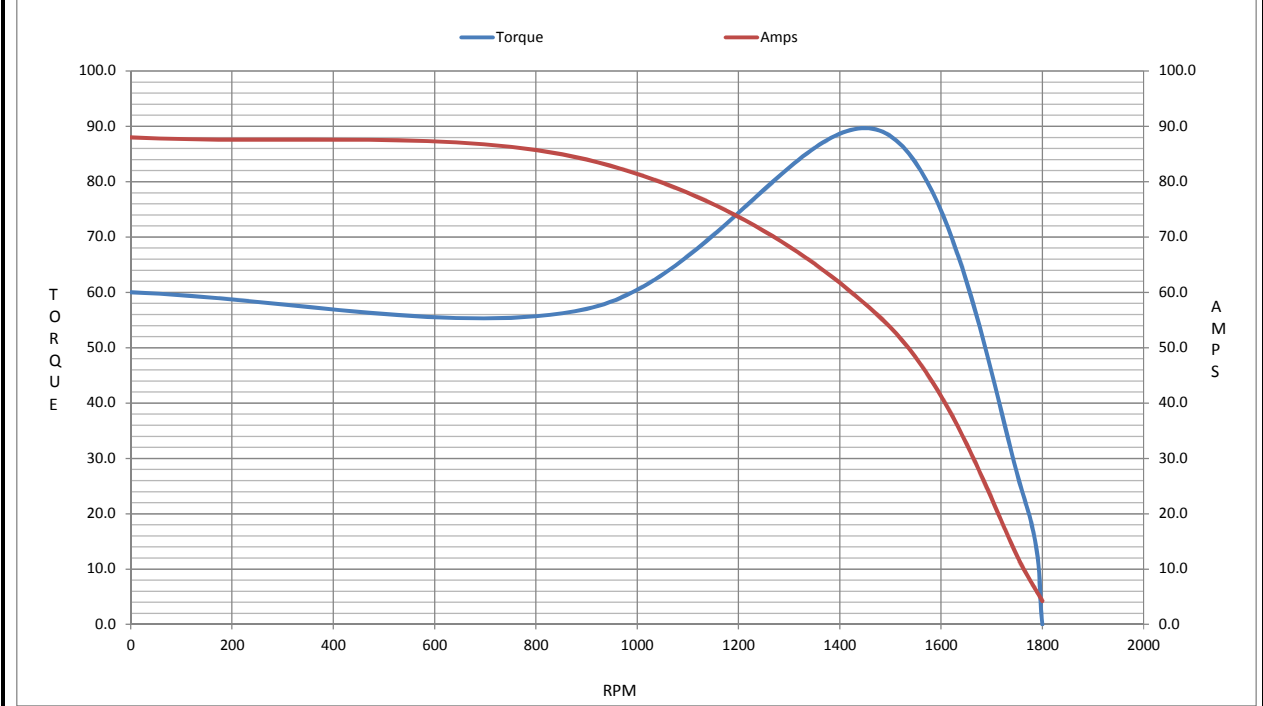
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1485	1765	1800
Current (Amps)	88.0	84.0	55.0	9.7	4.2
Torque (ft-lb)	60.0	57.0	89.0	22.5	0.00

Information Block				
HP	7.5			
Sync. RPM	1800			
Frame	213			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	L			
Service Factor	1.0			
Temp Rise @ FL	55 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.80 Lb-Ft ²			
Ref Wdg	K2134181 R2			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	A-SS88574-725			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7860	0.6690	2.5060	3.8930	63.8820



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 : 213THFS8028

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

Catalog No : Y595

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