

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405TSTDS16005

Catalog No: U455A

XRI® General Purpose General Purpose Motor, 150 & 125 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V,
3600 & 3000 RPM, 405TSC Frame, DP



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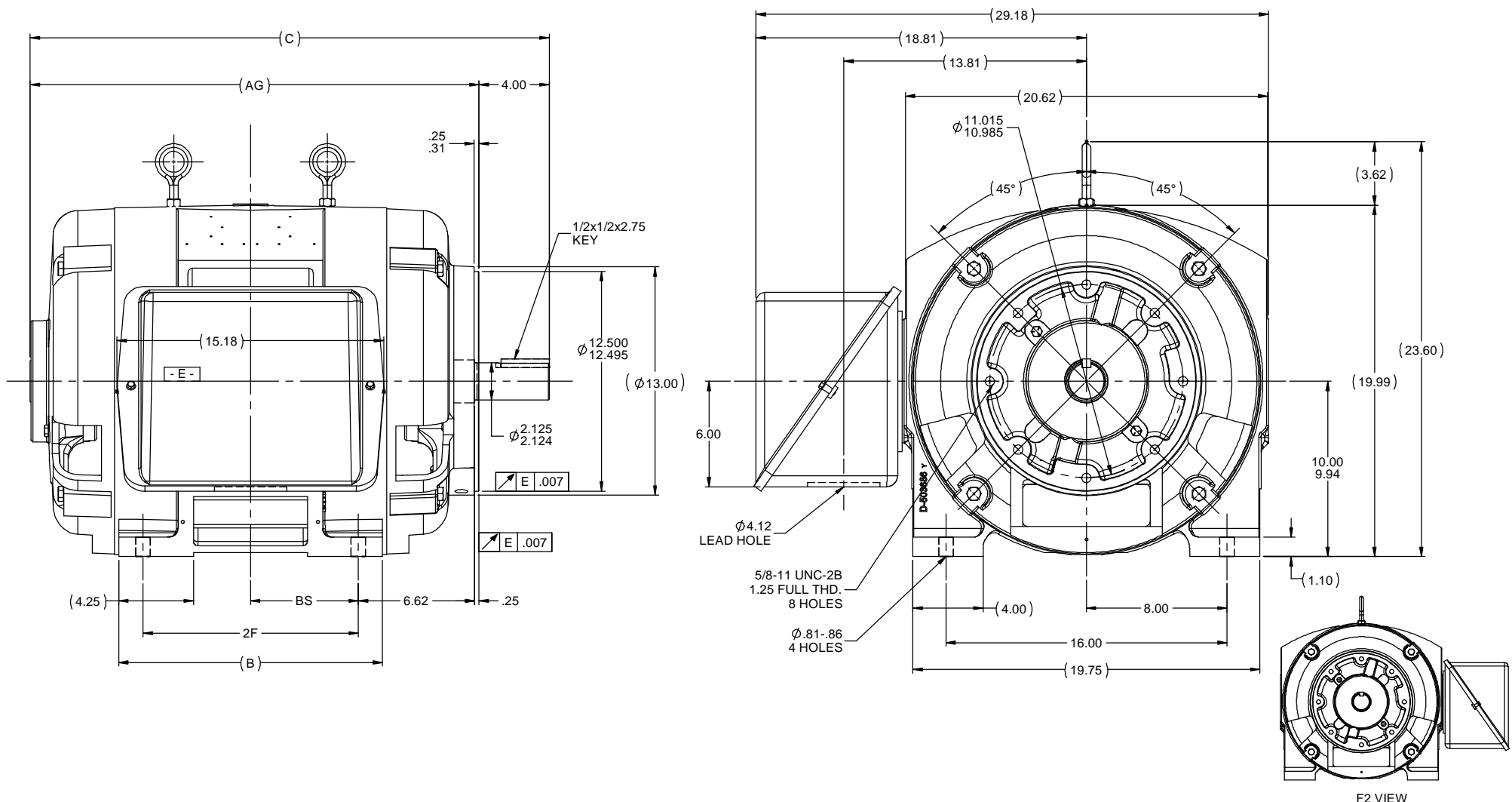
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	150 & 125 Hp
Output KW	112.0 & 93.0 kW	Voltage	460 & 380 V
Speed	3565 & 2965 rpm	Service Factor	1.15 & 1.15
Frame	405TSC	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	95 & 94.1 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	165 & 167 A	Power Factor	89.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start & Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.0395 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	31.00 in
Frame Length	17.00 in	Shaft Diameter	2.125 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS510954-1700	Connection Drawing	A-EE7300BH

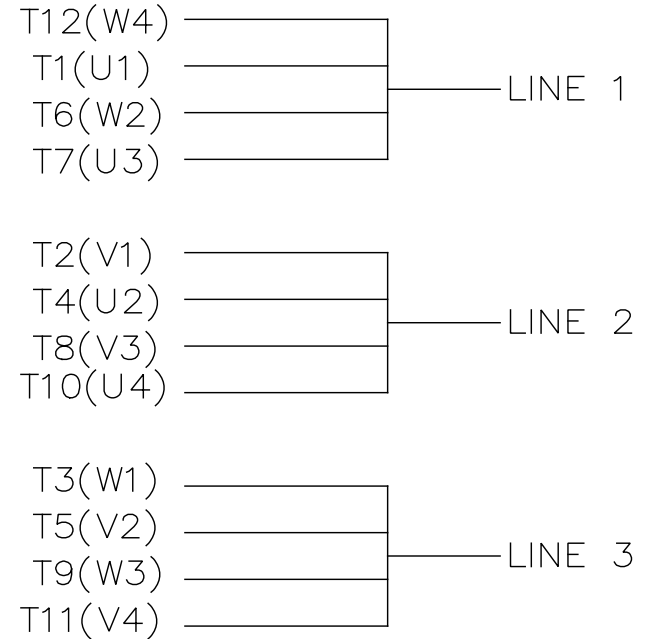
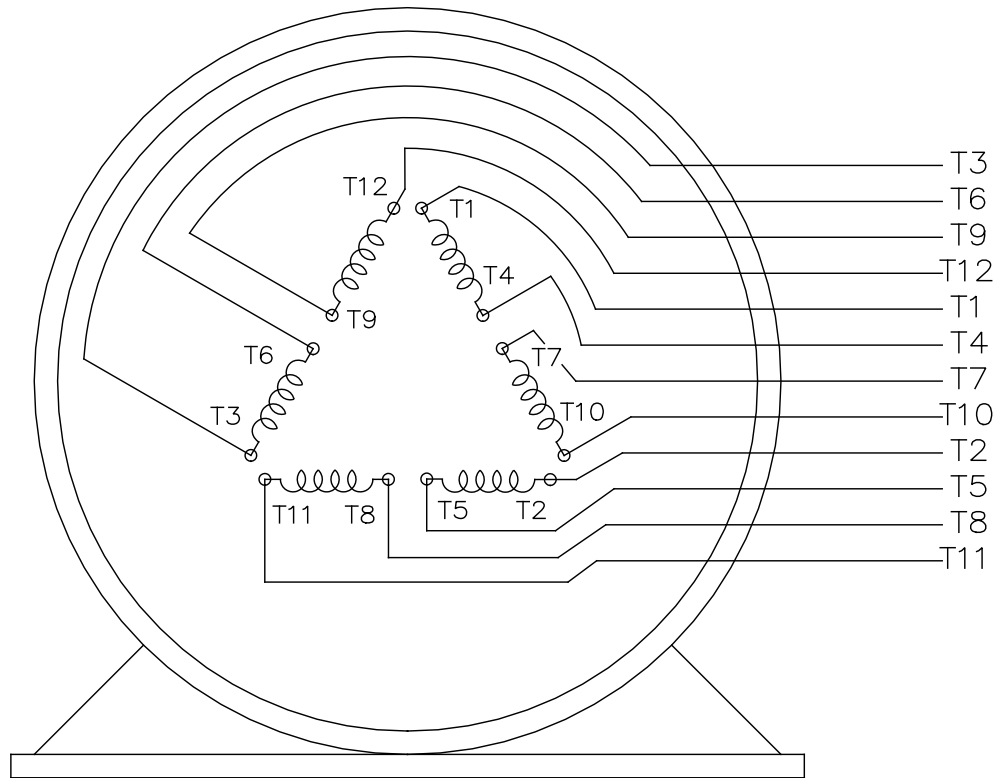


- NOTES:
1. BOX CAN BE ROTATED IN 90 ° STEPS.
 2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180 °.
 3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	B	C	2F	AG	BS
1550	404TSC	15.00	29.50	12.25	25.50	6.12
1700	405TSC	16.50	31.00	13.75	27.00	6.88

REVISION		BY & DATE	CHK	LANG	± 1/2°	FINISH	PREV	SIZE	DRAWING NO	REV
07	ADDED F2 VIEW PER MU108019, REDRAWN IN SOLIDWORKS	JG 07/16/2012	DJK	DEC	INCHES			B	SS510954	07
06	REDRAWN IN AUTOCAD	TAT 06/29/2004	ML	X	±.1					
05	REPLACED ONE EYEBOLT FOR TWO CN28063	BJW 2/10/2000	XX		±.03	TITLE	OUTLINE			SCALE 3:16
04	UPDATED C'BOX GEOMETRY CN28063	TRB 02/10/2000	XXX		±.005		400TSC FR. - DR. PR. - (STD) - C'FACE			REF
03	REDRAWN IN AUTOCAD	TLB 02/29/1988	XXXXX		±.0005	MATL				FMF
NO										PAGE OF





VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		REGAL REGAL - BELOIT CORPORATION	DRAWN RJW 02-11-2005				
				DEC.	INCHES		CHK	ML	02-11-2005		
				.X	±.1		APPD	GK	02-11-2005		
				.XX	±.02	TITLE CONNECTION DIAGRAM		SCALE			
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX ±.005	12 LEAD- SINGLE VOLTAGE		REF			
1	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	ML	.XXXX ±.0005	MAT'L.		FMF			
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH		PREV			
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 02-11-2005	CAD FILE ee7300bh	SIZE A	DRAWING NO. EE7300BH	PAGE OF	REV. C
						DIST LB					

CERTIFICATION DATA SHEET

Model#: 405TSTDS16005 AN **WINDING#:** T405241 NONE 2
CONN. DIAGRAM: A-EE7300BH **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS510954-1700

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
150&125	112&93	3600	3565&2965	405TSC	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	165&167	PWS & YDRUN	CONTINUOUS	B1	1.15/1.15	40	3300

FULL LOAD EFF: 95&94.1	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89.5&90	3/4 LOAD PF: 88.5	1/2 LOAD PF: 84.5	94.5	SQ CAGE IND RUN	38.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
221 LB-FT	1020	290 LB-FT 130	560 LB-FT 253	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
82 dBA	92 dBA	16.5 LB-FT^2	140 LB-FT^2	10 SEC.	2	1100 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	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	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313	6313						

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

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

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DATE: 06/21/2017 08:20:52 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/20/2017

405TSTDS16005

Customer: _____



Attention: _____

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 460 V

Motor Load Data

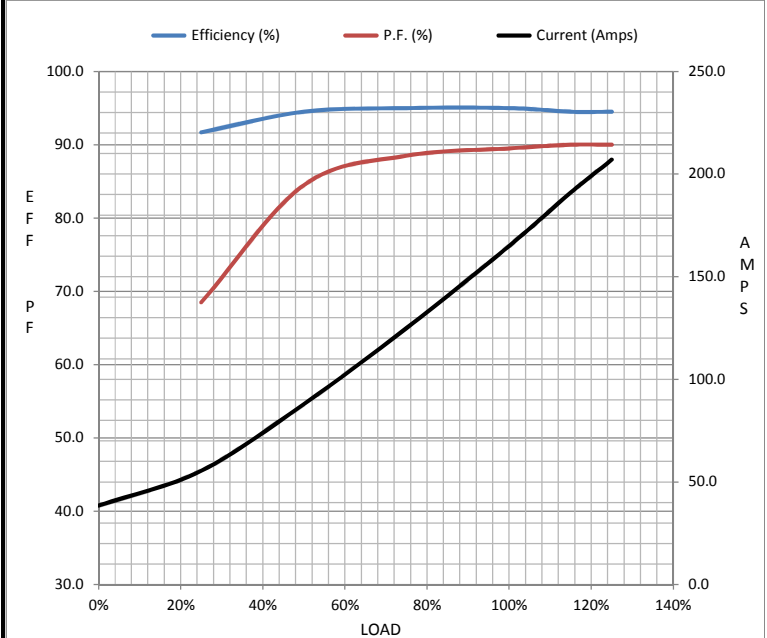
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	38.5	55.5	88.0	125	165	191	207	1,020
Torque (ft-lb)	0.00	55.0	110	165	221	255	276	290
RPM	3600	3592	3585	3575	3565	3,560	3555	0
Efficiency (%)		91.7	94.5	95.0	95.0	94.5	94.5	
P.F. (%)	7.5	68.5	84.5	88.5	89.5	90.0	90.0	31.0

Motor Speed Data

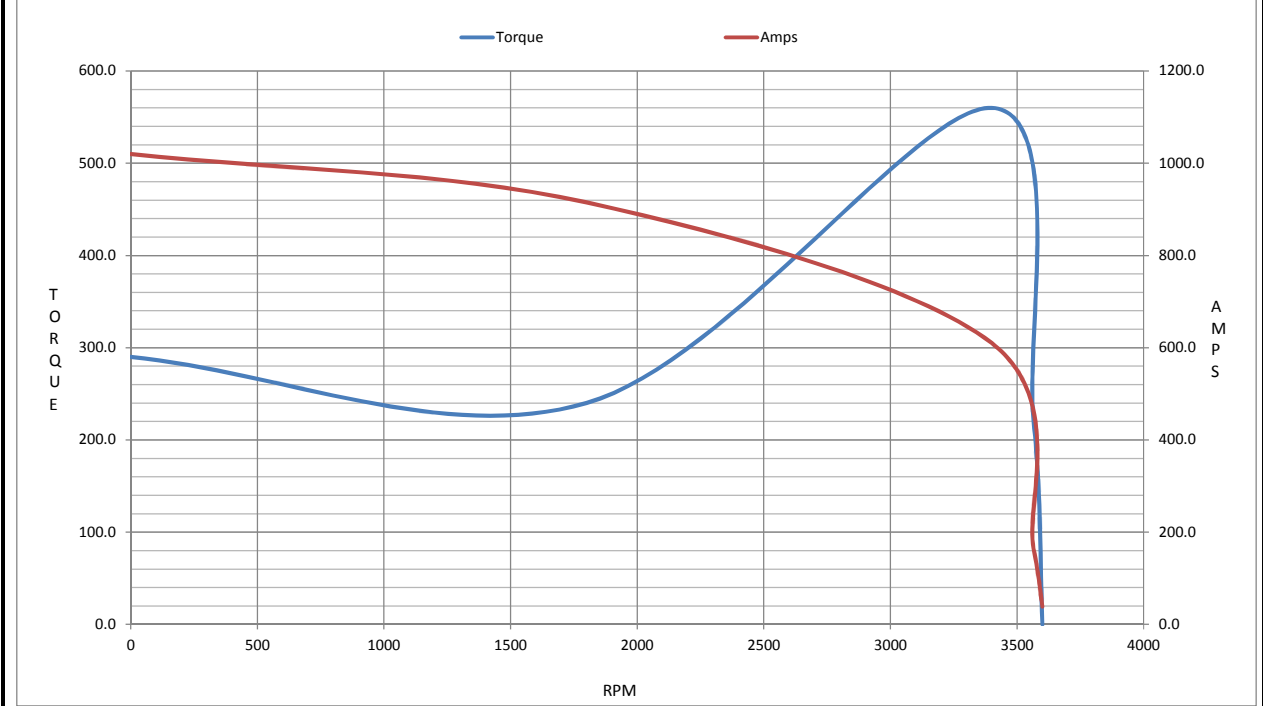
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3400	3565	3600
Current (Amps)	1,020	915	610	165	38.5
Torque (ft-lb)	290	240	560	221	0.00

Information Block

HP	150.0			
Sync. RPM	3600			
Frame	405			
Enclosure	DP			
Construction	TDS			
Voltage	460#380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	45 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	16.5 Lb-Ft ²			
Ref Wdg	T405241 NONE			
Sound Pressure @ 1M	82 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS510954-1700			
Conn. Diag	A-EE7300BH			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0220	0.0130	0.1870	0.1440	6.0900



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 : 405TSTDS16005

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

Catalog No : U455A

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