

PRODUCT INFORMATION PACKET

Model No: 284THFPA8086

Catalog No: Y395

Blue Max® Inverter Duty Encoder Motor, 15 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 284TC Frame,
TEBC-AXIAL



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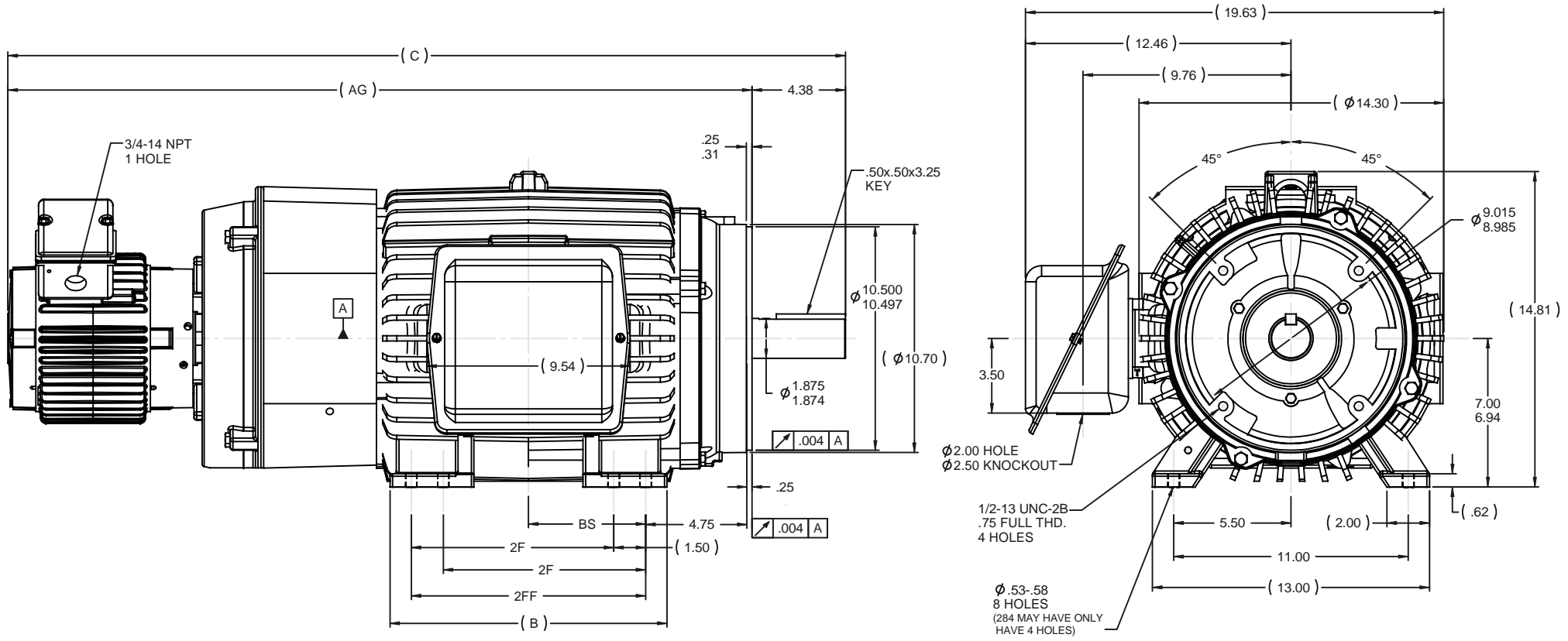


Nameplate Specifications

Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	230/460 V
Current	40.0/20.0 A	Speed	1170 rpm
Service Factor	1	Phase	3
Efficiency	88.5 %	Power Factor	79
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	G
Frame	284TC	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6210
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	6	Rotation	Reversible
Resistance Main	.748 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	37.81 in
Frame Length	12.75 in	Shaft Diameter	1.875 in
Shaft Extension	4.37 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Connection Drawing	A-EE7308T	Outline Drawing	B-SS311263-1275



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

DASH	FRAME	C	AG	B	2F	2FF	BS
1275	284TC	37.81	33.43	11.50	9.50		4.75
1425	286TC	39.31	34.93	13.00	9.50	11.00	5.50

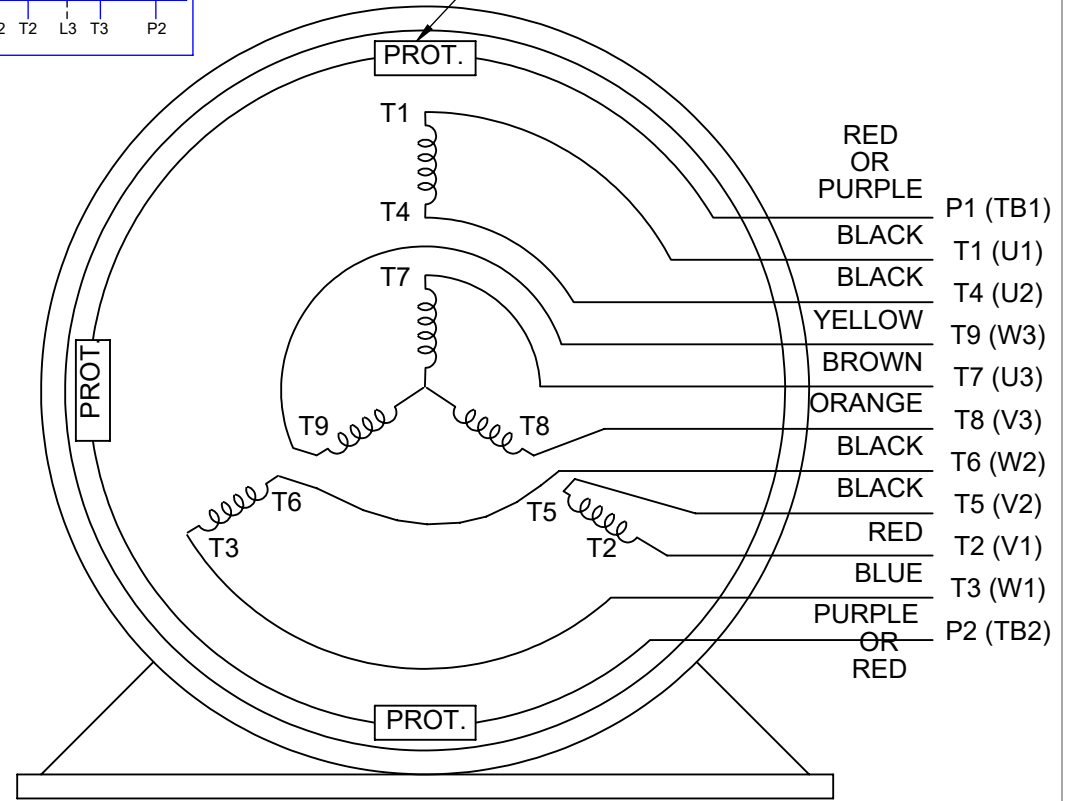
		TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN CAV 12-26-2001	
		DEC	INCHES			CHK	ML 01-04-2002
3	REVISED MOUNTING HOLE QUANTITY CN 40694	DRS 10-25-2008	ML .XX ±.03	TITLE OUTLINE - TFPA SERIES		APPR	DD 01-04-2002
2	REDRAWN IN AUTOCAD	TAT 06-24-2008	XXX ±.005	280TC FR. - TEBC		SCALE	1:4.5
1	NEW DRAWING MU39842	CAV 01-02-2002	XXXX ±.0005	MATL		REF	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	CAD FILE SS311263	SIZE	DRAWING NO	REV	
		DIST LB		B	SS311263	3	

HIGH VOLTAGE



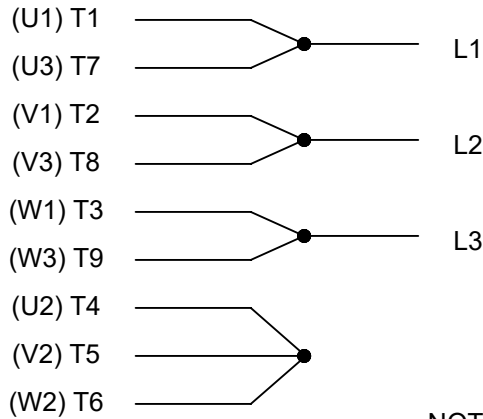
**THREE PHASE
DUAL VOLTAGE MOTOR**

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 ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR	
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			REFERENCE EE7308/EE7300	SIZE A	DRAWING NUMBER EE7308T	SHEET 1 OF 1
			THIRD ANGLE PROJECTION			

CERTIFICATION DATA SHEET

Model#: 284THFPA8086 AC
CONN. DIAGRAM: A-EE7308T
OUTLINE: B-SS311263-1275

WINDING#: 254661 R1 6
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15	11.2	1200	1170	284TC	TEBC-AXIAL	G	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	40/20	INVERTER ONLY	CONTINUOUS	H4	1.0	40	3300

FULL LOAD EFF: 88.5	3/4 LOAD EFF: 89.5	1/2 LOAD EFF: 88.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 79	3/4 LOAD PF: 74.5	1/2 LOAD PF: 64	87.5	SQ CAGE INV DUTY	18 / 9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
67 LB-FT	230 / 115	126 LB-FT 188	178 LB-FT 266	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	2.7 LB-FT^2	- LB-FT^2	- SEC.	-	500 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.495704	0.404888	1.6555	1.515492	28.38

RM	ZREF	XR	TD	TD0
1649.824	18.92	3.33	0.0127	0.196

***** 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
6311	6210						

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

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INVERTER TORQUE: CONSTANT 2000:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY NORTHSTAR ST56 NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE

NONE	NONE	
- FT-LB	NONE V	NONE Hz

DATE: 06/23/2017 07:35:39 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 29-06-2017
Customer: _____
Attention: _____
Submitted by: FAREEDA DUDEKULA



284THFA8086

Submittal

Data @ **460 V**

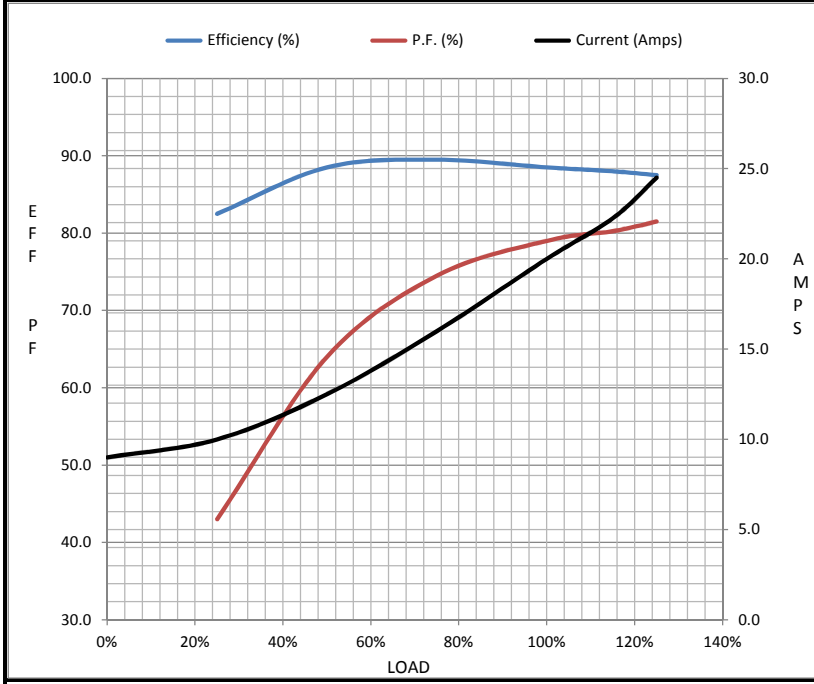
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	9.0	10.0	12.5	16.0	20.0	22.3	24.5	115
Torque (ft-lb)	0.00	16.5	33.0	50.0	67.0	75.8	84.5	126
RPM	1200	1190	1185	1180	1170	1,166	1160	0
Efficiency (%)		82.5	88.5	89.5	88.5	88.0	87.5	
P.F. (%)	8.5	43.0	64.0	74.5	79.0	80.3	81.5	42.0

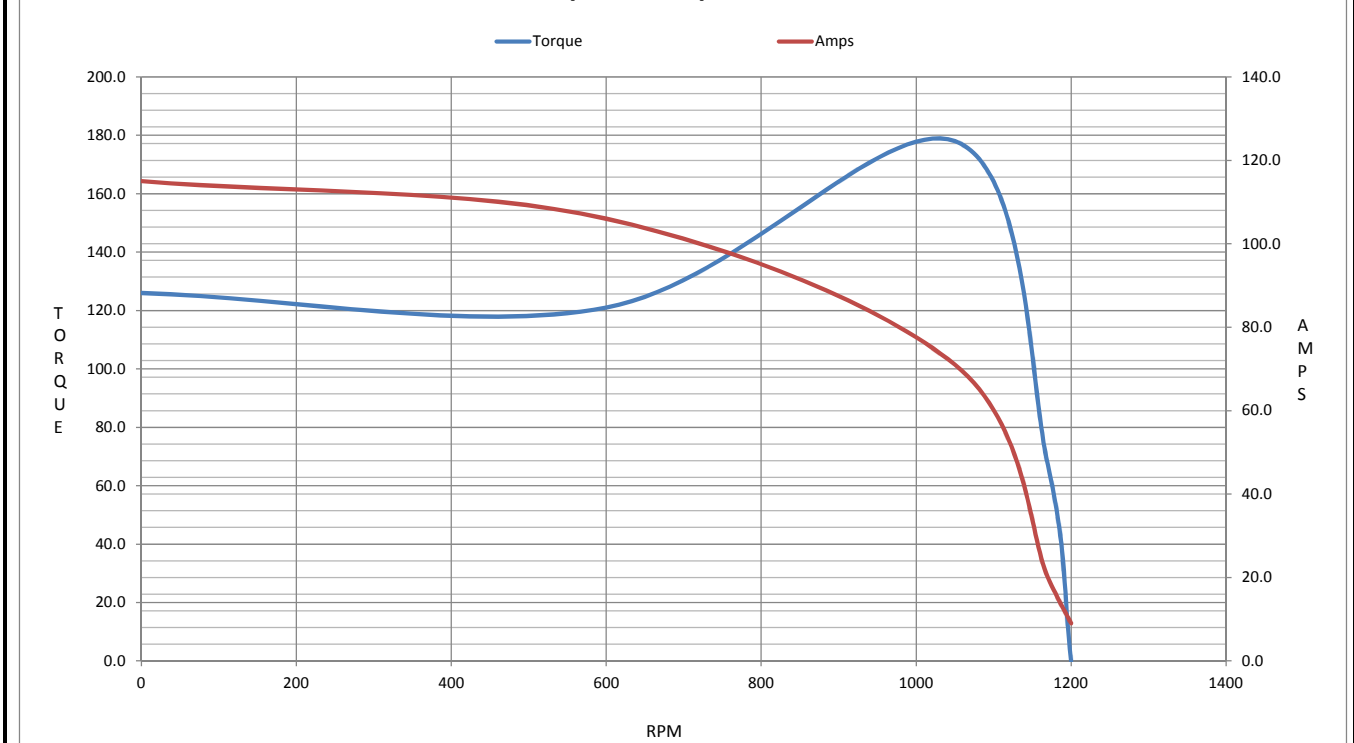
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1050	1170	1200
Current (Amps)	115	106	71.0	20.0	9.0
Torque (ft-lb)	126	121	178	67.0	0.00

Information Block				
HP	15.0			
Sync. RPM	1200			
Frame	284			
Enclosure	TEBC			
Construction	TBP			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	60 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	2.70 Lb-Ft ²			
Ref Wdg	254661 R1			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS311263-1275			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4960	0.4050	1.6560	1.5150	28.3800



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 : 284THFPA8086

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

Catalog No : Y395

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