

PRODUCT INFORMATION PACKET

Model No: 444THFN8384

Catalog No: Y589

Blue Max® Inverter Duty Encoder Motor, 100 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 444TC Frame,
TEBC-AXIAL



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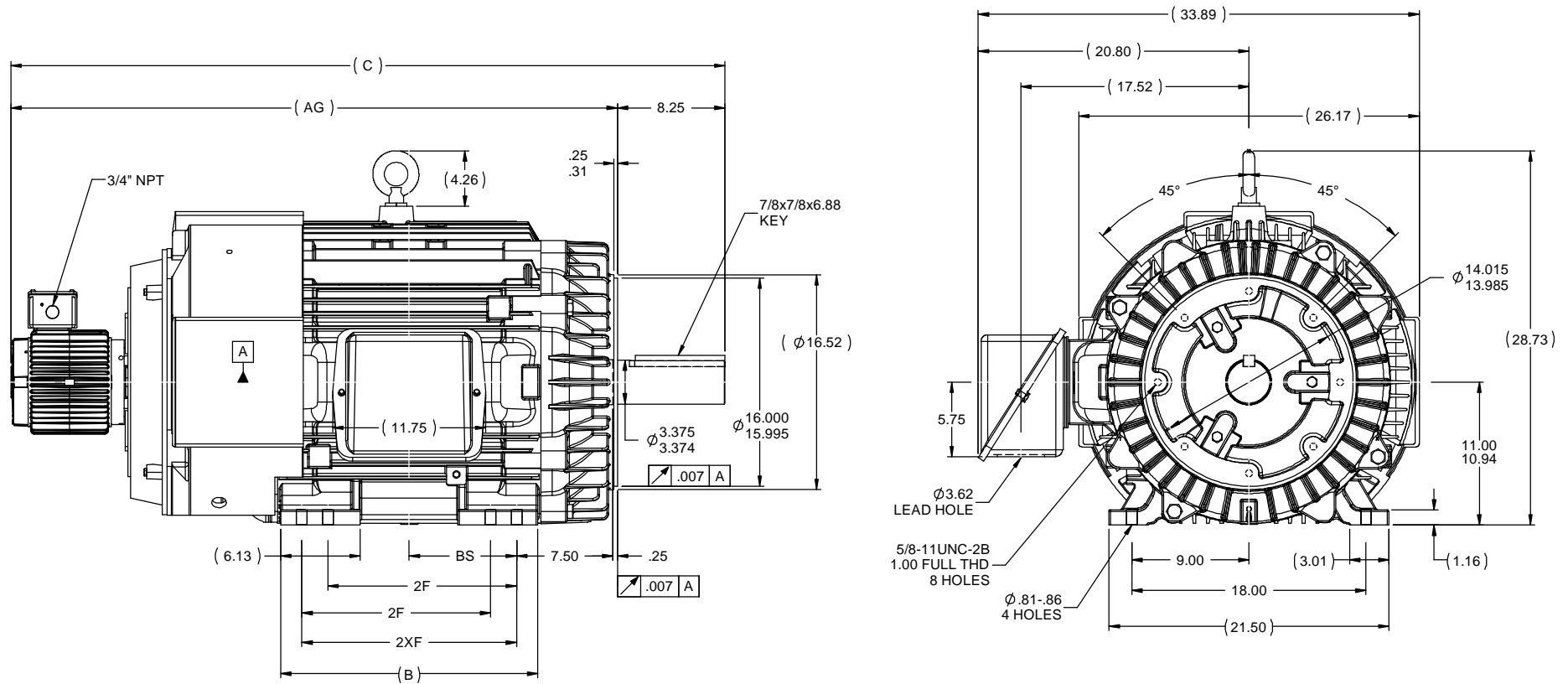
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Nameplate Specifications

Phase	3	Output HP	100 Hp
Output KW	75.0 kW	Voltage	230/460 V
Speed	1190 rpm	Service Factor	1
Frame	444TC	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	Thermostat	Efficiency	94.5 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	250.0/125.0 A	Power Factor	79
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	H
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
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	.045 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	54.85 in
Frame Length	20.25 in	Shaft Diameter	3.375 in
Shaft Extension	8.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Outline Drawing	B-SS515884-2025	Connection Drawing	A-EE7308T

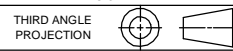


NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90 ° STEPS.
2. CONDUIT 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.

REVISION		BY & DATE		TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC	DRAWN	
NO	DESCRIPTION	CHK	ANG	DEC	INCHES		CHK	DATE
5	REVISED FRAME AND DASH TABLE ISAAC09-5049	TJW	4/1/2010	EH	DEC	TITLE OUTLINE - TEBC - STD. 444/445TC.FR. MATL FINISH PREV NETWORK FILE NAME SSS15884	KL	1/8/1997
4	UPDATED DRAWING	RJW	5/7/2007	X	±.1		ML	1/9/1997
3	BLOWER MOTOR ROTATED 90° CBOX @ F3 CN224459	PGK	7/9/1997	XX	±.03		DJK	1/9/1997
2	REVISED TO SHOW FRAME WITH CAST-IN LUG CN22904	MH	2/25/1997	XXX	±.005		SCALE	1:8
1	NEW DRAWING MU12868	KL	1/9/1997	XXXX	±.0005		REF	
				±7.30"		FMF		
						PAGE	OF	
						SIZE	DRAWING NO	REV
						B	SSS15884	5

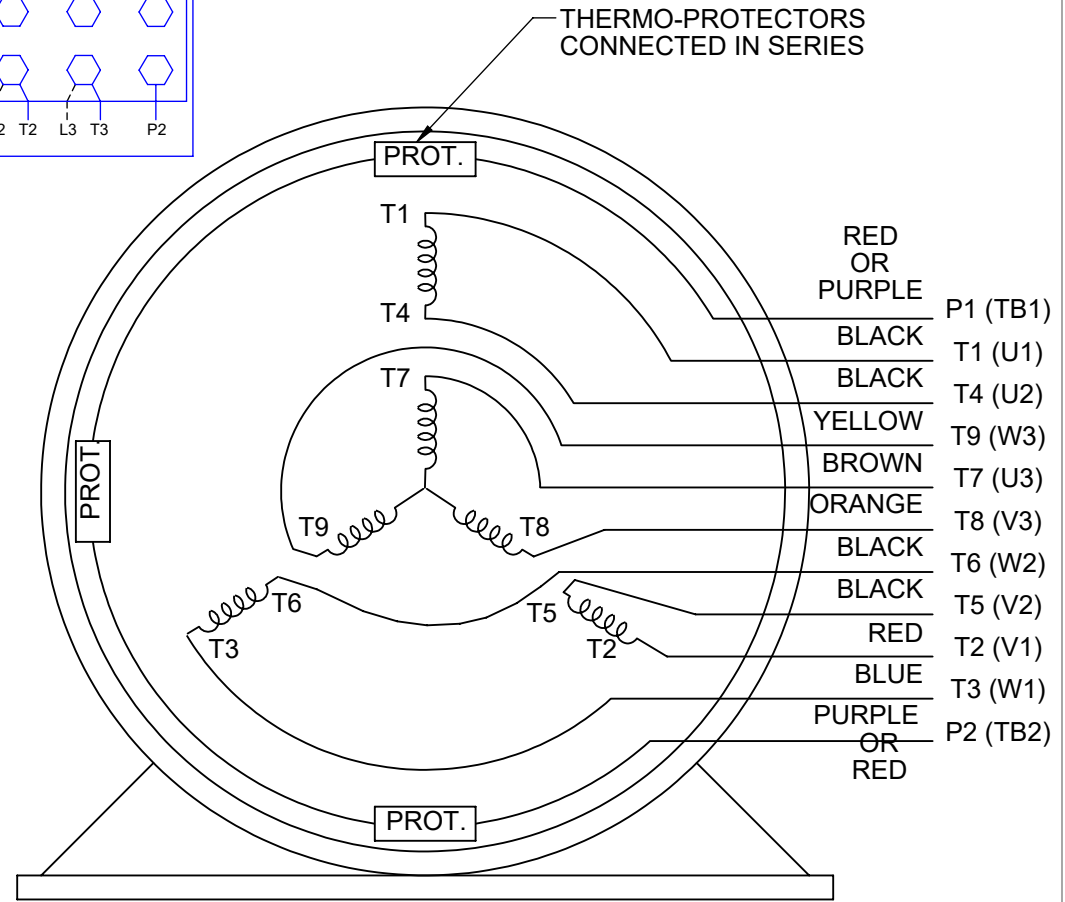
DASH	FRAME	B	C	AG	BS	2F	2XF
1825	444TC	17.75	52.85	44.60	7.25	14.50	---
2025	444/445TC	19.75	54.85	46.60	8.25	14.50	16.50



HIGH VOLTAGE

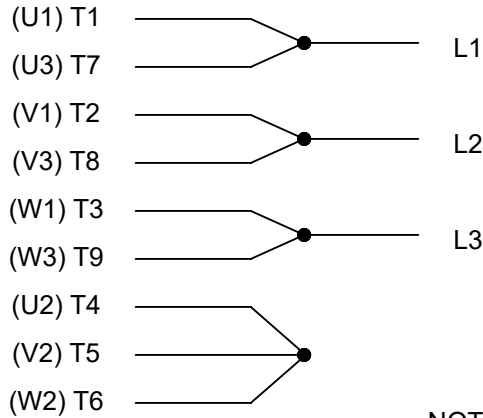


**THREE PHASE
DUAL VOLTAGE MOTOR**



**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		DESCRIPTION CONN DIAGRAM-INTERNAL
ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY TB	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#: 444THFN8384 BF WINDING#: T444668 R2 1
 CONN. DIAGRAM: A-EE7308T ASSEMBLY: F1/F2 CAPABLE
 OUTLINE: B-SS515884-2025

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN			
100	75	1200	1190	444TC	TEBC-AXIAL	H	INV			
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION	
3	60	230/460	250/125	INVERTER ONLY	CONTINUOUS	H1	1.0	40	3300	
FULL LOAD EFF: 94.5		3/4 LOAD EFF: 94.5		1/2 LOAD EFF: 93.6		GTD. EFF		ELEC. TYPE		NO LOAD AMPS
FULL LOAD PF: 79		3/4 LOAD PF: 74		1/2 LOAD PF: 63		93.6		SQ CAGE INV DUTY		112 / 56
F.L. TORQUE		LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE°C		
441 LB-FT		1680 / 840		825 LB-FT 187		1250 LB-FT 283		50		
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT				
88 dBA	98 dBA	61 LB-FT^2	- LB-FT^2	- SEC.	-	2117 LBS.				

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.032944	0.020448	0.213	0.260428	4.544
RM	ZREF	XR	TD	TD0
268.948	2.84	7	0.0395	0.625

*** 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
6318	6316						

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: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE

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NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/21/2017 03:34:18 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



444THFN8384

Submittal

Data @ 460 V

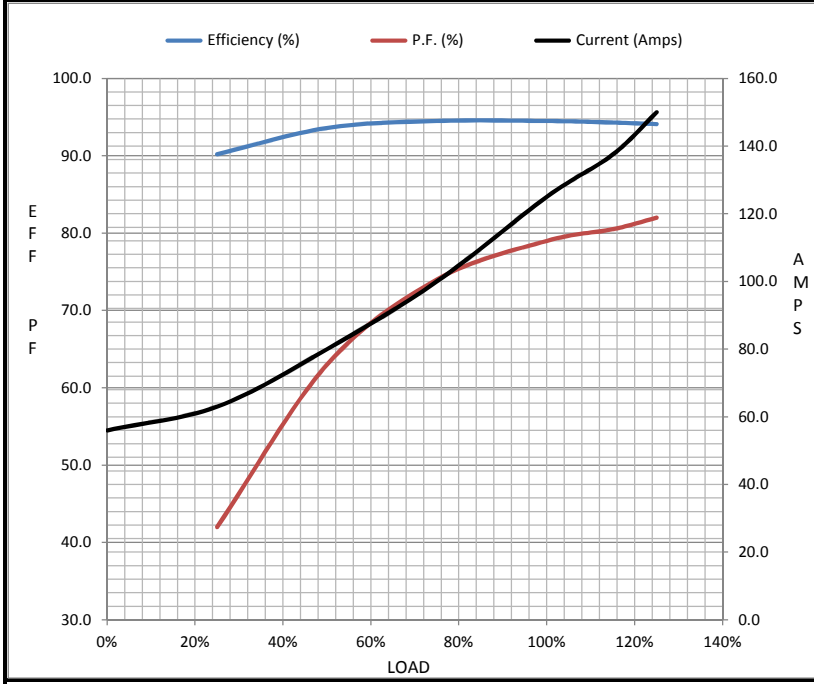
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	56.0	63.0	80.0	100	125	138	150	840
Torque (ft-lb)	0.00	110	220	330	441	498	555	825
RPM	1200	1196	1194	1192	1190	1,188	1186	0
Efficiency (%)		90.2	93.6	94.5	94.5	94.3	94.1	
P.F. (%)	5.0	42.0	63.0	74.0	79.0	80.5	82.0	31.0

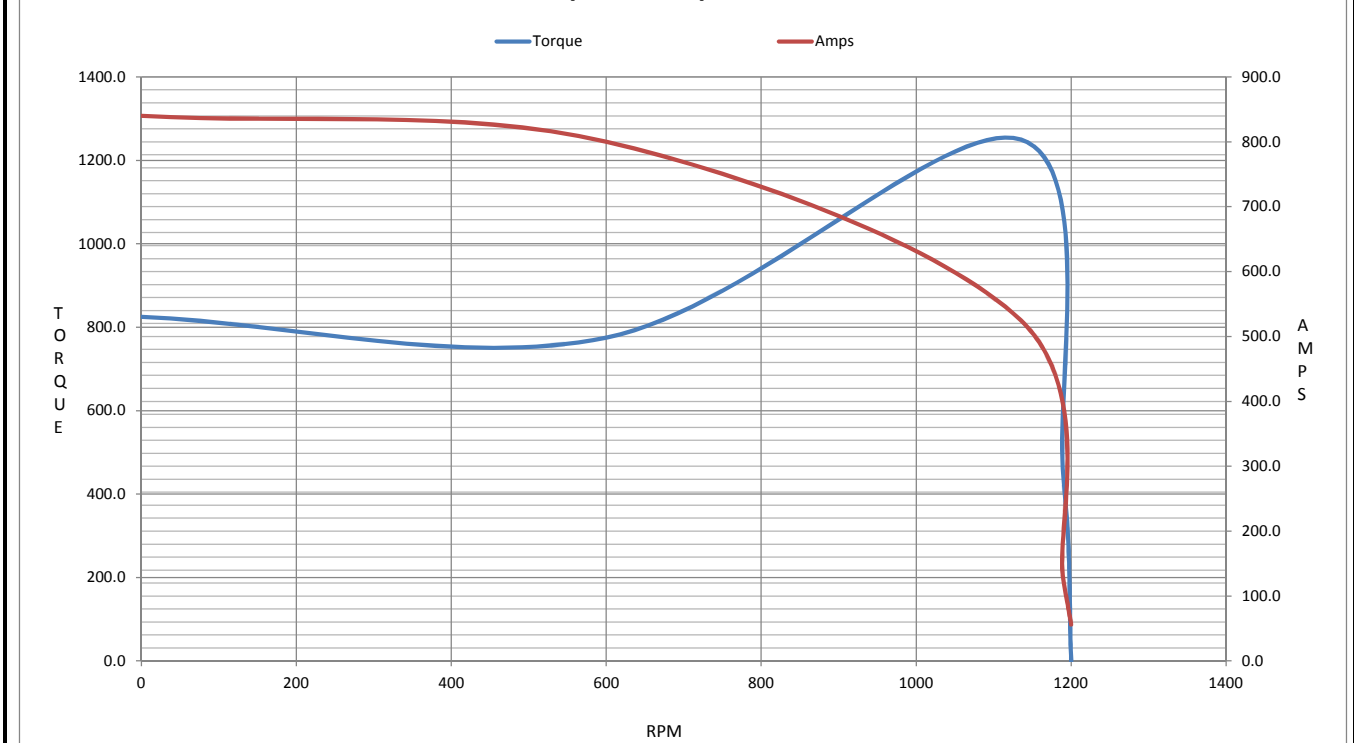
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1135	1190	1200
Current (Amps)	840	800	525	125	56.0
Torque (ft-lb)	825	775	1,250	441	0.00

Information Block				
HP	100.0			
Sync. RPM	1200			
Frame	444			
Enclosure	TEBC			
Construction	TBN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	50 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	61.0 Lb-Ft ²			
Ref Wdg	T444668 R2			
Sound Pressure @ 1M	88 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS515884-2025			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0330	0.0200	0.2130	0.2600	4.5440



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 : 444THFN8384

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

Catalog No : Y589

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