

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 286TTFC6077

Catalog No: E968A

General Purpose Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 & 1000 RPM,
286T Frame, TEFC



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RegalRexnord



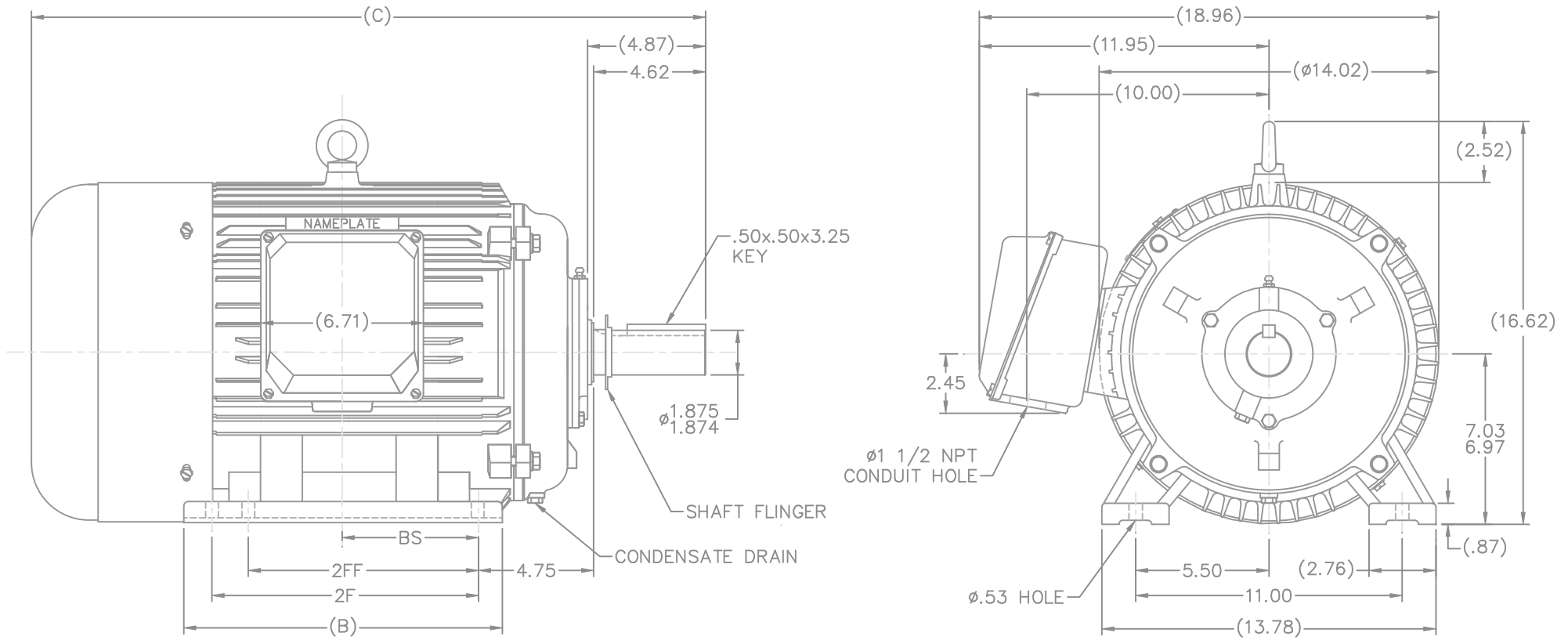
Nameplate Specifications

Phase	3	Output HP	20 & 15 Hp
Output KW	14.9 & 11.2 kW	Voltage	230/460 & 190/380 V
Speed	1185 & 980 rpm	Service Factor	1.15 & 1.15
Frame	286T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	92.4 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	53.5/26.8 & 48/24 A	Power Factor	75
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6309
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Mounting	Rigid Base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	T
Overall Length	27.83 in	Shaft Diameter	1.880 in
Shaft Extension	4.87 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	00417203ME	Outline Drawing	16953960ME-286T

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NOTE: 286T HAS 6 MTG. HOLES, USING 284T AND 286T LOCATIONS

DASH	FRAME	C	B	BS	2F	2FF
1248	284T	26.26	11.61	4.90	--	9.50
1398	286T	27.83	13.11	5.68	11.00	9.50

		TOLERANCES UNLESS SPECIFIED		DRAWN TJB 05-29-2003	
		DEC.	INCHES	CHK	ML 05-29-2003
		.X	±.1	APPD	GK 05-29-2003
		.XX	±.03	SCALE	1=4
		.XXX	±.005	REF	
		.XXXX	±.0005	FMF	
		CHK	ANG ±7'30"	PREV	
1 NEW DRAWING		TJB 05-29-2003		RFP CAD FILE 16953960me	
NO. REVISION		BY & DATE		SIZE	DRAWING NO. PAGE OF REV.
		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		B	169539-60ME 1
		DIST WA			



TITLE OUTLINE - RIGID
280T FR. - TEFC

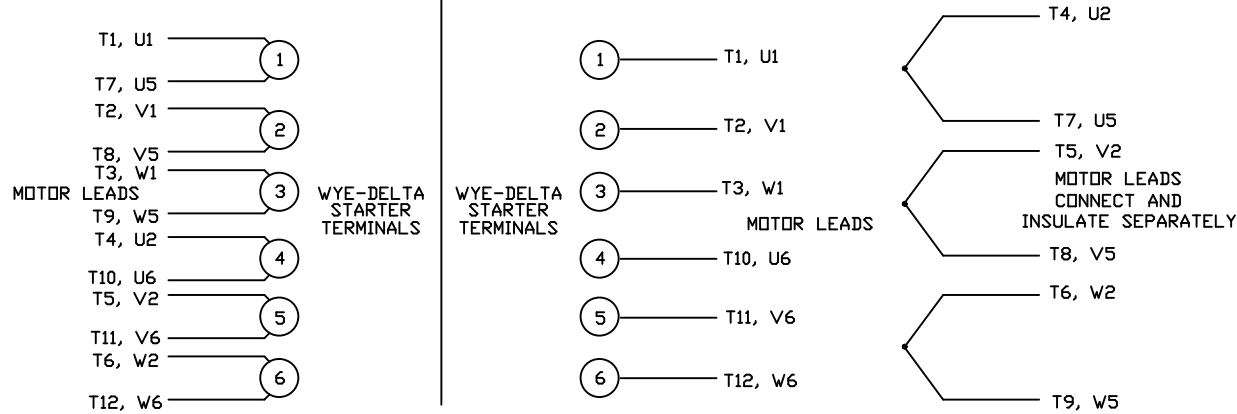
MAT'L

FINISH

WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

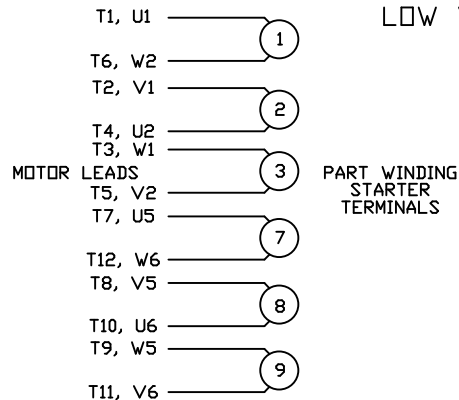
LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

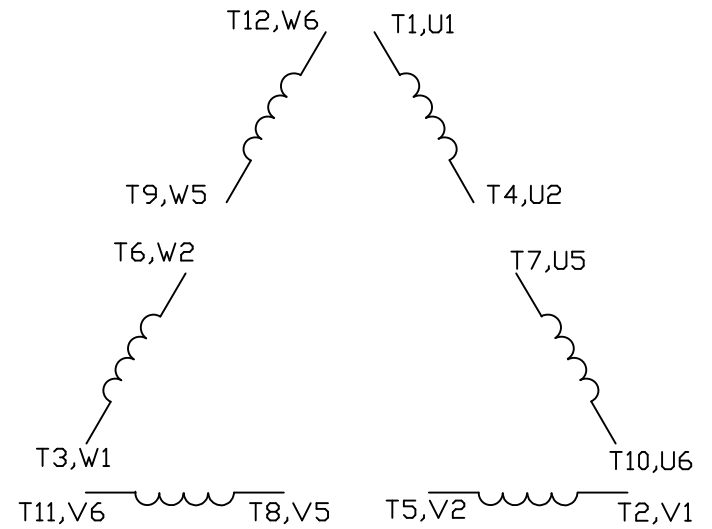
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



REFER TO THE PART WINDING STARTER INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

REFER TO THE CUTLER - HAMMER OR EQUIV. FOR PROPER SELECTION OF OVERLOAD HEATER COILS.

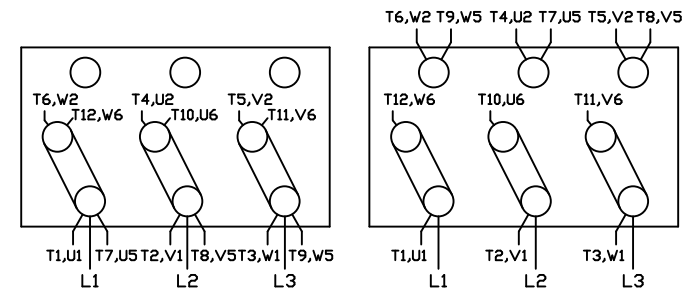
LINE LEADS



12 LEAD DELTA CONNECTION ACROSS THE LINE START
(FOR Y START DELTA RUN, REMOVE THE JUMPERS)

LOW VOLTAGE
(MUST BE REWIRED
AS SHOWN)

HIGH VOLTAGE
(FACTORY WIRED FOR HIGH
VOLTAGE AS SHOWN)



TOLERANCES
UNLESS SPECIFIED

DEC. INCHES

.X ±.1

.XX ±.01

.XXX ±.005

.XXXX ±.0005

ANG ±1/2*



TITLE DELTA - WYE CONNECTION DIAGRAM
IEC CAST IRON MOTORS

MAT'L.

FINISH

DRAWN CJW 08/28/02

CHK

APPD

SCALE 1=1

REF

FMF

PREV

NO. REVISION BY & DATE

CHK

RFP

DIST

CAD FILE 00417203ME

SIZE DRAWING NO.

A 004172-03ME

REV.

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CERTIFICATION DATA SHEET

Model#: 286TTFC6077 AA **WINDING#:** T14506013 FR 3
CONN. DIAGRAM: 00417203ME **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: 169539.60ME

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&15	14.9&11.2	1200	1185&980	286T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	53.5/26.8&48/ 24	ACROSS THE LINE	CONTINUOU S	F2	1.15/1.15	40	3300

FULL LOAD EFF: 92.4&91.7	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 75&77.5	3/4 LOAD PF: 70	1/2 LOAD PF: 59.2	91	SQ CAGE IND RUN	25 / 12.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
88 LB-FT	290 / 145	142 LB-FT 160	230 LB-FT 260	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
55.5 dBA	65.5 dBA	6.64 LB-FT^2	6.6 LB-FT^2	15 SEC.	2	400 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	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	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6311	6309						

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
NONE FT-LB NONE V NONE Hz

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DATE: 06/27/2017 03:39:22 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 12/12/2018
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



286TTC6077

Submittal

Data @ 460 V

Motor Load Data

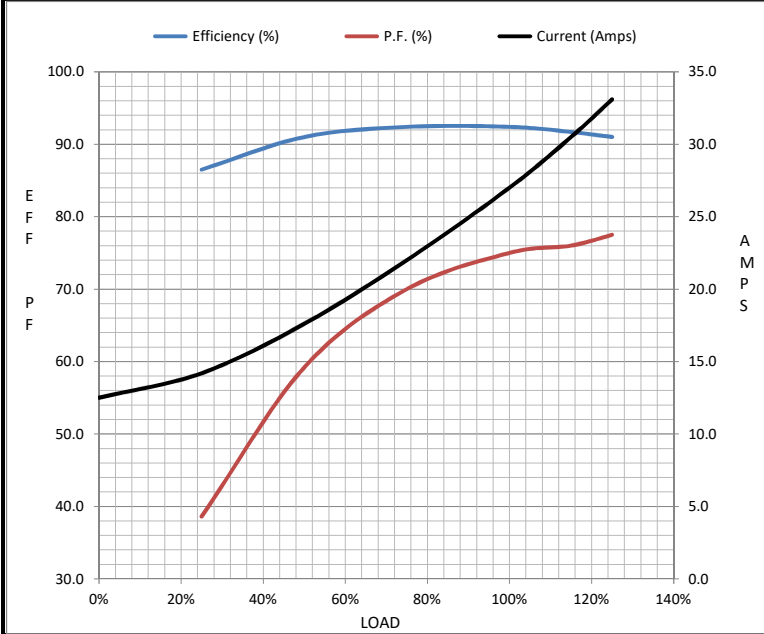
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.5	14.2	17.6	22.0	27.0	30.5	33.1	145
Torque (ft-lb)	0.00	22.0	45.0	67.0	88.0	103	112	142
RPM	1200	1197	1192	1190	1185	1,180	1180	0
Efficiency (%)		86.5	91.0	92.4	92.4	91.7	91.0	
P.F. (%)	5.1	38.6	59.2	70.0	75.0	76.0	77.5	0.0

Motor Speed Data

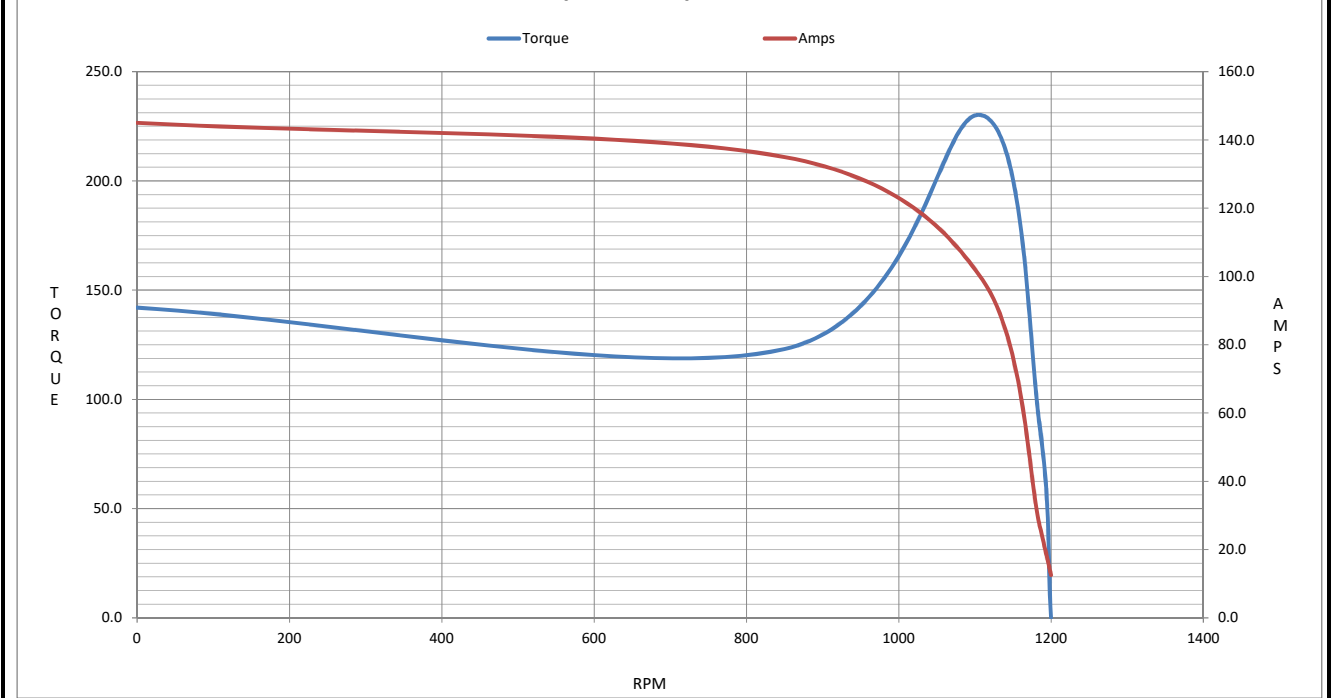
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	850	1110	1185	1200
Current (Amps)	145	135	99.0	27.0	12.5
Torque (ft-lb)	142	123	230	88.0	0.00

Information Block

HP	20.0			
Sync. RPM	1200			
Frame	286			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	55 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	6.6 Lb-Ft ²			
Ref Wdg	T14506013 FR			
Sound Pressure @ 1M	56 dBA			
VFD Rating	NONE			
Outline Dwg	169539.60ME			
Conn. Diag	4172.03			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



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 : 286TTFC6077

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

Catalog No : E968A

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 09/17/2022

CE 22