

# PRODUCT INFORMATION PACKET



Model No: LM28120  
Catalog No: LM28120  
Elevator Duty Motor, 10 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 256T Frame, DP



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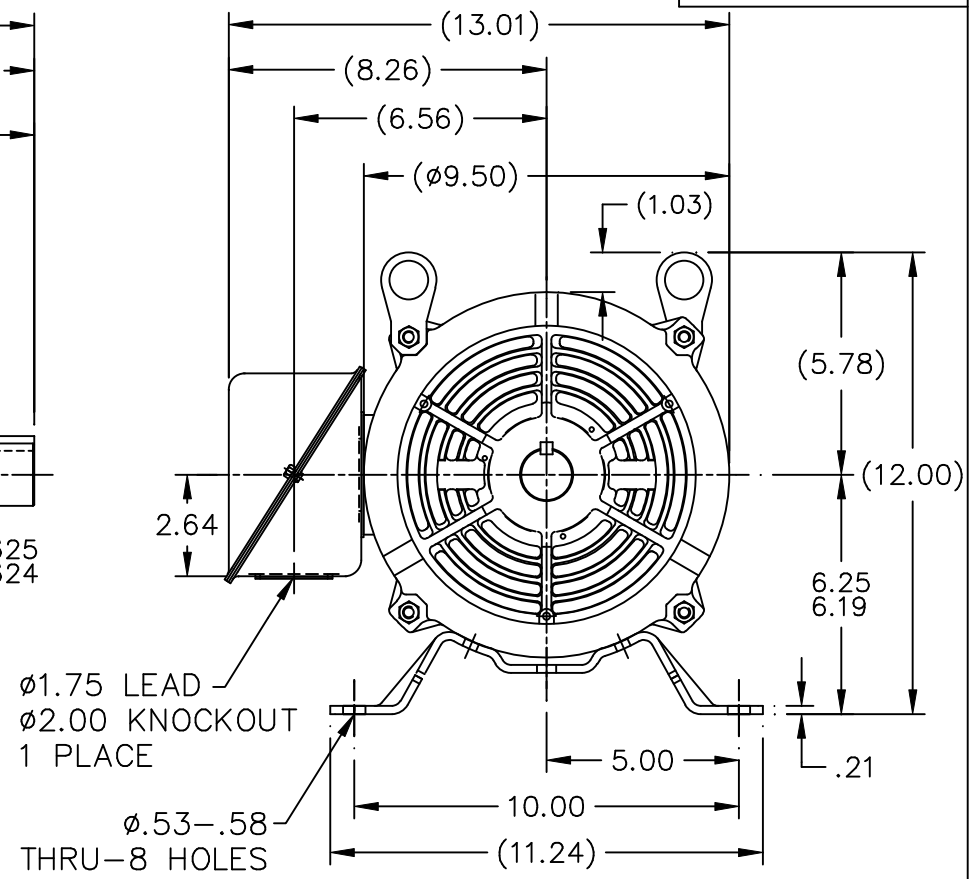
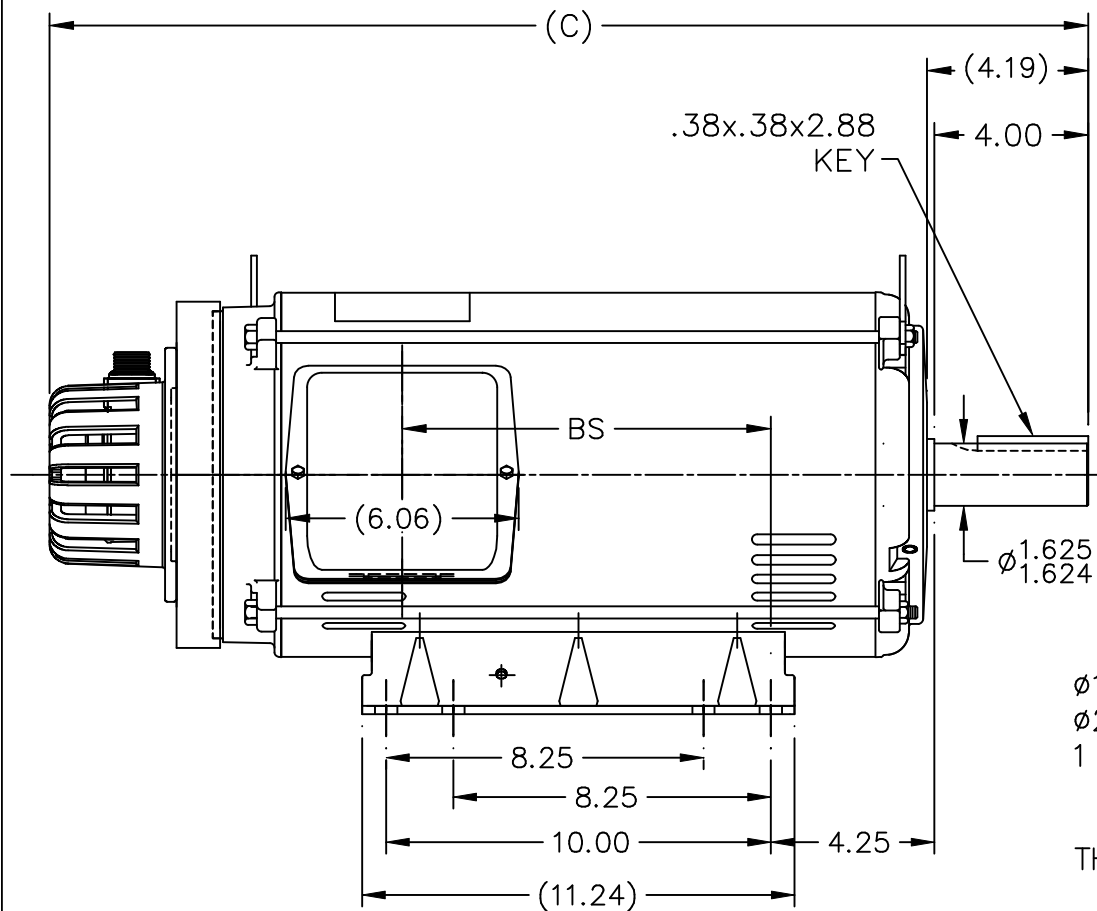


### Nameplate Specifications

Output HP	10 Hp	Output KW	7.5 kW
Frequency	60 Hz	Voltage	230/460 V
Current	29.0/14.5 A	Speed	1160 rpm
Service Factor	1	Phase	3
Efficiency	86.5 %	Power Factor	74
Duty	Elevator	Insulation Class	F
Design Code	INV	KVA Code	J
Frame	256T	Enclosure	Drip Proof
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	309	Opp Drive End Bearing Size	208
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		


### Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	6	Rotation	Reversible
Resistance Main	1.16 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	27.00 in
Frame Length	15.45 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 1000:1		
Outline Drawing	A-SS88763LN-1545	Connection Drawing	A-EE7308T-LN



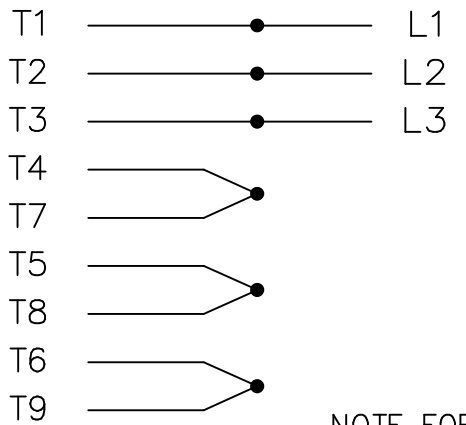
DASH	FR.	C	BS	MOUNTING
1370	254T	25.25	7.68	F1 OR F2
1545	254/256T	27.00	9.43	F1 OR F2

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

				TOLERANCES UNLESS SPECIFIED			DRAWN TJB 11-26-2002	
				DEC.	INCHES		CHK	ML 12-02-2002
				.X	±.1	APPD BW 12-03-2002		
				.XX	±.03	SCALE 1=5		
2	REVISED O.D.E. BRACKET	MU43968	TJB 12-13-2002	DRS	.XXX	TITLE OUTLINE - STEEL C'BOX HS35 TACH 250T FR. - BB - DR.PR.		
1	NEW DRAWING	MU43968	TJB 12-03-2002	BW	.XXXX	REF		
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	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 ss88763ln		SIZE	DRAWING NO. PAGE OF
				DIST	LB	A	SS88763LN 2	

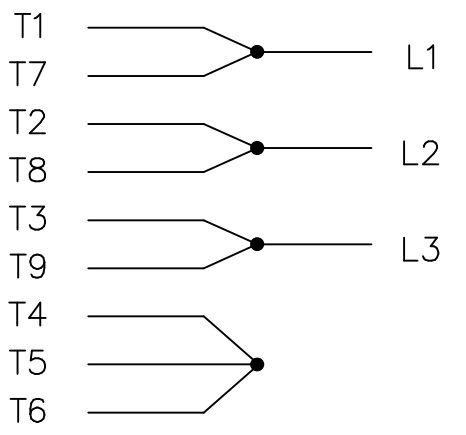
THREE PHASE  
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

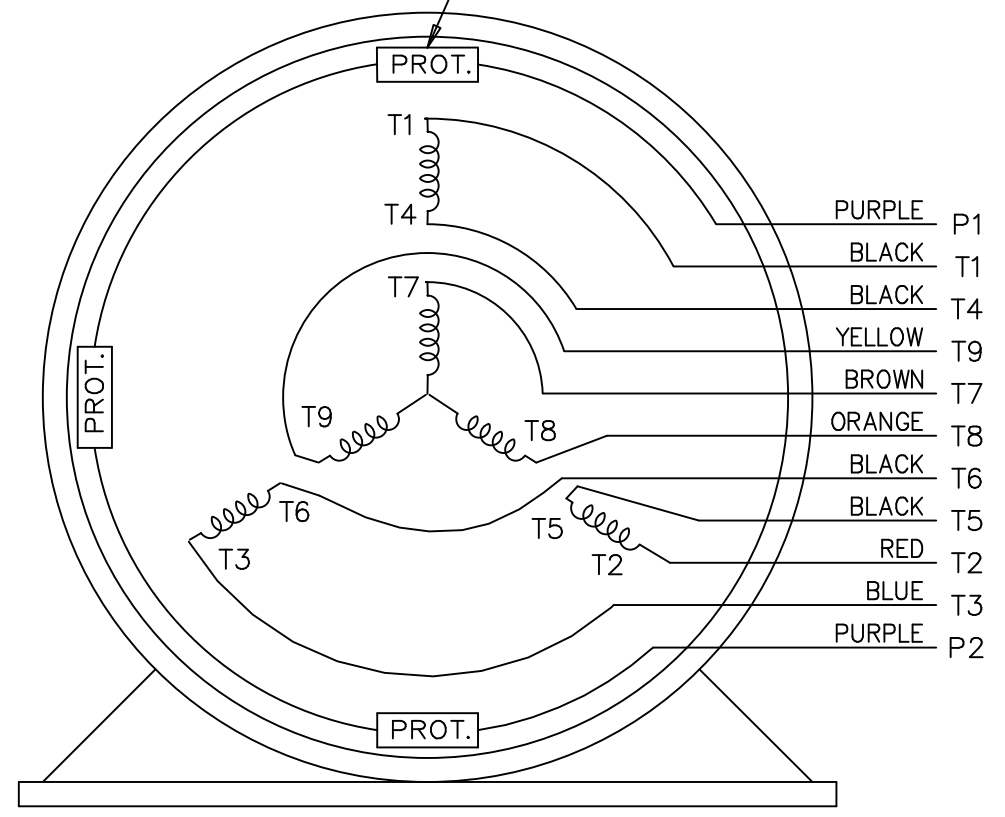


NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST FOR COMMON CONNECT:  
HIGH VOLT: CONNECT P1 TO T1  
THEN P2 TO L1  
LOW VOLT: CONNECT P1 TO T1 & T7,  
THEN P2 TO L1

LOW VOLTAGE



THREMO-PROTECTORS  
CONNECTED IN SERIES.



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED			DRAWN BJK 07-16-2002			
				DEC.	INCHES		CHK DRS 07-18-2002			
				.X	±.1		APPD GK 07-18-2002			
				.XX	±.02		SCALE 1=1			
2	ADDED COLORS TO "T & P" LEADS	CN 40494	MSG 08-08-2006	ML	.XXX	±.005	TITLE CONNECTION DIAGRAM 3 PHASE - DUAL VOLTAGE MOTOR		REF	
1	NEW DRAWING		BJK 07-18-2002	DRS	.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	CAD FILE ee7308t_ln			SIZE	DRAWING NO. PAGE OF	REV.
				DIST	LB			A	EE7308T-LN	2



**CERTIFICATION DATA SHEET**

**2100 WASHINGTON ST.  
GRAFTON, WI  
PH. 262-277-8810**

**CONN. DIAGRAM:** A-EE7308T-LN

CATALOG #: LM28120

**OUTLINE:** A-SS88763LN-1545

**WINDING #:** K2156160 1

**MOUNTING:** F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10	7.46	1200	1160	256T	DP	J	INV

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	230/460	29/14.5	INVERTER ONLY	ELEVATOR	F3	1.0	40

FULL LOAD EFF:	86.5	3/4 LOAD EFF:	87.5	1/2 LOAD EFF:	86.5	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	74	3/4 LOAD PF:	68	1/2 LOAD PF:	55.5	84		SQ CAGE INV DUTY	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
45.3 LB-FT	200 / 100	120 LB-FT 265 %	140 LB-FT 309 %	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
64 dBA	74 dBA	1.3 LB-FT^2	- LB-FT^2	- SEC.	-	150 LBS.

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	GRAY - LINCOLN

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
309	208						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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<b>INVERTER TORQUE:</b> CONSTANT 1000:1
<b>INV. HP SPEED RANGE:</b> NONE
<b>ENCODER:</b> REGAL SUPPLIED - REGAL MOUNT
DYNAPAR HS35 LINCOLN
MS CONNECTOR 1024 PPR
<b>BRAKE:</b> NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz



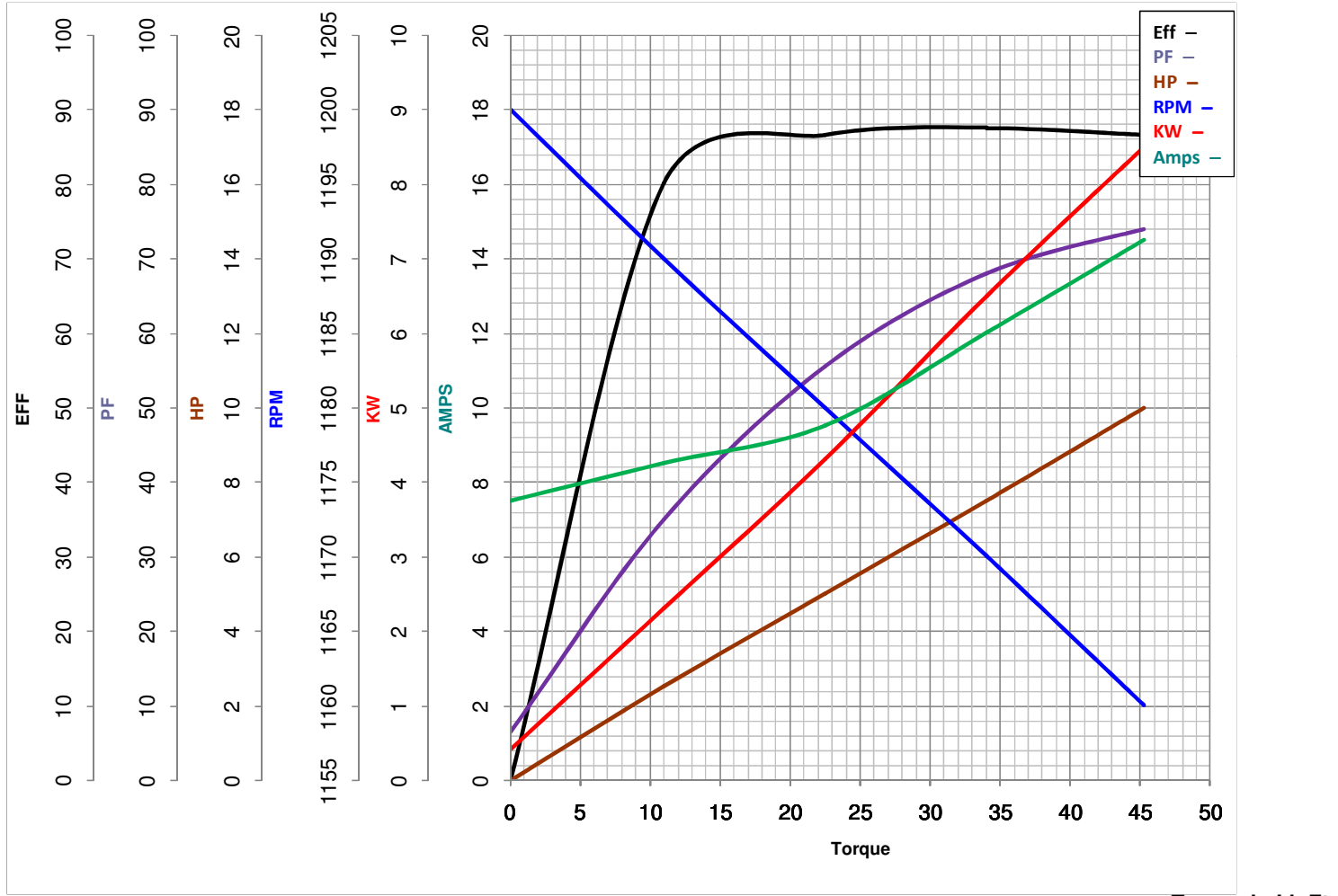
**LEESON ELECTRIC CORPORATION**  
 TYPICAL PERFORMANCE CURVE for AC MOTOR

Model No LM28120

Curve at 460 Volts HP 10.00 PHASE 3  
60 HZ  
10 HP VOLTS 230/460

Catalog No LM28120AB

HZ 60 RPM 1160



<b>FL TORQUE</b>	<u>45.3</u> Lb.Ft	<b>FL AMPS</b>	<u>29/14.5</u>
<b>BD TORQUE</b>	<u>140.0</u> Lb.Ft	<b>PU TORQUE</b>	<u>110.0</u> Lb.Ft
<b>LR TORQUE</b>	<u>120</u> Lb.Ft	<b>LR AMPS</b>	<u>100</u>
<b>WINDING</b>	K2156160-1	<b>Date</b>	<u>6/4/2018</u>

## 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 : LM28120

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

Catalog No : LM28120

Rework No : N/A

Directives :

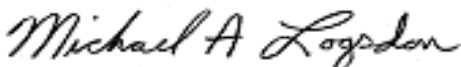
Low Voltage Directive 2014/35/EU

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**