

PRODUCT INFORMATION PACKET



Model No: LM21190
Catalog No: LM21190
Speed Ratio Motor, 3 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 182T Frame, TEFC



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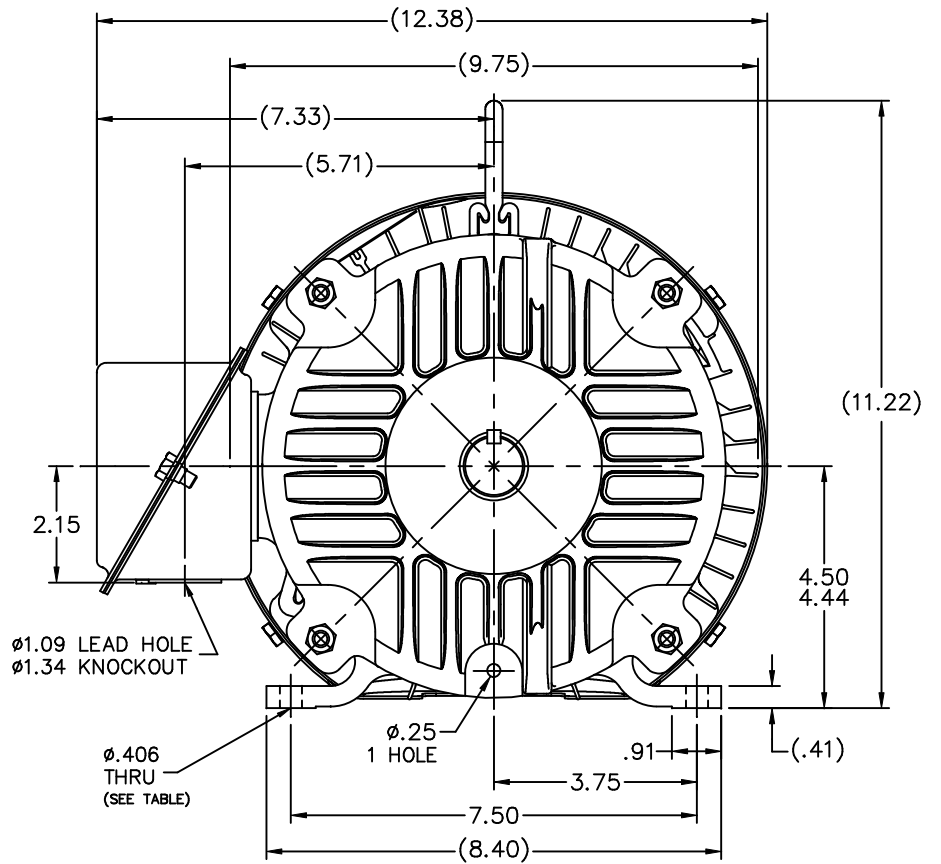
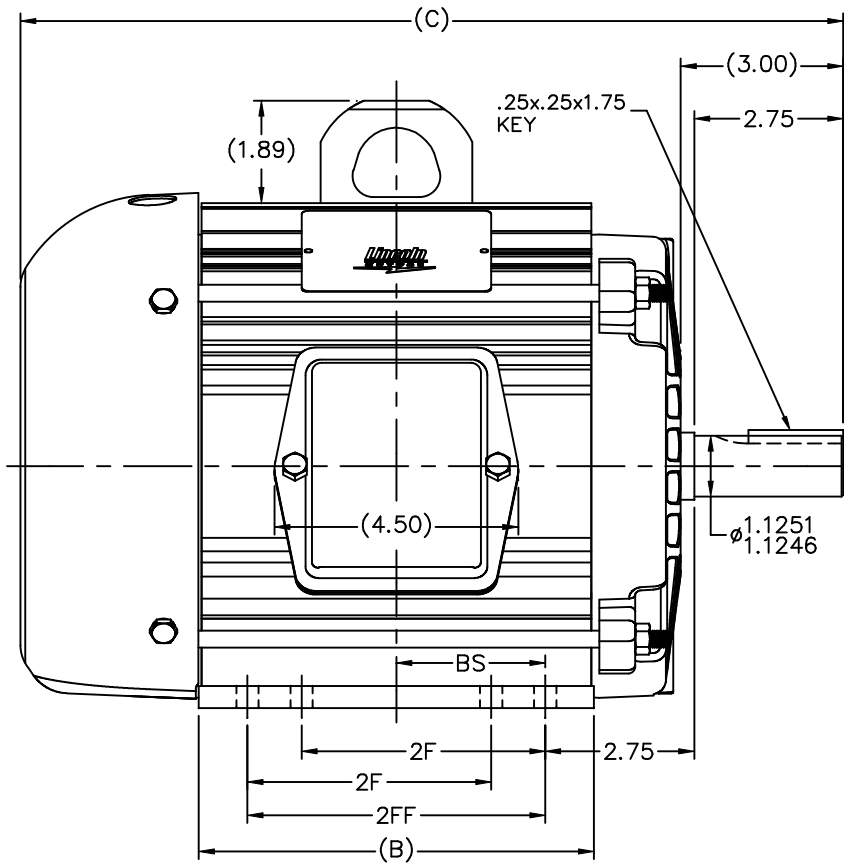


Nameplate Specifications

Output HP	3 Hp	Output KW	2.2 kW
Frequency	60 Hz	Voltage	230/460 V
Current	8.4/4.2 A	Speed	1760 rpm
Service Factor	1	Phase	3
Efficiency	87.5 %	Power Factor	76
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	K
Frame	182T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	207	Opp Drive End Bearing Size	205
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	4	Rotation	Reversible
Resistance Main	4.65 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	14.19 in
Frame Length	6.20 in	Shaft Diameter	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 4:1		
Outline Drawing	B-SS601006LN-620	Connection Drawing	A-EE7308T-LN



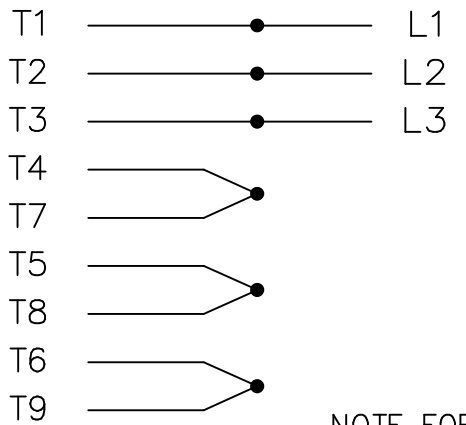
- NOTES:
 1. CONDUIT BOX BE ROTATED IN 90° STEPS.
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FR.	C	BS	B	2FF	2F	FOOT HOLE	NO.	REVISION	BY & DATE	CHK	ANG	±1/2"	FINISH	PREV			
620	182T	14.19	2.25	6.30	4.50	---	4	12	REVISED 'B' DIMENSION IN DASH TABLE	ECN 14167	MSG	8/19/2009	BW	TOLERANCES UNLESS SPECIFIED	DRAWN BLR 01-13-2000			
720	182/4T	15.19	2.75	7.30	5.50	4.50	8	11	DE EXTN WAS 3.1 CHANGED TO 3.0		SVL	7/22/2009	ML	DEC. INCHES	CHK ML 01-18-2009			
720	184T	15.19	2.75	7.30	5.50	---	4	10	REVISED DASH TABLE INFORMATION	CN 32829	DRS	09-10-2004	ML	.X ±.1	APPD GK 01-18-2000			
820	184T	16.19	3.25	8.30	---	5.50	8	9	REVISED -820, 2FF WAS 5.50 & 2F WAS BLANK		TAT	06-23-2004	ML	.XX ±.03	SCALE 7=16			
								8	RE-ISSUE CLARIFIED HOLES		TAT	01-30-2004	ML	.XXX ±.005	TITLE OUTLINE			
								7	CHANGED 2F TO 2FF		TAT	01-27-2004	ML	.XXXX ±.0005	180T FR. - TEFC			
													CHK	ANG ±1/2"	MAT'L			
													RFP		REF			
									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					CAD FILE ss601006ln	SIZE B	DRAWING NO. SS601006LN	PAGE OF 12	REV. 12



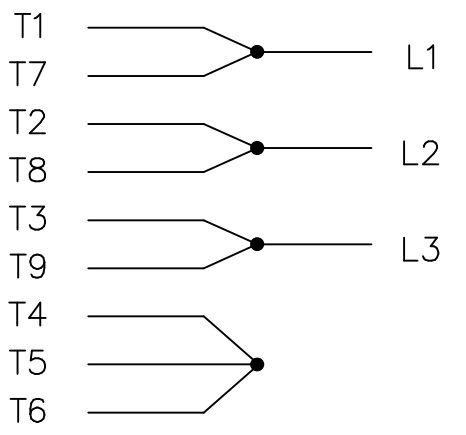
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

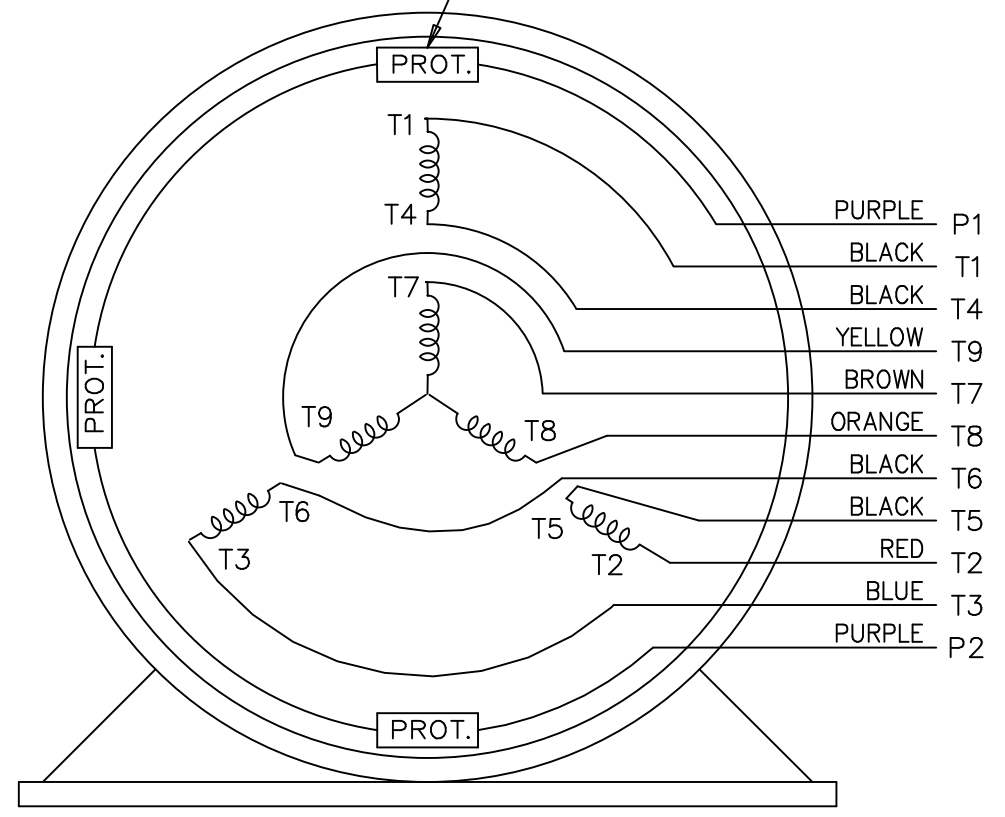


NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

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						
1	NEW DRAWING		BJK 07-18-2002	DRS	.XXXX	±.0005	MAT'L.						
NO.	REVISION		BY & DATE	CHK	ANG	±7'30"	FINISH						
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



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

CONN. DIAGRAM: A-EE7308T-LN

OUTLINE: B-SS601006LN-620

CATALOG #: LM21190

WINDING #: K1824117 R5 1

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
3	2.24	1800	1760	182T	TEFC	K	INV

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	230/460	8.4/4.2	INVERTER ONLY	CONTINUOUS	F3	1.0	40

FULL LOAD EFF:	87.5	3/4 LOAD EFF:	87.5	1/2 LOAD EFF:	85	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	76	3/4 LOAD PF:	68	1/2 LOAD PF:	55	85.5		SQ CAGE INV DUTY	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
9 LB-FT	64 / 32	20 LB-FT 222 %	35 LB-FT 389 %	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.3 LB-FT^2	- LB-FT^2	- SEC.	-	70 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	GRAY - LINCOLN

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ALUMINUM
207	205						

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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INVERTER TORQUE: CONSTANT 4:1
INV. HP SPEED RANGE: NONE
ENCODER: NONE NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE NONE NONE FT-LB V NONE Hz

Data Sheet

Date: 1/19/2018

LM21190



Data @ **460 V**

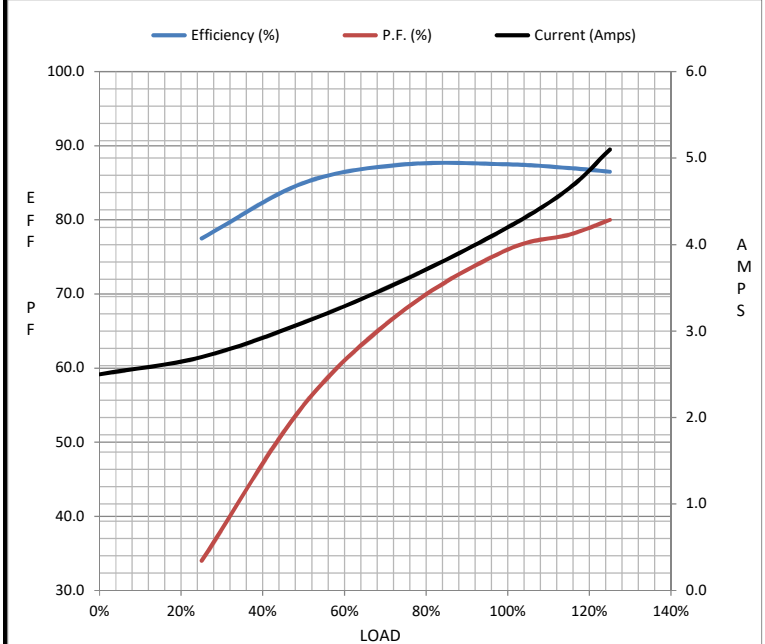
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	2.50	2.70	3.1	3.6	4.2	4.7	5.1	32.0
Torque (ft-lb)	0.00	2.20	4.4	6.7	9.0	10.1	11.2	20.0
RPM	1800	1790	1780	1770	1760	1.756	1750	0
Efficiency (%)		77.5	85.0	87.5	87.5	87.0	86.5	
P.F. (%)	6.5	34.0	55.0	68.0	76.0	78.0	80.0	52.0

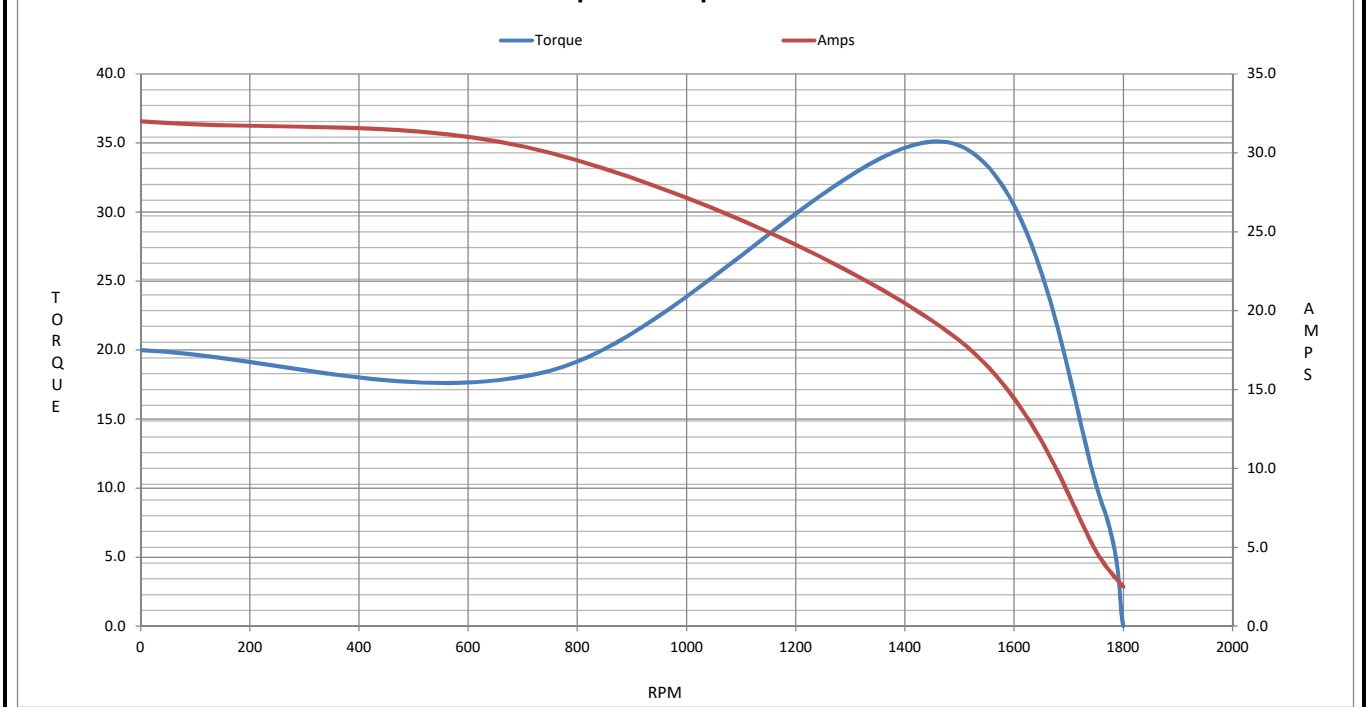
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1485	1760	1800
Current (Amps)	32.0	30.0	18.5	4.2	2.50
Torque (ft-lb)	20.0	18.5	35.0	9.0	0.00

Information Block				
HP	3.0			
Sync. RPM	1800			
Frame	182			
Enclosure	TEFC			
Construction	TFL			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	K			
Service Factor	1.15			
Temp Rise @ FL	45 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.30 Lb-Ft ²			
Ref Wdg	K1824117 R5			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 4:1			
Outline Dwg	B-SS601006LN-620			
Conn. Diag	A-EE7308T-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
2.7810	1.5800	5.2310	7.0570	98.3840



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 : LM21190

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

Catalog No : LM21190

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