

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 284THTNA7026

Catalog No: Y553

Black Max® Inverter Duty Speed Ratio Motor, 25 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 284TC Frame,
TENV



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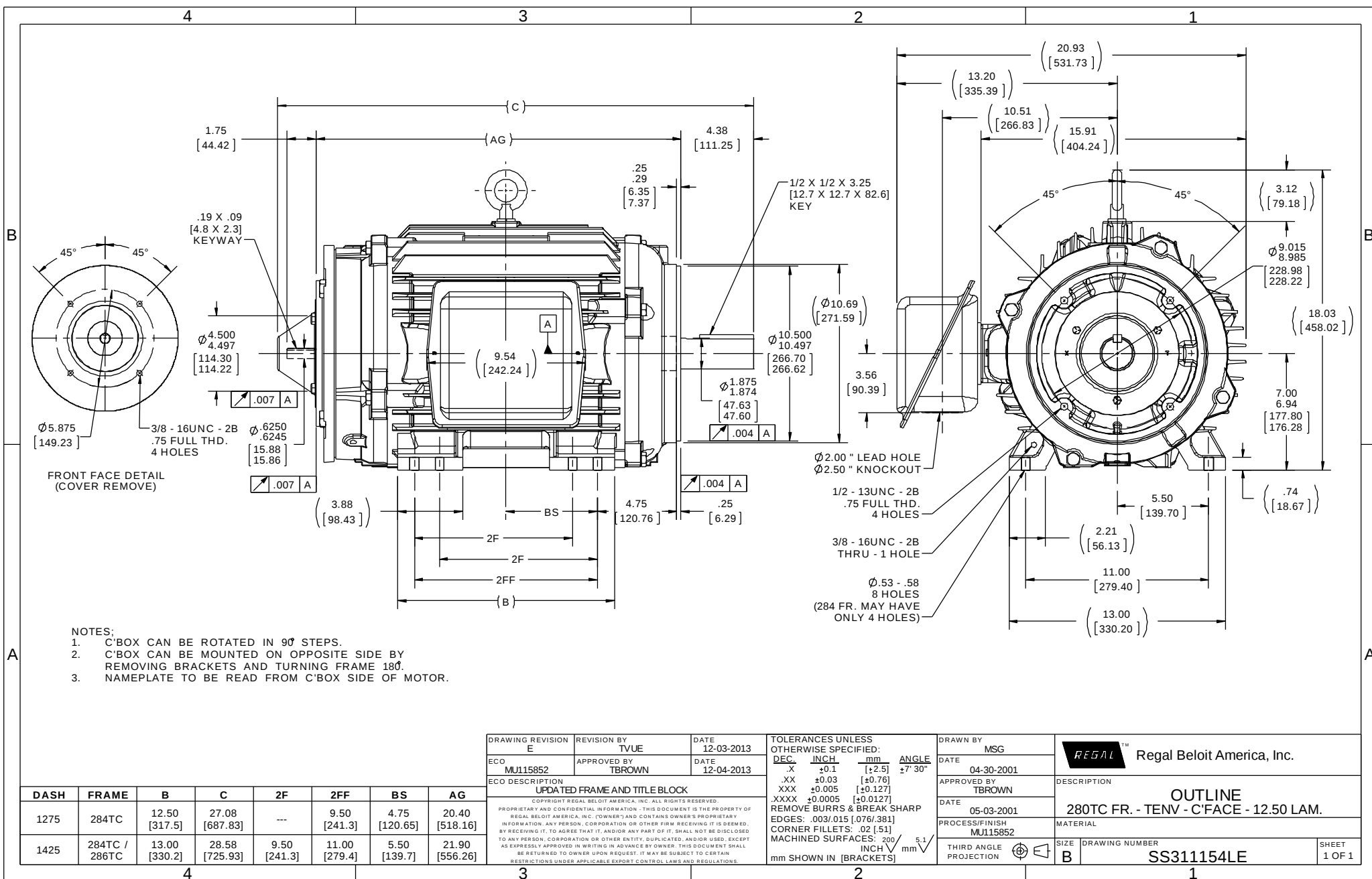
RegalRexnord

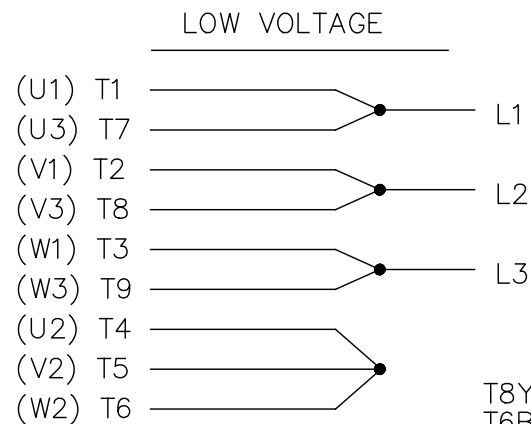
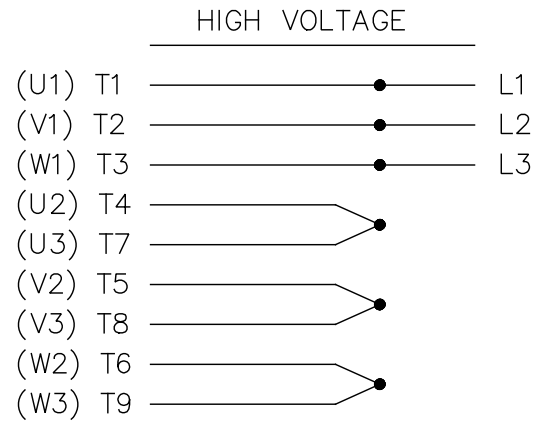
Nameplate Specifications

Phase	3	Output HP	25 Hp
Output KW	18.7 kW	Voltage	230/460 V
Speed	1770 rpm	Service Factor	1.0
Frame	284TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Efficiency	93.6 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	62.0/31.0 A	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	K
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

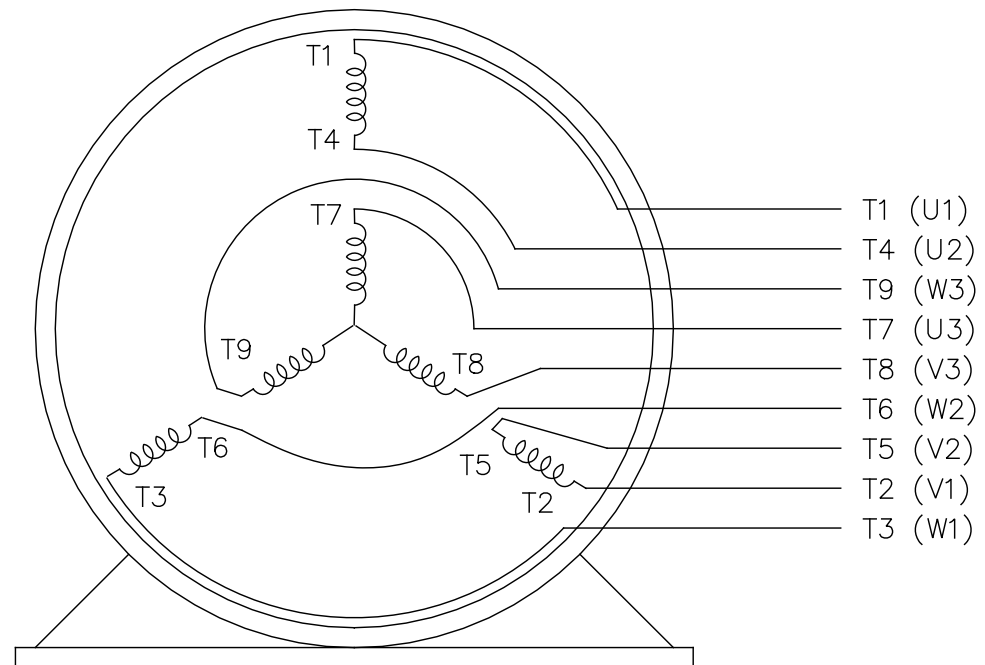
Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.2 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	27.08 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 1000:1		
Connection Drawing	A-EE7308T	Outline Drawing	B-SS311154-1275





THREE PHASE DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD CONNECTION

L1 — WHITE —
L2 — RED —
L3 — BLACK —

DRAWING REVISION	REVISION BY	DATE	TOLERANCES UNLESS OTHERWISE SPECIFIED	DRAWN BY:			
ECO	APPROVED BY	DATE	DEC. mm INCH ANGLE	AS			
ECO DESCRIPTION			.X ±2.5 ±0.11 ±0.5°	DATE:	DESCRIPTION		
NEW DRAWING			.XX ±0.51 ±0.021	02/20/2017			
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			.XXXX ±0.0127 ±0.00051	ST			
			REMOVE BURRS & BREAK SHARP	DATE:	3 PHASE - UAL VOLTAGE		
			EDGES .08/.38 [.003/.015]X 45°	02/20/2017			
			CORNER FILLETS R.51 [.02]	REFERENCE	MATERIAL		PROCESS/FINISH
			MACHINED SURFACES	EE7308			
			INCH 125 mm 3.2	THIRD ANGLE	SIZE DWG NO		SHEET
			INCH SHOWN IN [BRACKETS]	PROJECTION	A EE7308TP		1

CERTIFICATION DATA SHEET

Model#: 284THTNA7026 AA

WINDING#: K2844139 R2 1

CONN. DIAGRAM: A-EE7308T

ASSEMBLY: F1/F2 CAPABLE

OUTLINE: B-SS311154-1275

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
25	18.7	1800	1770	284TC	TENV	K	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	62/31	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 93.6	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80	3/4 LOAD PF: 74	1/2 LOAD PF: 62	92.4	SQ CAGE INV DUTY	28 / 14

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
74.2 LB-FT	560 / 280	163 LB-FT 220	330 LB-FT 445	96

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	4.4 LB-FT^2	- LB-FT^2	- SEC.	-	379 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.1425	0.1596	0.7239	0.6783	13.965

RM	ZREF	XR	TD	TD0
1413.6	11.4	5.5	0.012	0.24

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE OR ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (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	6311						

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 1000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY NORTHSTAR ST56 NONE NONE PPR
BRAKE: PROVISIONS ONLY NONE STEARNS P/N NONE

56,000	NONE	
10 FT-LB	NONE V	NONE Hz

DATE: 06/23/2017 07:36:16 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/19/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



284THTNA7026

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	14.0	16.0	20.0	25.0	31.0	34.0	37.0	280	
Torque (ft-lb)	0.00	18.5	36.8	55.5	74.2	83.7	93.2	163	
RPM	1800	1792	1785	1778	1770	1,766	1760	0	
Efficiency (%)		89.5	93.0	94.1	93.6	93.3	93.0		
P.F. (%)	3.0	39.0	62.0	74.0	80.0	82.0	84.0	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	900	1585	1770	1800					
Current (Amps)	280	250	180	31.0	14.0					
Torque (ft-lb)	163	125	330	74.2	0.00					

Efficiency (%)

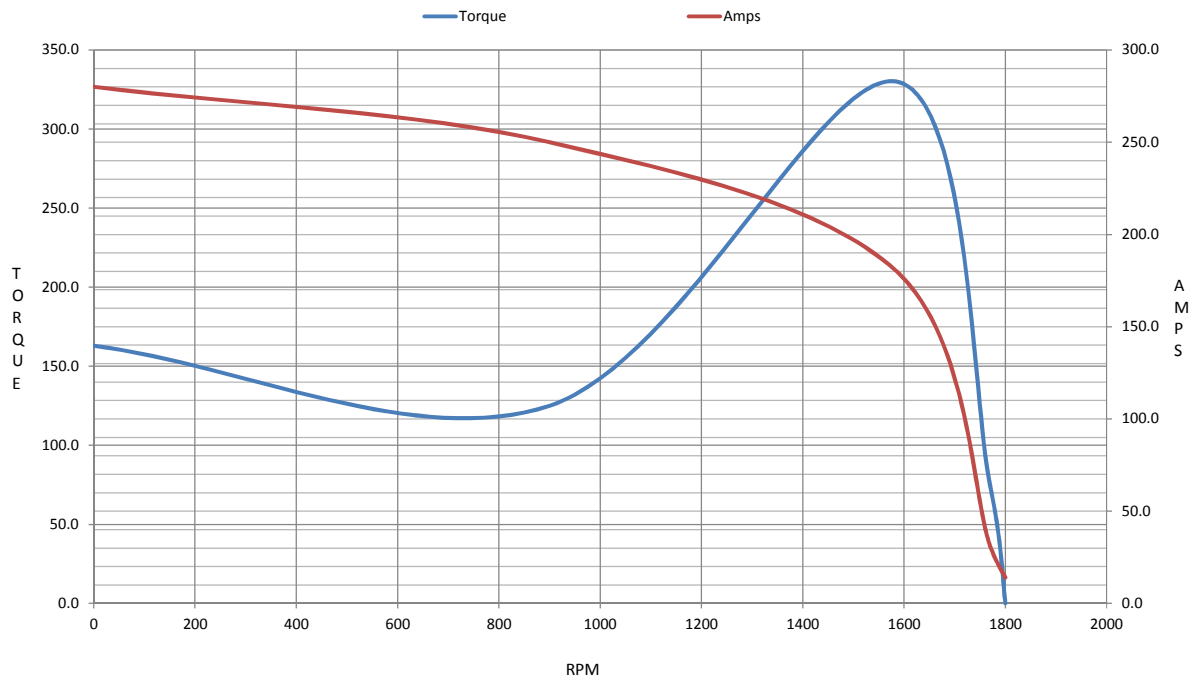
P.F. (%)

Current (Amps)

Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)
25	90	39	14.0
50	92	65	20.0
75	94	78	25.0
100	93	82	31.0
125	93	84	35.0

HP	25.0			
Sync. RPM	1800			
Frame	284			
Enclosure	TENV			
Construction	TTN			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	K			
Service Factor	1.0			
Temp Rise @ FL	96 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	4.4 Lb-Ft²			
Ref Wdg	K2844139 R2			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	B-SS311154-1275			
Conn. Diag	A-EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1430	0.1600	0.7240	0.6780	13.9650

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 : 284THTNA7026

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

Catalog No : Y553

Rework No : N/A

Directives :

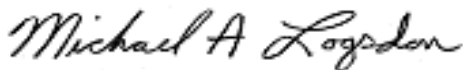
Low Voltage Directive 2014/35/EU

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