

PRODUCT INFORMATION PACKET

Model No: LM13964

Catalog No: LM13964

General Purpose Motor, 30 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 286T Frame, TEFC



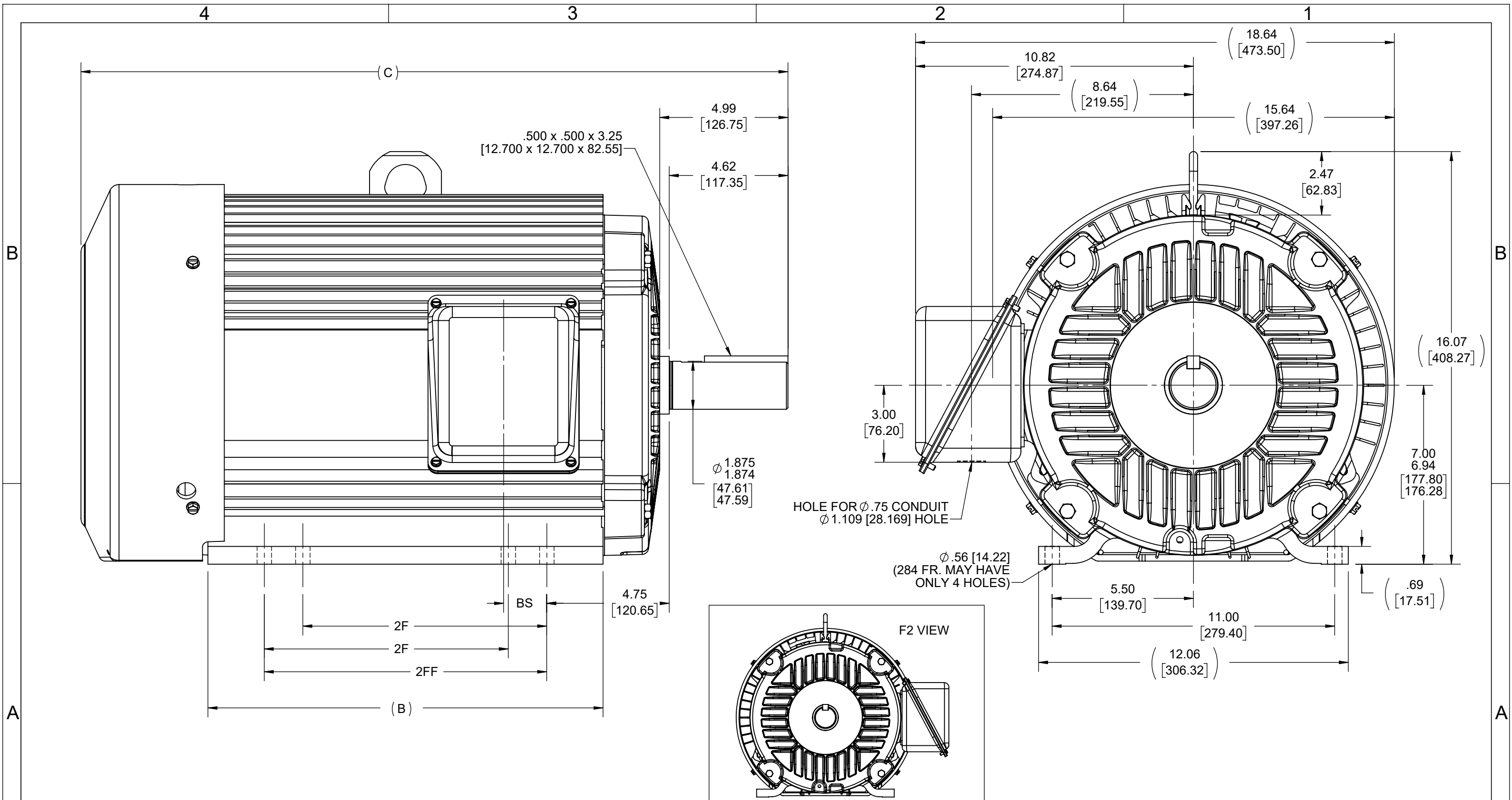
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Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	75.0/37.5 A	Speed	1777 rpm
Service Factor	1.25	Phase	3
Efficiency	93.6 %	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	286T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6209
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.245 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	28.12 in
Frame Length	15.25 in	Shaft Diameter	1.875 in
Shaft Extension	4.62 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	3A263-2	Outline Drawing	XF5F1SS1-1525



DASH	FRAME	B	C	2F	2FF	BS
1375	284T	13.87 [352.30]	26.02 [660.91]	---	9.50 [241.30]	1.68 [42.70]
1525	286T	15.38 [390.65]	27.52 [699.11]	9.50 [241.30]	11.00 [279.40]	1.68 [42.70]

DRAWING REVISION D	REVISION BY SP	DATE 06/28/2021
ECO CR-0001223	APPROVED BY AS	DATE 06/28/2021
ECO DESCRIPTION 3C223-F3 FAN GUARD REPLACED WITH 310031A		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7' 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45° CORNER FILLETS: R.02 [51] MACHINED SURFACES: 200 INCH/mm 5.1 mm SHOWN IN [BRACKETS]			

DRAWN BY TJB
DATE 09-05-2001
APPROVED BY JMM
DATE 09-05-2001
REFERENCE
THIRD ANGLE PROJECTION

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 280T FR. - TEFC - UE	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER XF5F1SS1
	SHEET 1 OF 1



CERTIFICATION DATA SHEET

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

CONN. DIAGRAM: 3A263-2

OUTLINE: XF5F1SS1-1525

CATALOG : LM13964

WINDING #: L2864032 1

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30&25	22.4&18.7	1800	1777&1475	286T	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB° C
3	60/50	230/460&190-208/380-415	75/37.5&75-72/37.5-36	WYE START DELTA RUN	CONTINUOUS	F3	1.25/1.15	40

FULL LOAD EFF:	93.6&92.4	3/4 LOAD EFF:	94.1	1/2 LOAD EFF:	93.6	GTD. EFF	92.4	ELEC. TYPE	SQ CAGE IND RUN
FULL LOAD PF:	80&81.5	3/4 LOAD PF:	75.5	1/2 LOAD PF:	66				

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
88.5 LB-FT	434 / 217	218 LB-FT 246 %	190 LB-FT 215 %	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
- dBA	- dBA	5.3 LB-FT^2	- LB-FT^2	- SEC.	-	0 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 (ENAMEL)

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)	ALUMINUM
6312	6209						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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

Data Sheet

Date: 1/31/2018

LM13964



Data @ 460 V

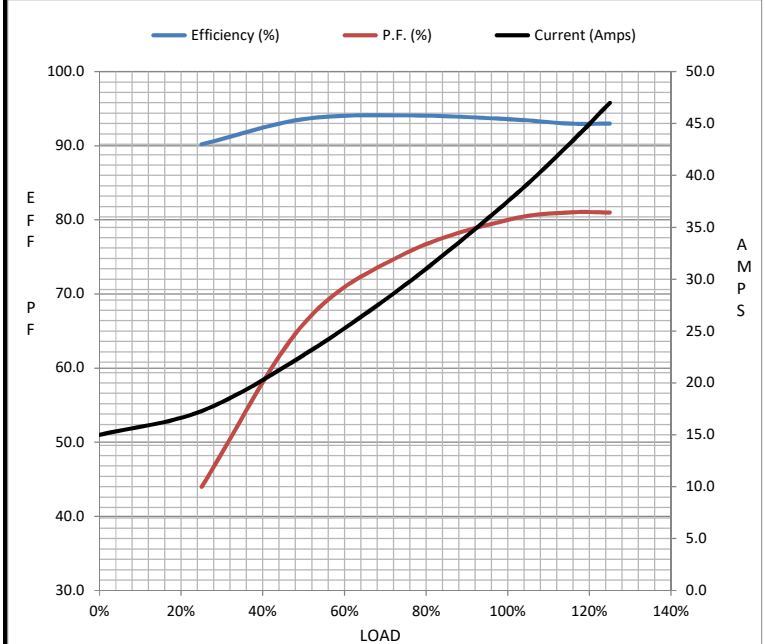
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	15.0	17.3	22.7	29.5	37.5	43.0	47.0	217
Torque (ft-lb)	0.00	22.0	44.0	66.5	88.5	103	112	218
RPM	1800	1795	1790	1783	1777	1.773	1770	0
Efficiency (%)		90.2	93.6	94.1	93.6	93.0	93.0	
P.F. (%)	3.0	44.0	66.0	75.5	80.0	81.0	81.0	44.0

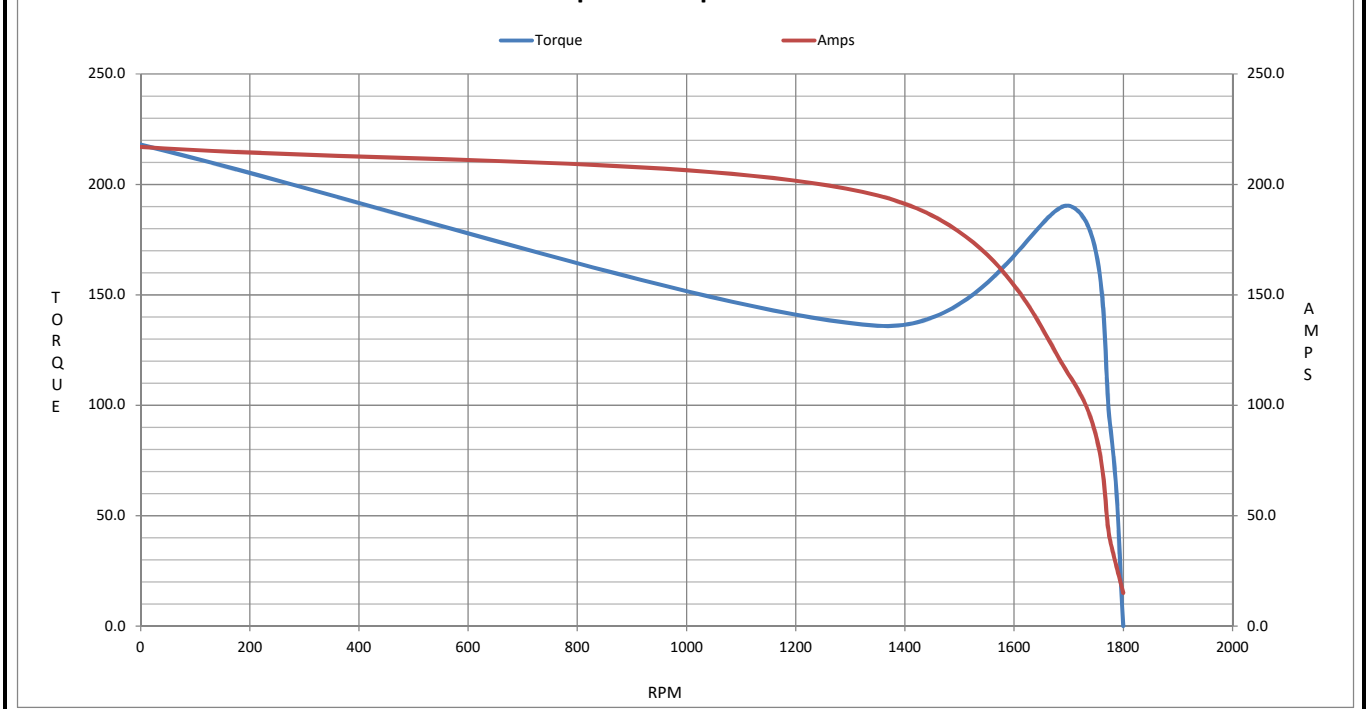
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1350	1705	1777	1800
Current (Amps)	217	195	112	37.5	15.0
Torque (ft-lb)	218	136	190	88.5	0.00

Information Block				
HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	TEFC			
Construction	TFL			
Voltage	230/460#190-208/380-415 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	70 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	5.3 Lb-Ft ²			
Ref Wdg	L2864032 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	NONE			
Outline Dwg	XF5F1SS1-1525			
Conn. Diag	3A263-2			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1660	0.0950	0.7090	1.3420	17.6720



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 : LM13964

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

Catalog No : LM13964

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