

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: TCA0223AE231GAA009

Catalog No: R844

TerraMAX® Cast Iron Motor, 30 & 25 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V, 1200 & 1000 RPM,
200L Frame, TEFC



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RegalRexnord

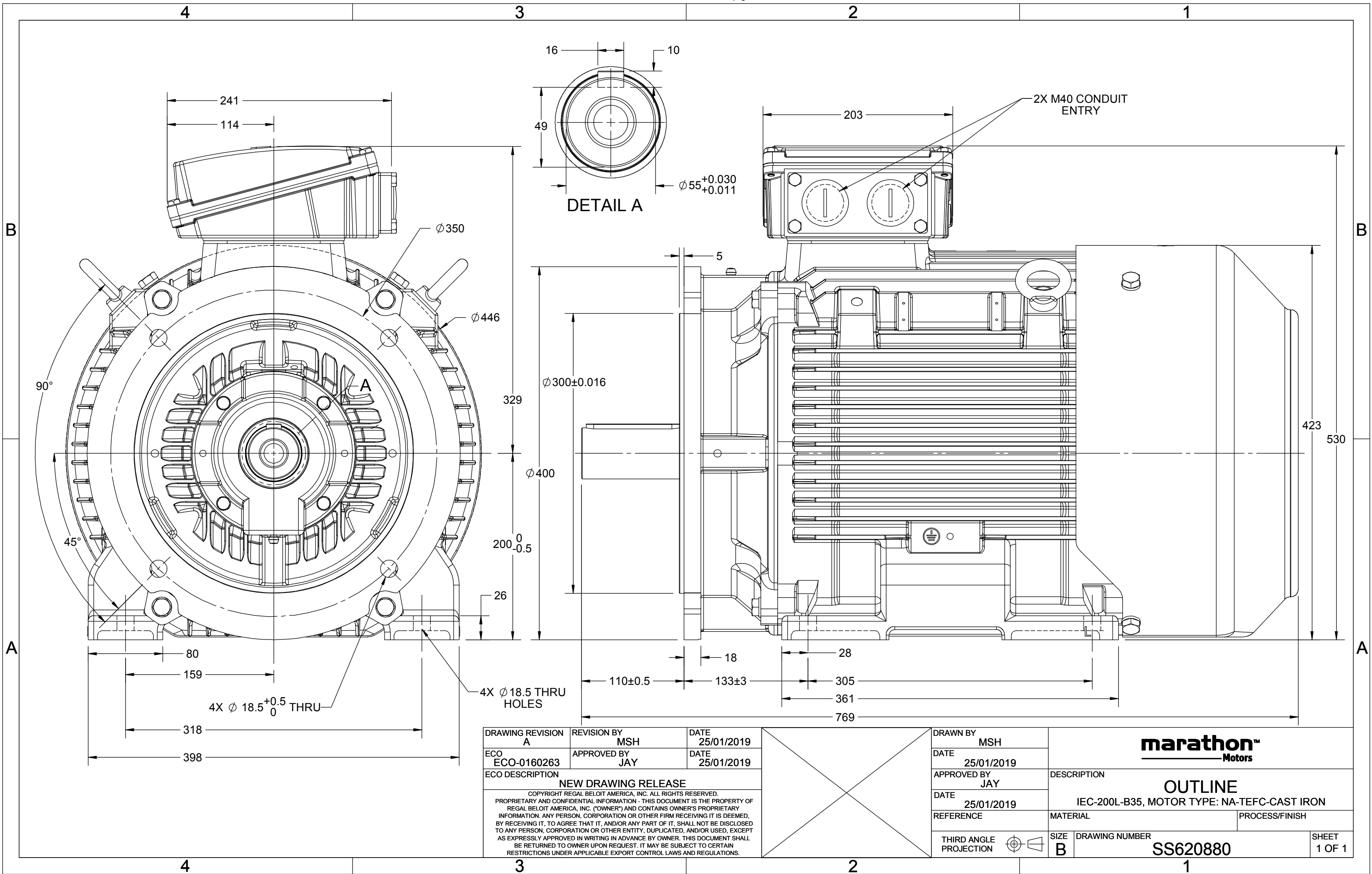
Nameplate Specifications

Phase	3	Output HP	30 & 25 Hp
Output KW	22.0 & 18.5 kW	Voltage	230/460 & 200/400 V
Speed	1185 & 990 rpm	Service Factor	1.15 & 1.15
Frame	200L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	76/38 & 76/38 A	Power Factor	78
Duty	Continuous	Insulation Class	F
Design Code	N (IEC)	KVA Code	J
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6212
UL	Recognized	CSA	N
CE	Y	IP Code	55
Number of Speeds	1	Efficiency Class	IE3

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.24 Ohms	Mounting	B3
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Shaft Diameter	55.000 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Connection Drawing	8442000715	Outline Drawing	SS620880

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DRAWING REVISION
A
 ECO
 ECO-0194685
 ECO DESCRIPTION

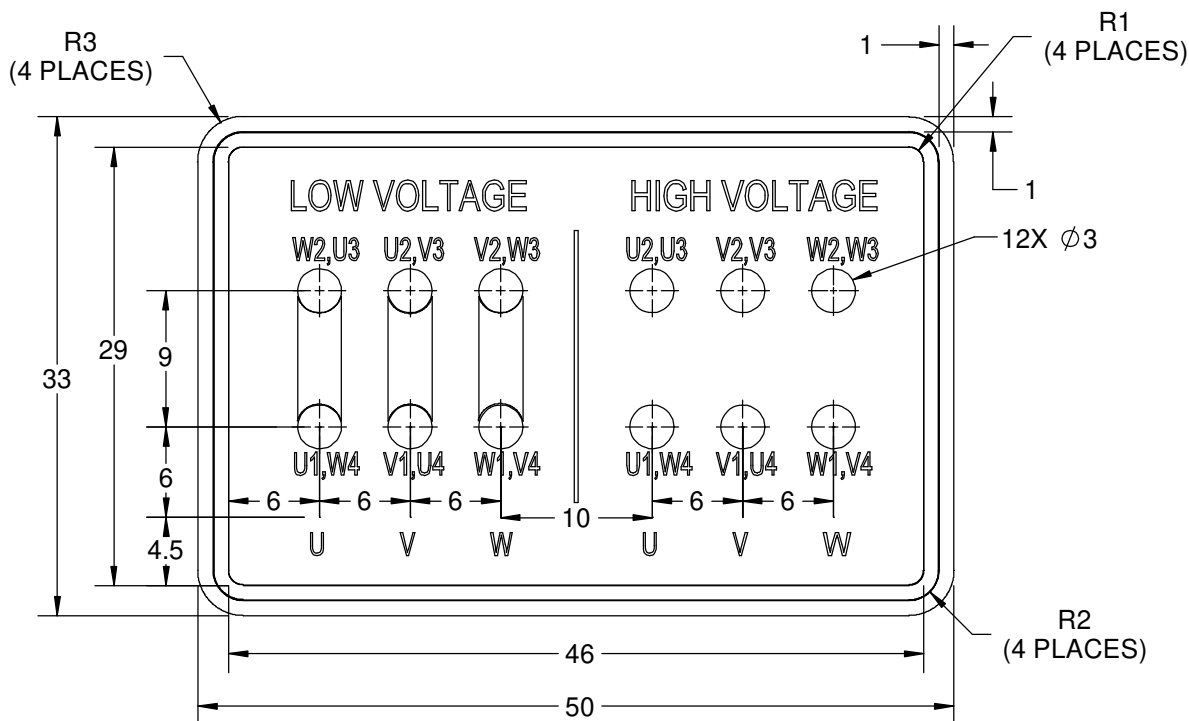
REVISION BY
S.MUDDA
 APPROVED BY
SUMANTA

DATE
16/11/2020
 DATE
16/11/2020

NEW DRAWING

GEOMETRIC TOLERANCE

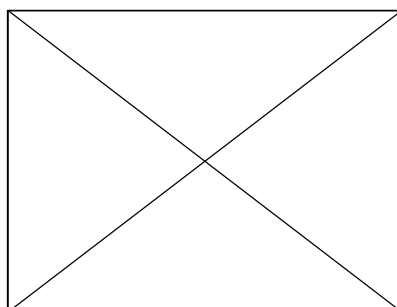
LINEAR DIM	>0~6	±0.1
	>6~30	±0.2
	>30~120	±0.3



NOTES:

1. PRESSURE-SENSITIVE ADHESIVE COATED PAPER ON THE BACK OF SELF-ADHESIVE.
2. AT THE END OF YELLOW, WORDS, SYMBOLS, LETTERS ARE BLACK, BORDER IS BLACK.
3. THE TOLERANCE OF THE LINEAR SIZE OF THE TOLERANCE WITHOUT THE TOLERANCE BY THE TABLE.
4. LEAD TERMINAL MARKINGS FONT SIZE : T1-T12 & U1-U4,V1-V4& W1-W4 OF ARIAL WITH 3mm SIZE
5. OTHER LETTER FONT SIZE SHOULD BE 3.5mm.

8WD.442.2017



DRAWN BY
S.MUDDA
 DATE
16/11/2020
 APPROVED BY
SUMANTA
 DATE
16/11/2020

REFERENCE

THIRD ANGLE
 PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-NAMEPLATE

MATERIAL

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

8442000715

SHEET
1 OF 1



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____
ORDER #: _____
CONN. DIAGRAM: 8442000677
OUTLINE: SS620880
WINDING: IE3L2006202 NONE 1
SPEED: _____

CUSTOMER P.O. #: _____
REFERENCE MODEL #: TCA0223AE231GAA009
CAT #: R844
CUSTOMER PART #: _____
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.00	1200	1185	200L	TEFC	TCA 200LB06	J	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (* C)	ELEV.(Ft.)
3	60/50	230/460#200/400	76/38&76/38	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.0	1/2 LD EFF	91.9	GTD EFF	ELECT. TYPE
F.L. PF	78.0	3/4 LD PF	72.0	1/2 LD PF	61.0	92.0	SQ CAGE INV RATED

F.L. TORQUE		LR AMPS @ 460 V		L.R. TORQUE		B.D. TORQUE		F.L. RISE (° C)			
133	LB-FT	273		327	LB-FT	246%	372	LB-FT	280%	80	

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
65 dBA	74 dBA		14.8 LB-FT ²	14.8 LB-FT ²	15 SEC.	2	312	KG.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAIN
FF-FLANGE-350	STANDARD	B3	HORIZONTAL	NO	NONE	NO	NONE	BLUE (ENAMEL)

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL
DE ODE							
BALL BALL	SG S5-V100	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)		CAST IRON
6312 6212							

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE	HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE		NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.151	0.085	0.558	0.964	14.551	0.150	ODE

* N O T E S *		INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE
		ENCODER: NONE NONE NONE PPR

PREPARED BY: _____ DATE: 11/27/2020	BRAKE: NONE NONE NONE	FT-LB: NA VOLTAGE: NONE	HZ: _____ UL: V - LI,ME-INS,CONST UL REC
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FORM: 3531 REV_4 2/27/06



Data Sheet										
Date: 4/8/2020		TCA0223AE231GAA009								
Customer: _____		Submittal								
Attention: _____		Data @ 460 V								
Submitted by: _____										
Motor Load Data										
Load	0%	25%	50%	75%	100%	115%	125%	LR		
Current (Amps)	18.1	21.4	25.0	31.5	38.0	43.5	46.8	273		
Torque (ft-lb)	0.00	32.9	66.0	99.3	133	153	167	327		
RPM	1200	1197	1194	1190	1185	1,185	1183	0		
Efficiency (%)		87.1	91.9	93.0	93.0	92.7	92.4			
P.F. (%)	5.0	38.0	61.0	72.0	78.0	80.0	81.0	63.4		
Motor Speed Data										
	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	400	1112	1185	1200	Information Block				
Current (Amps)	273	259	145	38.0	18.1	HP	30.0			
Torque (ft-lb)	327	310	372	133	0.00	Sync. RPM	1200			
						Frame	200			
						Enclosure	TEFC			
						Construction	TCA 200LB06			
						Voltage	230/460#200/400 V			
						Frequency	60 Hz			
						Design	N			
						LR Code letter	J			
						Service Factor	1.15			
						Temp Rise @ FL	80 °C			
						Duty	CONT			
						Ambient	40 °C			
						Elevation	3,300 feet			
						Rotor/Shaft wk²	14.8 Lb-Ft²			
						Ref Wdg	IE3L2006202 NONE			
						Sound Pressure @ 1M	66 dBA			
						VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
						Outline Dwg	SS620880			
						Conn. Diag	8442000677			
						Additional Specifications:				
						0				
						0				
						EQUIV CKT (OHMS / PHASE)				
						R1	R2	X1	X2	Xm
						0.1510	0.0850	0.5580	0.9640	14.5510

LOAD

Speed -Torque Curve

RPM

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 : TCA0223AE231GAA009

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

Catalog No : R844

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