## CAME і-

Control panel for 230 V gearmotors


ZM3E ZM3EC ZM3EP

## $\triangle$ Important safety instructions.

## $\triangle$ Please follow all of these instructions. Improper installation may cause serious bodily harm.

## $\triangle$ Before continuing, please also read the general precautions for users.

Only use this product for its intended purpose. Any other use is hazardous. • The manufacturer cannot be held liable for any damage caused by improper, unreasonable or erroneous use. • This product has been designed to be assembled to partly completed machinery and/or equipment so as to build machinery as regulated by the Machinery Directive 2006/42/EC. • The final installation must comply with the Machinery Directive (2006/42/EC) and the European reference standards in force. • The manufacturer declines any liability for using non-original products, which would also void the warranty. • All operations indicated in this manual must be carried out exclusively by skilled and qualified personnel and in full compliance with the regulations in force. - The device must be installed, wired, connected and tested according to good professional practice, in compliance with the standards and laws in force. • Make sure the mains power supply is disconnected during all installation procedures. • All the components (e.g. actuators, photocells and sensitive edges) needed for the final installation to comply with the Machinery Directive (2006/42/EC) and with the reference harmonised technical standards are specified in the general CAME product catalogue or on the website www.came.com. • Check that the temperature ranges given are suitable for the installation site. • Make sure that no direct jets of water can wet the product at the installation site (sprinklers, water cleaners, etc.). • Make sure you have set up a suitable dual-pole cut-off device along the power supply that is compliant with the installation rules. It should completely cut off the power supply according to category III surcharge conditions. • Demarcate the entire site properly to prevent unauthorised personnel from entering, especially minors. • Use suitable protection to prevent any mechanical hazards due to persons loitering within the operating range of the operator.

- The electrical cables must pass through special pipes, ducts and cable glands in order to guarantee adequate protection against mechanical damage. $\bullet$ The electrical cables must not touch any parts that may overheat during use (such as the motor and transformer). • Before installation, check that the guided part is in good mechanical condition, and that it opens and closes correctly. •The product cannot be used to automate any guided part that includes a pedestrian gate, unless it can only be enabled when the pedestrian gate is secured. $\bullet$ Make sure that nobody can become trapped between the guided and fixed parts, when the guided part is set in motion. • All fixed controls must be clearly visible after installation, in a position that allows the guided part to be directly visible, but far away from moving parts. In the case of a hold-to-run control, this must be installed at a minimum height of 1.5 m from the ground and must not be accessible to the public. - If not already present, apply a permanent tag that describes how to use the manual release mechanism close to it. • Make sure that the operator has been properly adjusted and that the safety and protection devices and the manual release are working properly. • Before handing over to the final user, check that the system complies with the harmonised standards and the essential requirements of the Machinery Directive (2006/42/EC). • Any residual risks must be indicated clearly with proper signage affixed in visible areas, and explained to end users. - Put the machine's ID plate in a visible place when the installation is complete. - If the power-supply cable is damaged, it must be immediately replaced by the manufacturer or by an authorised technical assistance centre, or in any case, by qualified staff, to prevent any risk. • Keep this manual inside the technical folder along with the manuals of all the other devices used for your automation system. Make sure to hand over to the end user all the operating manuals of the products that make up the final machinery.


## DISMANTLING AND DISPOSAL

CAME S.p.A. employs an Environmental Management System at its premises. This system is certified and compliant with the UNI EN ISO 14001 standard to ensure that the environment is respected and safeguarded. Please continue safeguarding the environment. At CAME we consider it one of the fundamentals of our operating and market strategies. Simply follow these brief disposal guidelines:

## DISPOSING OF THE PACKAGING

The packaging materials (cardboard, plastic, etc.) can be disposed of easily as solid urban waste, separated for recycling. Before dismantling and disposing of the product, please always check the local laws in force.
DISPOSE OF THE PRODUCT RESPONSIBLY
DISPOSING OF THE PRODUCT
Our products are made of various materials. Most of these materials (aluminium, plastic, iron and electrical cables) are classified as solid urban waste. They can be separated for recycling and disposed of at authorised waste treatment plants. Other components (electronic boards, transmitter batteries, etc.) may contain pollutants.
These must be removed and disposed of by an authorised waste disposal and recycling firm. It is always advisable to check the specific laws that apply in your area.
DISPOSE OF THE PRODUCT RESPONSIBLY

Key
$\mathbb{L}$ This symbol shows which parts to read carefully.
$\triangle$ This symbol shows which parts describe safety issues.
This symbol shows what to tell users.
The measurements, unless otherwise stated, are in millimetres.

## Description

## 002ZM3E

Multifunction control panel for swing gates with two leaves. Graphic signalling display and self-diagnosing safety devices and built-in radio decoding.
002ZM3EC
Multifunction control panel for swing doors with two leaves, complete with safety lock and buttons, with graphic programming and signalling display, plus self-diagnosing safety devices.

## 002ZM3EP

Multifunction control panel for swing gates with two leaves. Graphic programming display and signalling and self-diagnostics using safety devices.

Technical data

| MODELS | ZM3E | ZM3EC | ZM3EP |
| :--- | :---: | :---: | :---: |
| Power supply (V-50/60 Hz) | 230 AC | 230 AC | 230 AC |
| Motor power supply (V) | 230 AC | 230 AC | 230 AC |
| Standby consumption (W) | 4,7 | 4,7 | - |
| Standby consumption with | 0,75 | 0,75 | 0,75 |
| the RGP1 (W) module | 750 | 750 | 2400 |
| Power (W) | RAL 7040 | RAL 7040 | RAL 7040 |
| Colour | $-20 \div+55$ | $-20 \div+55$ | $-20 \div+55$ |
| Operating temperature $\left({ }^{\circ} \mathrm{C}\right)$ | 54 | 54 | 54 |
| Protection rating (IP) | $\\|$ | $\\|$ | $\\|$ |
| Insulation class |  |  |  |

## Fuse table

| MODELS | ZM3E | ZM3EC | ZM3EP |
| :--- | :---: | :---: | :---: |
| Line fuse | 5 AF | 5 AF | 10 AF |
| Control-board fuse | 1 AF | 1 AF | 1 AF |
| Accessories fuse | 1.6 AF | 1.6 AF | 1.6 AF |

(1) Transformer
(2) Capacitors *
(3) Control board fuse
(4) Accessories fuse
(5) Terminal board for connecting the RGP1 module
( Electric-lock fuse
$(7$ Display
(8 Trimmer to adjust the display lighting
(9) Memory Roll card connector
(10) Programming buttons
(1) Power LED
(12) Programming status warning LED
(3) Connector for the R700 or R800 decoding card
(14) Connector for plug-in radio frequency card (AF)
(10) Terminal board for connecting the keypad selector
(10) Terminal board for connecting the antenna
(17) Terminal board for B1-B2 output
(18) Terminal board for connecting the limit switches
(1) Terminal board for connecting the transponder selector switch
20 Terminal board for connecting control and safety devices
(2) Terminal board for connecting the encoder

23 Terminal boards for gearmotors
(23) Terminal board for CRP connection
(24) RSE card connector

23 Power supply terminal board
26 Line fuse

* Only for 230 V Frog gearmotors.

Use the black cables to connect M1 and the red cables to connect M2.


Only for ZM3EC
27) STOP button
23 CLOSING button

(29) OPENING button<br>(30 SAFETY LOCK knob



| Cable length (m) | up to 20 | from 20 to 30 |
| :--- | :---: | :---: |
| Power supply 230 V AC | $3 G \times 1.5 \mathrm{~mm}^{2}$ | $3 G \times 2.5 \mathrm{~mm}^{2}$ |
| 24 V AC/DC flashing beacon | $2 \times 0.5 \mathrm{~mm}^{2}$ | $2 \times 0.5 \mathrm{~mm}^{2}$ |
| TX Photocells | $2 \times 0.5 \mathrm{~mm}^{2}$ | $2 \times 0.5 \mathrm{~mm}^{2}$ |
| RX photocells | $4 \times 0.5 \mathrm{~mm}^{2}$ | $4 \times 0.5 \mathrm{~mm}^{2}$ |
| 12 V DC electric lock | $2 \times 1 \mathrm{~mm}^{2}$ | $2 \times 1.5 \mathrm{~mm}^{2}$ |
| Command and control devices | *no. $\times 0.5 \mathrm{~mm}^{2}$ | *no. $\times 0.5 \mathrm{~mm}^{2}$ |

* no. = see product assembly instructions - Warning: the cable cross-section is indicative and varies according to the motor power and cable length.
[D] When operating at 230 V and outdoors, use H05RN-F cables compliant with 60245 IEC 57 (IEC); when operating indoors, use H05VV-F cables compliant with 60227 IEC 53 (IEC). For power supplies up to 48 V, you can use FROR 20-22 II cables compliant with EN 50267-2-1 (CEI).
[1] To connect the antenna, use RG58 cable (up to 5 m ).
DD To connect to the CRP, use a UTP CAT5 cable (up to $1,000 \mathrm{~m}$ long).
DDIl I
If the cable lengths differ from those specified in the table, define the cable cross-sections according to the actual power draw of the connected devices and in line with regulation CEI EN 60204-1.
DD For multiple, sequential loads along the same line, recalculate the values in the table according to the actual power draw and distances. For information on connecting products not covered in this manual, please see the documentation accompanying the products themselves.
$\mathbb{D} d$ To connect the encoder, use a FROR $300 / 500 \mathrm{~V}$ shielded cable ( $3 \times 0.5 \mathrm{~mm}^{2}$ ).


## INSTALLATION

## Preparing the control panel

(1) Separate the parts of the control panel.
(2) Assemble the pressure hinges.
(3) Insert the hinges into the box (either on the left or the right) and fasten them using the screws and washers supplied. The hinges slide to rotate.
(4) Drill the pre-marked holes. The diameter of the holes is 20 mm .

(2)

(3)

(1) Drill the fixing points in the control panel in a protected area.
(2) Fasten the base using screws and plugs.
$4]$ Use Phillips round head screws (maximum diameter 6 mm ).
(3) Insert the cable gland with the corrugated tubes for threading the electrical cables


3


## Preparing the electrical cables

10 Connect all wires and cables in compliance with the law.Use cable glands to connect the devices to the control panel. One of these must be used exclusively for the power supply cable.


## (1) Connecting to the mains ( $120 / 230 \mathrm{~V} \mathrm{AC}-50 / 60 \mathrm{~Hz}$ )

## (2) Power supply output for accessories

The output normally delivers 24 V AC.
The output delivers 24 V DC when the batteries start operating, if they are installed.
Lld The sum of the power draw for the connected accessories must not exceed 50 W .
(3) Connection for the 12 V AC electric lock - 15 W max.


Maximum capacity of contacts

| Device | Output | Power supply (V) | Power (W) |
| :--- | :---: | :---: | :---: |
| Accessories | $10-11$ | 24 AC | 20 |
| Additional light | E-E3 | 230 AC | 60 |
| Flashing beacon | W-E | 230 AC | 25 |
| Operator status warning light | $10-5$ | 24 AC | 3 |

Gearmotor without limit switch
(1) Gearmotor delayed while opening
(2) Gearmotor delayed while closing

(1) Gearmotor delayed while opening
(2) Gearmotor delayed while closing

(2)



## Gear motor with encoder

Gearmotor delayed while opening
(2) Gearmotor delayed while closing

a Green cable
(- Brown cable
c White cable
(c) Earthing braid

## (1) STOP button (NC contact)

This stops the gate and excludes automatic closing. Use a control device to resume movement.
LII If the contact is not used, it must be deactivated during programming.

## (2) Control device (NO contact)

OPEN ONLY function
[1] When the [HOLD-TO-RUN] function is active, the control device must be connected during OPENING.

## (3) Control device (NO contact)

PARTIAL OPENING function
PEDESTRIAN OPENING function
[d See Command 2-3P function.

## 4 Control device (NO contact)

CLOSE ONLY function
[1] When the [HOLD-TO-RUN] function is active, the control device must be connected during CLOSING.

## (5) Control device (NO contact)

OPEN-CLOSE function
OPEN-STOP-CLOSE-STOP function.
CDl See control function 2-7.

## 6 Card reader

(7) Transponder selector switch
(8) Keypad selector

## (9) Antenna with RG58 cable



## (1) Flashing beacon

It flashes when the operator opens and closes.

## (2) Additional light

It increases the light in the manoeuvring area.

## (3) Operator status warning light

It notifies the user of the operator status.


## Safety devices

During programming, configure the type of action that must be performed by the device connected to the input. Connect the safety devices to the CX, CY and/or CZ inputs (NC contacts).
$\square]$ If contacts $\mathrm{CX}, \mathrm{CY}$ and CZ are not used, they must be deactivated during programming.

## DELTA photocells

Standard connection

## DELTA photocells

Connection with safety test
$\square \mathbb{L}$ See safety devices test function.


## DIR / DELTA-S photocells

Standard connection

DIR / DELTA-S photocells
Connection with safety test
$\mathbb{L}$ See safety devices test function.


DFWN sensitive edge


(1) ESC button

The ESC button is used to perform the operations described below.
Exit the menu
Delete the changes
Go back to the previous screen

## (2) < > buttons

The $<>$ buttons are used to perform the operations described below.
Navigate the menu
Increase or decrease values

## (3) ENTER button

The ENTER button is used to perform the operations described below.
Access menus
Confirm a choice

## Getting started

CDI Once the electrical connections have been made, proceed with commissioning. Only skilled and qualified staff may perform this operation.
Make sure that there are no obstacles in the way.
Power up and proceed with the operations indicated below.

## Motor type <br> Number of motors <br> Total stop <br> Travel calibration

LDA After powering up the system, the first manoeuvre is always to open the gate; Wait for the manoeuvre to be completed.
1 ID Press the STOP button immediately in the event of any faults, malfunctions, strange noises or vibrations, or unexpected behaviour in the system.
At the end of commissioning, check the correct operation of the device using the buttons near the display. Check that the accessories also work correctly.

## Functions menu

## LANGUAGE

Choose the display language.

## [LANGUAGE]

> [Italiano] (Default)
> [English]
> [Français]
> [Deutsch]
> [Español]
> [Português euro]
> [Português bras]

## Automatic closure

Activate automatic closing.

| [FUNCTIONS] | [Automatic close] | [Deactivated] <br> [Activated] (Default) |
| :--- | :--- | :--- |

## Hold-to-run

With the function active, the operator opening movement (command 2-3) or closing movement (command 2-4) is interrupted when the control device is released.
LD] When the function is active, it excludes all other control devices.

| [FUNCTIONS] | [Hold-to-run] | [Deactivated] (Default) <br> [Activated] <br> [Closing] |
| :--- | :--- | :--- |

## Detecting obstacles

With the function active, the gate remains idle if the safety devices detect an obstacle. The function is active when the gate is closed, open or after a complete stop.

| [FUNCTIONS] | [Obstruction det.] | [Deactivated] (Default) <br> [Activated] |
| :--- | :--- | :--- |

## Safety devices test

Check that the photocells connected to the inputs are operating correctly, after each opening and closing command.

| [FUNCTIONS] | [Safety devices test] | [Deactivated] (Default) [CX] <br> [CY] <br> [CZ] <br> [CX+CY] <br> [CX+CZ] <br> [CY+CZ] <br> $[C X+C Y+C Z]$ |
| :---: | :---: | :---: |
| Pre-flashing |  |  |
| The flashing beacon is activated before each manoeuvre. 1 The pre-flashing duration is set with the [Pre-flashing T.] function |  |  |
| [FUNCTIONS] | [Pre-flashing] | [Deactivated] (Default) [Activated] |

## Thrust

Before every opening or closing manoeuvre, the leaves thrust inwards to release the electric lock.
LD] The thrust time is set with the [Thrust T.] function

| [FUNCTIONS] | [Thrust] |
| :--- | :--- |
|  | [Deactivated] (Default) |
|  | [Close] |
|  | [Open] |
|  | [Open-Close] |

## Total stop

This stops the gate and excludes automatic closing. Use a control device to resume movement.
[FUNCTIONS]
[Total stop]
[Deactivated]
[Activated] (Default)

## CX input

Associate a function with the CX input.
[FUNCTIONS]
[CX input]
[Deactivated]
[C1] = Reopen while closing (Photocells) (Default)
[C2] = Reclose while opening (Photocells)
[C3] = Partial stop Only with [Automatic close] activated.
[C4] = Obstacle standby (Photocells)
[C7] = Reopen while closing (sensitive edges)
[C8] = Reclose while opening (sensitive edges)

## CY input

Associate a function with the CY input.

| [FUNCTIONS] | [CY input] | [Deactivated] |
| :--- | :--- | :--- |
| [C1] = Reopen while closing (photocells) |  |  |
| [C2] $=$ Reclose while opening (Photocells) |  |  |
|  | $[C 3]=$ Partial stop (Default) Only with [Automatic close] |  |
| activated. |  |  |
|  | $[C 4]=$ Obstacle standby (Photocells) |  |
|  | $[C 7]=$ Reopen while closing (sensitive edges) |  |
|  | [C8] = Reclose while opening (sensitive edges) |  |

## CZ input

Associate a function with the CZ input.

## [FUNCTIONS]

[CZ input]

| $[$ [C1] $=$ Reopen while closing (photocells)$[$ [C2] $=$ Reclose while opening (Photocells)$[$ [C3] $=$ Partial stop Only with [Automatic close]$[$ [4] $=$ Obstacle standby (Photocells)$[$ [C7] $=$ Reopen while closing (sensitive edges)$[$ [C8] $=$ Reclose while opening (sensitive edges) |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Closing thrust

When the leaves reach the closing limit-switch, the operator performs a closing thrust for a few seconds.
[FUNCTIONS]
[Cl. thrust]
[Deactivated] (Default)
[Activated]

## Lock

Associate the electric lock release with a command.

| [FUNCTIONS] | $[$ Lock] |
| :--- | :--- |

```
[Deactivated] (Default)
[Close]
[Open]
[Open-Close]
```


## Configurations

Configure slowdowns and limit switches.
LD] [Slow.] and [Op.LS-Cl.Slow.] must be configured with the [Slow. T.].

| [FUNCTIONS] | [Config] |
| :--- | :--- |
|  |  |

[Slow.] = Slowdown during opening and closing [Op.LS-CI.Slow.] = Opening limit-switch and closing slowdown.
[ENCODER] = Encoder (Default)
[Time LS] = Time limit switch
[Limit switch] $=$ Opening and closing limit-switches

## Limit switch

Configure the limit switch contacts as NO or NC.
Cld This function only appears when one of the follow parameters is selected from the [Config] function: [Limit switch] [Op.LS-CI.Slow.] [Slow.].
[FUNCTIONS]
[Limit switch]
[N.C.] (Default) [N.O.]

## Command 2-7

Associate a command with the device connected to 2-7.
[FUNCTIONS]
[Command 2-7]
[Open-Close](Default) [Op. Stop CI.]

## Command 2-3P

Associate a command to the connected device on 2-3P.

| [FOMCTIONS] | [Partial] |
| :--- | :--- |
|  | Ca The degree of opening of the leaf is set with the |
| [Part. open] function in the [SET TIME] menu. |  |
|  | [Pedestrian] (Default) |

## Additional light

Choose the operating mode of the lighting device connected to the output.

| [FUNCTIONS] | LLight E] | [Courtesy] <br> The light stays on for 5 minutes. <br> [Cycle] (Default) |
| :--- | :--- | :--- |
| The lamp stays on during the manoeuvre. |  |  |
| lal The light remains off if an automatic closing time |  |  |
| is not set. |  |  |

## B1-B2 output

Configure the contact.

| [FUNCTIONS] | [Output B1-B2] |
| :--- | :--- |
|  | $[$ Monostable] (Button) <br> $[$ Bistable $]$ (Switch) (Default) |
|  |  |

## Slowdown speed

Set the slowdown speed.
[FUNCTIONS]
[Slow. speed]

## Number of motors

Set the number of motors that control the gate.
[FUNCTIONS]
[No. motors]
[M1+M2] (Default) [M2]

## Motor type

Set the type of gearmotor installed.

| [FUNCTIONS] | [Motor type] | $[$ [FROG] (Default) |
| :--- | :--- | :--- |
|  | $[$ [AXO] |  |
|  | $[$ [FAST] |  |
|  | $[$ [FERN] |  |
|  | $[$ FROG-PLUS] |  |

## Sleep Mode

This reduces the consumption of the photocells when they are in standby.

| [FUNCTIONS] | [Sleep Mode] |
| :--- | :--- |
|  | [Deactivated] (Default) <br> [Activated] |

## CRP address

Set the peripheral number. This function is needed where there are multiple operators in the same system.
[FUNCTIONS] $[$ CRP address] $]$

## CRP Baud rate

Set the communication speed of the remote connection system.

| [FUNCTIONS] | [CRP Baud rate] | $[1200]$ |
| :--- | :--- | :--- |
|  |  | $[2400]$ |
|  | $[4800]$ |  |
|  | $[9600]$ |  |
|  | $[19200]$ |  |
|  | $[38400]$ (Default) |  |
|  | $[57600]$ |  |
|  | $[115200]$ |  |

## Removing obstacles

If an obstacle is detected by the sensitive edge or by the amperometric sensor on the electronic board, movement is inverted to create a space sufficient to clear the obstacle.
If this function is deactivated, the motion is inverted until the limit-switch is reached.

## [FUNCTIONS]

[Remove obstacle]
[Deactivated] (Default)
[Activated]

## Sensitivity

Activate the obstacle-detection sensitivity.
[ENCODER]
[CD This function appears only
if the [ENCODER] parameter is
activated from the [Config] function

## [Sensitivity]

Travel sensitivity
Adjust the obstruction detection sensitivity during boom travel.
[1] This function appears only if the [Sensitivity] function is active.
[ENCODER]
LCD This function appears only if the [ENCODER] parameter is activated from the [Config] function
[Travel sens.]

## Slowdown sensitivity

Adjust the obstruction detection sensitivity during slowdown.
LD This function appears only if the [Sensitivity] and [Enc. Slow.] functions are active.

## [ENCODER]

© This function appears only if the [ENCODER] parameter is activated from the [Config] function

## [Slow. sens.]


[Activated] (Default) [Deactivated]

Opening slowdown point for M1
Set the opening slowdown starting point for M1 (percentage of the total travel).
$[1]$ This function appears only if the [Enc. Slow.] function is active.
[ENCODER]
$10]$ This function appears only if the [ENCODER] parameter is activated from the [Config] function
[M1 Slow. OP. \%]
From 1\% to 60\% (Default 10\%)

## Closing slowdown point for M1

Set the closing slowdown starting point for M1 (percentage of the total travel).
[D] This function appears only if the [Enc. Slow.] function is active.

## [ENCODER]

[1] This function appears only if the [ENCODER] parameter is activated from the [Config] function
[M1 Slow. CL \%]

## Opening slowdown point for M2

Set the opening slowdown starting point for M2 (percentage of the total travel).
[D] This function appears only if the [Enc. Slow.] function is active.

## [ENCODER]

$\mathbb{L}$ This function appears only if the [ENCODER] parameter is activated from the [Config] function
[M2 Slow. OP.\%]

Closing slowdown point for M2
Set the closing slowdown starting point for M2 (percentage of the total travel).
ID This function appears only if the [Enc. Slow.] function is active.

## [ENCODER]

[al This function appears only if the [ENCODER] parameter is activated from the [Config] function
[M2 Slow. CL. \%]
From 1\% to 60\% (Default 10\%)

## Closing approach point for M1

Set the closing approach starting point for M1 (percentage of the total travel).
[ENCODER]
[al This function appears only if the [ENCODER] parameter is activated from the [Config] function
[M1 Appr. CL. \%]

## Closing approach point for M2

Set the closing approach starting point for M2 (percentage of the total travel).

## [ENCODER]

Lanis function appears only if the [ENCODER] parameter is activated from the [Config] function
[M2 Appr. CL. \%]

## Opening approach point for M1

Set the opening approach starting point for M1 (percentage of the total travel).
[ENCODER]
[1] This function appears only if the [ENCODER] parameter is activated from the [Config] function
[M1 Appr. OP. \%]

From 1\% to 15\% (Default 15\%)

From 1\% to 15\% (Default 15\%)

## Opening approach point for M2

Set the opening approach starting point for M2 (percentage of the total travel).

## [ENCODER]

CD This function appears only if the [ENCODER] parameter is activated from the [Config] function
[M2 Appr. OP. \%]
From 1\% to 15\% (Default 15\%)
[Confirm? (No)] [Confirm? (Yes)]

## Automatic closing time

Set the time before automatic closure is activated, once the opening limit-switch has been reached.
ID The function does not work if any of the safety devices are triggered when an obstacle is detected, or after a complete stop, or during a power outage.

$$
\begin{array}{l|l|l}
\text { [SET TIME] } & \text { [ACT] } & \text { from } 0 \text { to } 300 \text { seconds (Default } 10 \text { seconds) }
\end{array}
$$

## Pedestrian automatic closing time

Set the time that must pass before automatic closing is activated, once the limit switch has been reached for a pedestrian opening (complete opening of only one of the two leaves) or partial opening (partial opening of only one of the two leaves).
[SET TIME] [Pedestrian ACT] from 0 to 300 seconds (Default 10 seconds)

## Operating time

Set the gearmotor working time during opening and closing.
[SET TIME] [Operating time] from 10 to 150 seconds (Default 90 seconds)

## M1 opening delay

Adjust the delay in starting the opening manoeuvre for M1 with respect to M2.

## M2 closing delay

Adjust the delay in starting the closing manoeuvre for M2 with respect to M1.

[CI.delay M2]
from 0 to 60 seconds (Default 2 seconds)

## Pre-flashing time

Set the time for which the beacon is activated before each manoeuvre.
[SET TIME]
[Pre-flashing T.]
from 1 to 60 seconds (Default 5 seconds)

## Electric lock time

Adjust the electric lock release time after an opening or closing command.
[SET TIME] [Lock time] from 1 to 5 seconds (Default 2 seconds)

## Thrust time

Adjust the gearmotor closing thrust time after an opening or closing command.
[SET TIME]
[Thrust T.]
from 1 to 10 seconds (Default 1 second)

## Partial opening time

Adjust M2 opening time.

## [SET TIME] <br> [Part. open] <br> from 5 to 60 seconds (Default 10 seconds)

## Slowdown time

Set the slowdown time before each limit switch.
$110]$ This function appears only with the [Op.LS-CI.Slow.] or [Slow.] parameters from the [Config] function.

| $[$ [SET TIME] | [Slow. time] function | $[0 F F]$ |
| :--- | :--- | :--- |
|  |  | from $[0 \mathrm{~s}]$ to $[30 \mathrm{~s}]$ (Default 5 s$)$ |

## New user

Register up to a maximum of 250 users and assign a function to each one.
$\mathbb{L D}$ The operation can be carried out by using a transmitter or another control device. The boards that manage the control devices (AF - R700-R800) must be inserted into the connectors.

| [USERS] | [New user] | [Deactivated] <br> [2-7] (Step-by-step or sequential control <br> [Open] <br> [B1-B2] <br> [2-3P] (Pedestrian or partial opening) |
| :---: | :---: | :---: |

## Edit name

Change the username or associated number.

## [USERS] <br> [Edit name]

## Edit code

Modify the code of a command associated to a user.

## [USERS]

[Edit code]

## Associated function

Associate a function with the user.

```
[USERS]
[Associated Func.]
```

```
[2-7] (Step-by-step or sequential control) (Default)
    [Open]
    [B1-B2]
    [2-3P] (Pedestrian or partial opening)
```


## Remove user

Remove one of the registered users.

## Remove all

Remove all registered users.
[USERS]
[Delete all users]
[Confirm? (No)]
[Confirm? (Yes)]

## Sensor type

Set the type of control device.
[USERS] [SENSOR]
[Keypad] (Default)
[Transponder]

## Save memory

Save the system users and settings in the Memory Roll.
[Save memory]
[Confirm? (No)]
[Confirm? (Yes)]
Press ENTER to confirm.

## Load the memory

Load the users and system settings from the Memory Roll.
$\mathbb{C l}$ The boards must be the same version, otherwise only the users can be loaded.

| [USERS] | [Load memory] | $[$ Confirm? (No)] |
| :--- | :--- | :--- |
|  |  | $[$ Confirm? (Yes)] |

## Radio decoding

Choose the type of radio coding for the transmitters enabled to control the operator.
[1] If you choose the type of radio coding for the transmitters [Rolling code] or [TW key block], any transmitters with a different type of radio coding saved previously will be deleted.

| [USERS] | [Radio decoding] |
| :--- | :--- |
|  | [All decoding] <br> [Rolling code] <br> [TW Key block] |
|  |  |

## Self-Learning

Save a new transmitter by copying an existing one without following the add new user procedure [New User].

[Self-Learning]
[Deactivated] (Default)
[Activated]

## No. runs

Display the number of completed manoeuvres.

## [INFO]

[No. runs]

## Initial message

Change the initial message.

| $[$ [INFO] | $[$ Initial msg] |
| :--- | :--- |
|  |  |
|  |  |

## Resetting the system

Restore factory settings.

## [INFO]

## [System reset]

[Confirm? (No)]
[Confirm? (Yes)]
Press ENTER to confirm.

## Motor test

Check the gate leaves open in the right direction.

## [MOT TEST]

## Password

Set a 4-digit password to access the main menu.

## [Password]

[<=M1 M2=>]
Press and hold the button < button.
Check that M1 performs opening.
Press and hold the button > button.
Check that M2 performs opening.
CD If the leaf does not move in the correct direction, invert the motor phases.

Change the password.
[Password]
[Change PSW]
[Confirm? (No)]
[Confirm? (Yes)]
Use the arrows to select a number.
Press ENTER to confirm.
Enter the password again.

## Remove password

Remove the password.

| [Password] | [Delete PSW] | $\left[\begin{array}{l}\text { [Confirm? (No)] } \\ \\ \\ \\ \\ \\ \end{array}\right.$ Confirm? (Yes)] |
| :--- | :--- | :--- |

## ERROR MESSAGES

|  | Encoder - ERROR | The Encoder is disconnected. The Encoder is broken. |
| :---: | :---: | :---: |
|  | Error! | The Encoder is disconnected. The Encoder is broken. |
| - Translation of the original instructions | Safety test - ERROR | The photocells are not correctly connected or configured. |
|  | Limit-switch - ERROR | Malfunctioning limit-switch contacts. |
|  | Operating time - ERROR | Finished the maximum work time set. |
|  | Safety devices - STOP | Contact 1-2 (NC) is open. |
|  | C1 | The (NC) contacts are open. |
|  | C3 | The (NC) contacts are open. |
| $\stackrel{\square}{5}$ | C4 | The (NC) contacts are open. |
| 3 | C7 | The (NC) contacts are open. |
| $\stackrel{\text { In }}{ }$ | C8 | The (NC) contacts are open. |


p. 30 - Manual FA01317-EN - 01/2020- © CAME S.p.A. - The contents of this manual may be changed at any time and without notice. - Translation of the original instructions
indizizo / address / acresse / acresse / drocciòn / endersço / adres / acres

# CAME ī 

 Via Martiri dela Liberta 15-31030 Dosson di Casier, Treviso - ItalyDICHAPA OFE L QUADAO COMANDO PERMOTOFADUTTOFI A $230 \mathrm{~V} /$ DECL ARES THAT THE OONTROL PMNE FOR 230 V GEAFMOTORS/ERVART DASS DE STELERUNGFUR 230 V ANTHEEE / DECUAFE QUE LE ARINOFE DE COMMANDE POURMOTOFEDUCTEURS $230 \mathrm{~V} /$ DECLAPA QUE LAS OUDPO DEMANDO PAPA MOTORREDUCTORES STERLUACA DO NAPEDOW ZASLLANYCH NAFIECIEM $230 \mathrm{~V} / \mathrm{VEAK} A A R T$ DAT DE STUURKAST VCOR 230 V -MOTOREN

## ZM3E ; ZM3EP

E' OONFOFME ALLE DISPOSVONI DELE SEGUENTI DFETTME/IT COMPLIES WTH THE PROMSIONS OF THEFOLOMIG DIFECTMES/DEN VOFGABEN DGT FOLGENDEN FICHTLINIENENTSPPECHEN/L EST CONFOFMES ALXX DISPOSITIONS DES DFFEGTMES SUMANTES/CUMPLEN CONLAS DISPOSICIONES DELAS SIGUENTES DIFECTMAS/ESTÅODE AOOFDO COMAS DISPOSICOES DAS SEGUINTES DFFCTINAS / SA ZGOCNE ZPOSTANOMIENIAM NASTEPUACYCH DYFEKTYW GUROPEISKCH/VOLDCEN AAN DE VOCFSCHFIFIEN VAN DE VOLGENDE FICHILLNEN:

- COMPATIBILTA E EITROMAGNETICA / ELECTROMAGNETC COMPATIBILTY / ELEKTROMAGNETISCHE VERTRAัGLUCH KEIT / COMPATIEILTE ELECTRQMAGNETIOUE / COMPATIBILIDAD ELECTROMAGNETICA / OOMPATIBILIDADE ELETROMAGNEIICA / KOMPATYEILNOSCI ELEKTROMAGNETYCZNEJ / ELEKTROMAGNETSCHE CCMPATIBILTEIT : $2014 / 30 \mathrm{LE}$
 Wher lechrical registions/ Haminoniorle Becugsnomen und andere tedinishe Vorgaben/

 andere techiscte normen wasmas is vervezem

EN 61000-6-2:2005
EN61000-6-3:2007+A1:2011

ASSEMELATO COFFEITAMENTE CONIMOTOFDUTTORI NDICATI NE MANUALE DI NSTALLAZIONE, RISPEITAI FEGUSTI ESSEVZAL APPLCATI / CORFECTL ASSEMEL ED WTH THE GEAFMOTCRS NDICATED NTHE NSTALATICNMAMUAL, MEET HEAPM UCAB E ESSENTIA REQUREMENTS./KOFFEKT MONTIERTMI DENIN DEA NSTALLATIONSANLGIUNGANGEGE ASSE APL E AVECL FS MOTOREDUCTE IFS NDIOUFS DANS I EMANUE DTNTAL ATMON FESPECTENT FSOCNDMONS REOUSES NECESSAFES AFYUOUEES:/MONTADO COFFECTAMENTE CON LOS MOTOFREDUCTOFES NDICADOS ENE MANUAL DE INSTALACION CUMPLEN CON LOS REQUSTOS ESEVCIALES APUCADOS / MONTADOS CORAETAMENTE COM OS MOTOFAEDUTORES INDICADOS NO MANUAL DE INSTALACAO, RESPETAMO FECUISIOS ESSENCIAIS APUCADCS. /PRAMDOWO ZIONTOWANE Z MOTOFEDUKTCRAM WSKAZANYMIWINSTRUKCIMONTAZU, SPEZNAJA PODSTAMOME WYMAGANE WYRUNII: / COFRECT GEMONTEHD MET DEMOTCFFEDUCTOREN AANGEGEVENINDEINSTALLATEHANDLEDING, VOLDCEN AANDE TOEPASBAFE MINMUM BSEN:
$1.1 .3 ; 1.1 .5 ; 1.2 .1 ; 1.2 .2 ; 1.3 .2 ; 1.3 .7 ; 1.3 .8 .1 ; 1.4 .1 ; 1.4 .2 ; 1.5 .1 ; 1.5 .6 ; 1.5 .8 ; 1.5 .9 ; 1.5 .10 ; 1.5 .11 ; 1.5 .13 ; 1.6 .1 ; 1.6 .3 ; 1.6 .4 ;$
1.7.1; 1.7.2; 1.7.4



SMMENTE STEIB

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