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CENTRALINA A MICROPROCESSORE PER CONTROL UNIT WITH MICROCONTROLLER FOR MIKROCONTROLLER-STEUERUNG FÜR CENTRALE A MICROCONTRÔLEUR POUR CENTRALITA A MICROPROCESADOR POR CENTRALKA Z MIKROPROCESOREM DLA



Libro istruzioni Operating instructions Betriebsanleitung Livret d'instructions Libro de instrucciones Książeczka z instrukcjami



UNIONE NAZIONALE COSTRUTTORI AUTOMATISMI PER CANCELLI, PORTE, SERRANDE ED AFFINI

Dichiarazione CE di conformità	Déclaration CE de conformité
EC declaration of confirmity	Declaracion CE de conformidad
EG-Konformitatserklarung	Deklaracja UE o zgodności
Con la presente dichiariamo che il nostro prodotto	

We hereby declare that our product Hiermit erklaren wir, dass unser Produkt Nous déclarons par la présente que notre produit Por la presente declaramos que nuestro producto Niniejszym oświadczamy że nasz produkt

KTE

è conforme alle seguenti disposizioni pertinenti: complies with the following relevant provisions: folgenden einschlagigen Bestimmungen entspricht: correspond aux dispositions pertinentes suivantes: satisface las disposiciones pertinentes siguientes: zgodny jest z ponižej wyszczególnionymi rozporządzeniami:

Direttiva sulla compatibilità elettromagnetica (89/336/ CCE, 93/68/CEE) EMC guidelines (89/336/EEC, 93/68/EEC) EMV-Richtlinie (89/336/EWG, 93/68/EWG) Directive EMV (89/336/CCE, 93/68/CEE) (Compatibilité électromagnétique) Reglamento de compatibilidad electromagnética (89/336/ MCE, 93/68/MCE)

Norme armonizzate applicate in particolare: Applied harmonized standards, in particular: Angewendete harmonisierte Normen, insbesondere: Normes harmonisée utilisées, notamment: Normas armonizadas utilzadas particularmente:

EN 55022, EN 61000-3-2, EN 61000-3-3, EN 50082-1

Data/Firma

Direttiva sulla bassa tensione (73/23/CEE, 93/68/CEE) Low voltage guidelines (73/23/EEC, 93/68/EEC) Tiefe Spannung Richtlinie (73/23/EWG, 93/68/EWG) Directive bas voltage (73/23/CEE, 93/68/CEE) Reglamento de bajo Voltaje (73/23/MCE, 93/68/MCE)

Norme armonizzate applicate in particolare: Applied harmonized standards, in particular: Angewendete harmonisierte Normen, insbesondere: Normes harmonisée utilisées, notamment: Normas armonizadas utilzadas particularmente:

EN 60204-1, EN 60335-1

Data/Firma



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# **KTE Control unit with microcontroller**

Installation instructions.

- a) The electrical installation and the operating logic must comply with the regulations in force.
- b) It is advisable to keep the power cables (motor, power supply) separate from the command cables (buttons, photocells, radio). To avoid interference it is preferable to provide and use two separate sheaths.
- c) Check all the connections again before supplying voltage.
- d) A jumper must be fitted on any normally closed contacts that are not used.
- e) If the direction of rotation of the motor is inverted, it is sufficient to invert the motor power supply leads.

Input/Output functions

- (1) Antenna input
- (2) Antenna earth
- (3) P.P. input= Step-by-Step input. Connected in parallel to the radio control output. Contact N.O.
- (4) FTC input= Contact N.C. The opening of this contact during the closing manoeuvre causes inversion of the stroke.
- (5) STOP input= Contact N.C.
- (6) +V output= Common output for all inputs.
- (7,8) Blinking light= Blinking light supply output 24Vac (3W).
- (9,10) Out 24Vac= Auxiliary supply output 24Vac (500mA max.).
- (13) Transformer= 0V.
- (14) Transformer= Voltage of the Soft-Start and of slowing Closing.
- (15) Transformer= Motor speed.
- (16,17) Motor output= To motor.
- (18) Common Limit stop.
- (19) FCC input= Contact N.C.
- (20) FCA input= Contact N.C.

If a mechanical edge is fitted, connect the contact in SERIES to the contact of the photocell to have inversion or in SERIES to the STOP button to have the STOP function.

The control unit is provided with a built-in radio module to receive remote controls both with a fixed code and with a variable code at the frequency of 433.92MHz.

In order to use a remote control it must first be learnt; the memorising procedure is illustrated below. The device is able to store up to 14 different codes.

The maximum work time of the control unit is 90 seconds. After having performed 4 complete manoeuvres (the term complete manoeuvre means starting from FC and arriving at the other FC), the control unit memorises the mean work time and slows down the movement during closing. The time of the courtesy light is 120 seconds.

On the supply transformer there is a faston connector which allows the motor power to be regulated at 3 different levels. Position the faston on the desired power.

It is possible to carry out a test on the control unit to check operation of the photocells; if you want to use this function you have to supply power to at least the transmitters of the photocells (if you like, for convenience's sake, you can also supply power to the receivers) from the terminals of the blinking light (terminals 7 and 8) and set the function as explained below in the paragraph SETTING THE PHOTOCELL TEST. Once the test has been set up, before each closure the control unit checks the operation of the FTCs; if they are faulty or occupied, after having given a signal for 3 seconds with the blinking light, the automatic mechanism does not perform the manoeuvre. If the FTC is occupied after the TCA (Automatic closing time) has elapsed, the automatic mechanism waits again for the whole set TCA.

#### Programming of the control unit

After having carried out any of the following programming operations, 4 complete manoeuvres must be performed before you can again see slowing down during closure (starting from one limit stop and arriving at the other limit stop).

#### Cancelling the remote controls from the memory

To cancel the remote controls from the memory, supply power to the control unit holding down the programming button PGM; the led will light up for about 5 seconds. When it goes out, the memory has been cancelled.

### Memorising a new remote control

Press the programming button PGM, the led will light up with a fixed light. Within 10 seconds, press the button of the new remote control that you want to memorise. If the led does not remain lit with a fixed light but starts blinking for 5s after you have pressed the PGM button, this means that the memory is full and cannot store any more codes.

# Setting the automatic closing time (TCA)

Press the programming button PGM twice, the blinking led will start to blink rapidly. The courtesy light will blink every second until the PGM button is pressed again; if the number of blinks is less than 5, automatic closure is disabled, whereas if it is larger than 5 the TCA is set at a number of seconds corresponding to the number of blinks made by the courtesy light (up to a maximum of 255).

After 255 blinks, if the PGM button is not pressed the control unit automatically leaves the programming procedure, disabling automatic closure.

## Setting the threshold of intervention of the current limiter

The current limiter has 6 thresholds of sensitivity. To set the desired sensitivity, press the programming button PGM a first time, then press the PP button; holding down the PP button, press the PGM button again and the blinking led will go out. The courtesy light will blink every second until the PGM button is pressed again. The set threshold of sensitivity decreases with the number of blinks made by the courtesy light: after 1 blink there is the greatest sensitivity (that is the minimum power), after 6 blinks, if the PGM button is not pressed again the control unit automatically leaves the programming procedure, memorising the minimum sensitivity (that is the maximum power).

If the threshold of intervention of the current sensor is exceeded in opening, the motor stops. In closing, if the threshold of intervention of the current sensor is exceeded the motor inverts the direction of movement for 2 sec., then stops.

#### Setting the photocell test

Whenever this procedure is tested the setting of the photocell test varies (that is if previously the test was switched off it is switched on, if previously the test was switched on it is switched off). To vary the setting of the photocell test, press the programming button PGM a first time, then press the PP button (press and release); press the PGM button again. The blinking led lights up with a fixed light, then the courtesy light indicates the new setting of the test: 1 blink if the test is activated, 2 blinks if the test is deactivated.

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