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$\square$ CENTRALE DI COMANDO UNITÉ DE COMMANDE CONTROL UNIT
$\square$ CENTRAL DE MANDO

ISTRUZIONI D' USO E DI INSTALLAZIONE INSTRUCTIONS D'UTILISATION ET D'INSTALLATION INSTALLATION AND USER'S MANUAL INSTRUCCIONES DE USO Y DE INSTALACION INSTRUÇÕES DE USO E DE INSTALAÇÃO

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This booklet is an integral and essential part of the product and must be delivered to the user. Carefully read the warnings contained inside that provide important information regarding safety during installation, use and maintenance.

## OVERVIEW

The DEA 203_2 control panel has been designed to control the "DEA SYSTEM" automation devices for both sliding gates and garage doors powered by 230 V single-phase motors, and comes complete with electronic motor force adjustment, amperometer control for the detection of any obstacles present and an inertia limitation system for use with sliding gates. The widest versatility, easy installation and complete respect for the European regulations in force regarding electromagnetic compatibility and electric safety are the unit's main characteristics; in particular, DEA SYSTEM ensures conformity to the following European Directives: 89/336/EEC, 73/23/EEC and subsequent amendments.
DEA SYSTEM reminds all users that the selection, configuration and installation of all the devices and materials in the entire automation must be performed in respect of the regulations in force in the nation of installation.

## TECHNICAL DATA

## Power supply

Flashing light output
Gate open signal light/courtesy light output
Auxiliary power supply output
Electric lock output
Max. motor power
Fuse F1
Fuse F2
Max pause time
Max work time

The work time you set must anyway allow to respect the maximum working time admitted for the type of motor you are using. Please refer to the data on the motor label.

## ELECTRICAL SYSTEM CONFIGURATION

## (See fig. 1)

IMPORTANT: Any installation, maintenance, cleaning or repair operations on any part of the automatism must be performed exclusively by qualified personnel, and all such operations must be performed only after first disconnecting the power supply. Always keep the 230 V cables (power supply, motor, starting condenser, flashing light, courtesy light) separate from the low voltage cables (controls, electric lock, antenna, and auxiliary power supply) and fasten these latter using adequate clamps near the terminal boards. Install a multiple pole switch with a contact opening of 3 mm provided with protection against overloads upstream from the automatism. Use a cable with a minimum section of $3 \times 1.5 \mathrm{~mm}^{2}$ (such as H07RN-F type) for the power supply and scrupulously respect all the regulations in force regarding electrical systems in the nation of installation.

## TERMINAL BOARD CONNECTION:

(See fig. 1)

## 1-2: $\quad$ Power supply: 230 V AC $+/-10 \% 50 \mathrm{~Hz}(\mathrm{~F}=$ phase, $\mathrm{N}=$ neutral)

3-4 Courtesy light output 230 V AC 50 Hz max 40 W (DIP8 = ON)

- Gate open indicator light output: $230 \mathrm{~V} \mathrm{AC} 50 \mathrm{~Hz} \max 40 \mathrm{~W}$ (DIP8 = OFF)

5-6 Flashing light output: $230 \mathrm{VAC} 50 \mathrm{~Hz} \max 40 \mathrm{~W}$
7-8-9 Motor output ( $7=$ open, $8=$ common, $9=$ close)
10-11 electric lock output 12 V AC 15 VA
12 Common inputs
13 FCA opening limit-switch input (N.C.) stops the motor's opening stroke
14 FCC closing limit-switch input (N.C.) stops the motor's closing stroke
15 APRE PEDONALE opens the gate to a width of only 1.5 (N.O.)
16 FOTO Photocell Art. 104/105 input (N.C) inverts movement during closing, and if enabled during opening stops movement
17 STOP stop button input (N.C) stops movement in any situation
18 APRE open/close button input (N.O.) can function in both step-by-step mode and inversion mode
IMPORTANT: All N.C. inputs not used must be bridged towards the common inputs terminal.
19 Antenna ground
20 Antenna signal
21-22 Auxiliary power supply output: 24V AC max 200mA
J3 Radio receiver plug-in connector

## OPERATION:

## TIME SETTING

TCA trimmer for the setting of the automatic closing time, after which the gate will automatically close again.
TLAV trimmer for the setting of the work time, after which the motor will stop during both opening and closing.
Whenever the limit-switches are installed, the work time must be set to a value that is a few seconds higher than the real time required for the stroke of the motor.

| DIP-SWITCHES FUNCTIONS |  |  |
| :---: | :---: | :---: |
| DIP1 | ON | "collectivity" function enabled: does not receive opening pulses during opening and the gate open pause time |
|  | OFF | "collectivity" function disabled: receives opening pulses also during opening and the gate open pause time |
| DIP2 | ON | See description "reverser operation" |
|  | OFF | See description "reverser operation" |
| DIP3 | ON | "step-by-step" program: OPEN->opening, OPEN->stop, OPEN>closing... |
|  | OFF | "inversion" program: OPEN->opening, OPEN->closing, OPEN>opening... |
| DIP4 | ON | Sliding version: closing limit-switch delay disabled, anti-inertia device enabled |
|  | OFF | Garage door version: closing limit-switch delay enabled, anti-inertia device disabled |
| DIP5 | ON | Photocell operative also during opening: stops all movement until the obstacle is removed |
|  | OFF | Photocell operative only during closing: inverts direction of movement |
| DIP6 | ON | automatic closing disabled: after opening, it closes again only after an opening pulse |
|  | OFF | automatic closing enabled : after opening, and after the pause time set, the gate automatically closes again |
| DIP7 | ON | Reverser disabled |
|  | OFF | Reverser enabled. IMPORTANT: limit-switches compulsory |
| DIP8 | ON | Terminals 3-4: courtesy light output 230V AC 50 Hz (delay: 50 seconds) |
|  | OFF | Terminals 3-4: gate open signal light output, 230 V AC, 50 Hz |

## FORCE ADJUSTMENT

The 203_2 control panel is equipped with a device that permits the electronic adjustment of motor force by adjusting the "forza" trimmer:
"FORZA":adjusts the intensity of the motor force during the stroke (rotate clockwise to increase force, counter-clockwise to decrease force). The motor force must be adjusted by keeping trimmer R32 "SENS" in the MIN. position (entirely in clockwise direction) in order to avoid the undesired intervention of the REVERSER. The sensitivity of the reverser is made subsequently (see "Reverser operation").

## REVERSER OPERATION

Whenever the "reverser" device is used, the limit-switches must also be installed After setting the motor force, proceed to the setting of reverser sensitivity. Make sure that the reverser is enabled (DIP7 OFF) and with the sensitivity set at minimum level (trimmer R32 turned entirely clockwise) perform an opening movement. During closing, stop the gate and slowly increase the reverser sensitivity (trimmer R32 turned counterclockwise) until the reverser intervenes (inversion of direction of movement). This permits the identification of the sensitivity necessary for the intervention of the reverser as soon as the motor stops.
In any case, we recommend setting a sensitivity that is SLIGHTLY lower in order to avoid the undesired intervention of the reverser by mechanical friction.

The position of DIP2 determines the reaction to the perception of the obstacle, and in particular:

- DIP 2 ON : during both opening and closing, the intervention of the reverser inverts the direction of movement for 3 seconds and then stops it.
- DIP 2 OFF : during opening, the intervention of the reverser stops movement, and during closing inverts the direction of movement.

It is in any case obligatory to use appropriate safety devices in order to ensure the impact force limitation values prescribed by the regulations in force in the nation of installation.
fig. 1


ATTENZIONE: DEA SYSTEM ricorda tuttavia che la scelta , la disposizione e l'installazione di tutti i dispositivi e materiali che compongono l'intera automazione deve avvenire in ottemperanza alle normative vigenti nel paese in cui si effettua l'installazione.

ATTENTION: DEA SYSTEM vous rappelle toutefois que le choix, la disposition et l'installation de tous les dispositifs et de tous les matériels qui font partie de l'automation complète doivent être exécutés conformément aux réglementations en vigueur dans le pays où l'installation sera mise en place.

ATENCIÓNI: DEA SYSTEM, no obstante, recuerda que la elección, la disposición y la instalación de todos los dispositivos y materiales que componen el automatismo debe efectuarse en el cumplimiento de las normativas en vigor en el país en el que se efectúa dicha instalación.

WARNING: DEA SYSTEM reminds however that the choice and installation of all devices and materials included in the complete automation must respect the legal norms in force in the country where the system is installed

ATENÇÃO: Entretanto o DEA SYSTEM lembra que a escolha, a disposição e a instalação de todos os dispositivos e materiais que constituem a inteira automação, devem ser efectuadas a obedecer também as normas em vigor no país onde for instalada.

