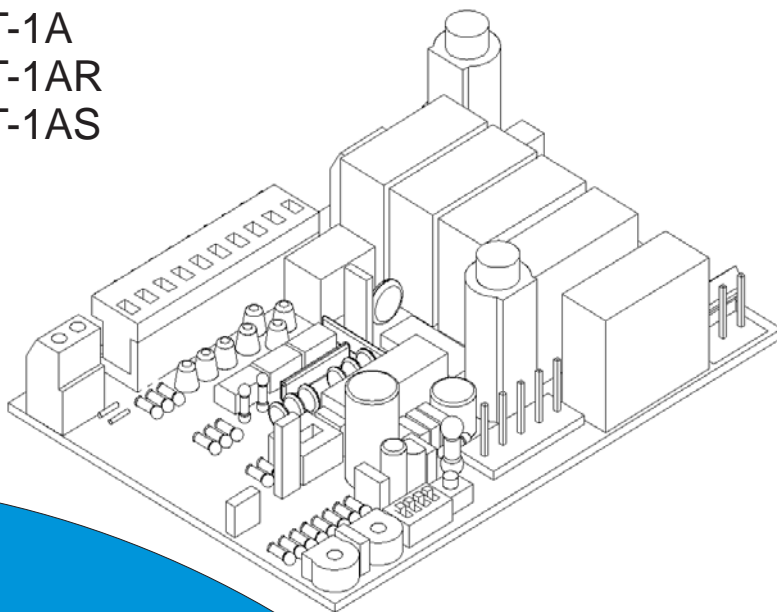


Centralina elettronica
Control unit
Armoires de commande
Steuerung
Centralitas
Unidades de comando

900CT-1A
900CT-1AR
900CT-1AS



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GB
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D
E
P

MANUALE ISTRUZIONI
INSTRUCTION MANUAL
LIVRET D'INSTRUCTIONS
ANLEITUNGS HEFT
MANUAL DE INSTRUCCIONES
MANUAL DE INSTRUÇÕES



2004

CE

SAFETY

We congratulate you for the excellent choice.

This handbook will help you during the installation of your gear motor. You will find explanation regarding gear motor's functions and safety rules, which will always grant you a perfect operating and maximum safety. In order to avoid damages on your equipment or to injure yourself and other persons, please read carefully and completely the present handbook before installing the gear motor.

Preserve the instructions, so that everyone can consult them before using the motor.

We decline all consequences, coming from wrong motor use or non-observance of the listed precautions.

In case of malfunction, switch off immediately the motor.

In case of reparations, be sure that supply has been turned off.







Don't try to dismount the motor, if your not authorized technician.

Don't expose to fire or heat sources, don't dip in water or other liquids.

Use proper supply cables.

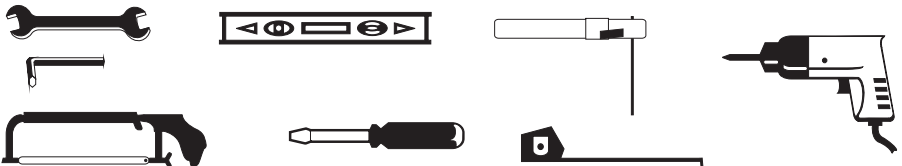
SAFETY RULES

During installation, follow carefully the following safety rules:

	USE GLOVES		ATTENTION MOVING GEARS		
	ATTENTION SAFETY DISTANCE		DON'T INSTALL GEAR MOTOR IN EXPLOSIVE MIXTURES SATURATED ROOMS	MAINTAIN PROTECTIVE CARTER	
	USE WELDING GLASSES			ELECTRIC SHOCK	

EQUIPMENT

For installation you need following equipment: keys, screwdriver, rule, saw, drill, welder.



INDEX

A grey semi-circular graphic containing the letters 'GB' in a bold, sans-serif font.

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THIS HANDBOOK IS APPOINTED FOR THE INSTALLER ONLY
The installation has to be carried exclusively by qualified personnel according to the current law disposal

MODELS AND SPECIFICATIONS

900CT-1A	Unit 230V pre-set for electric clutch,with built-in radio decoder and radio.
900CT-1AR	Unit 230V pre-set for electric clutch,and for radio card insertion.
900CT-1AS	Unit 230V pre-set for electric clutch, and for radio card insertion.

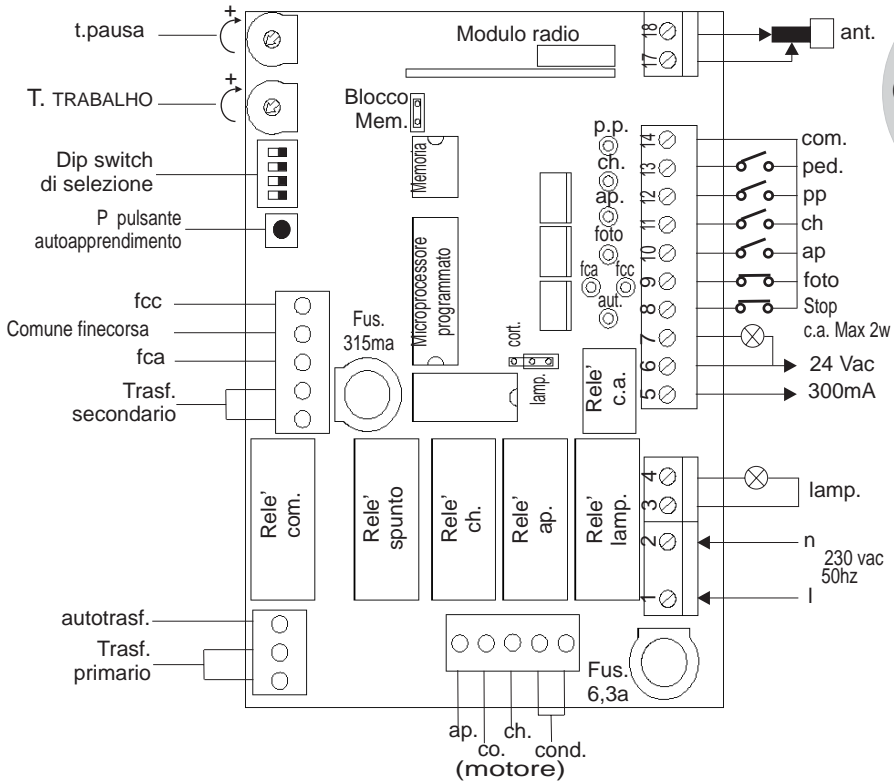
TECHNICAL DATA

	900CT-1A 900CT-1AR 900CT-1AS
SUPPLY	230 VAC/50-HZ
OUTPUT SUPPLY ACCESSORIES	24 VAC/300 MA
OPERATING TIME	2-60 sec
PAUSE TIME	2-180 sec
OPERATING TEMPERATURE	-20°/+70°

SET PANEL

900CT-1A 900CT-1AR

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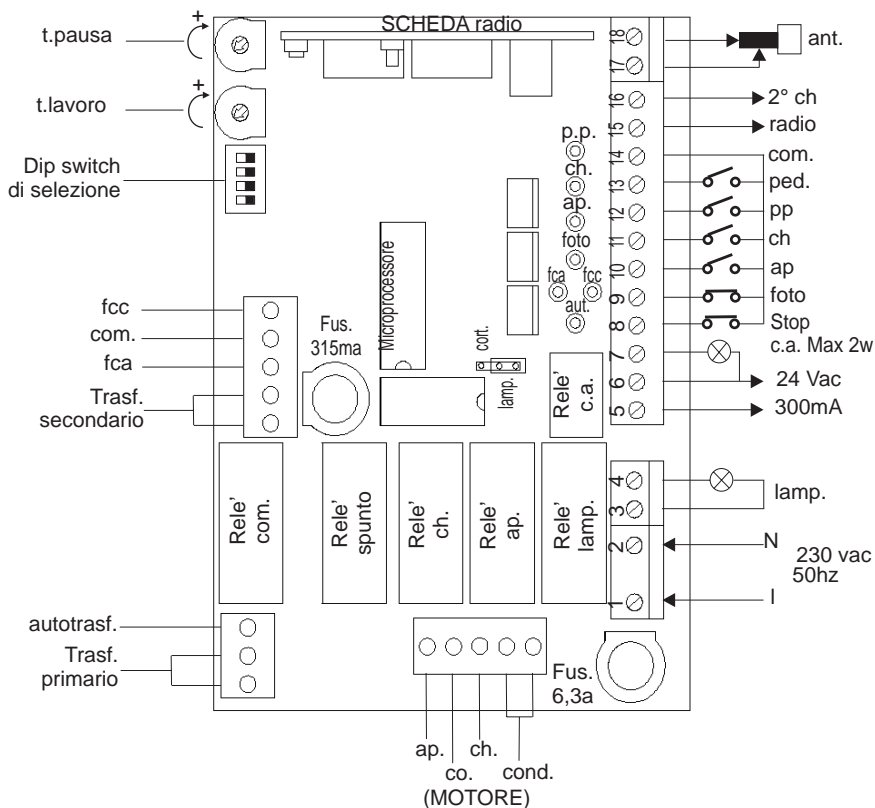
LIGAÇÕES NO TERMINAL DE BORNES

1-2	230VAC	230Vac 50Mhz mains power supply
3-4	FLASHING UNIT	Output for flashing unit/courtesy lamp (selection between flashing unit and courtesy lamp is set on the relative jumper) max 230Vac 25W for flashing unit, max. 100W for courtesy lamp.
5-6	24VAC	24Vac output for auxiliary power supply (photo, radio etc.) maximum 300mA
6-7	G.O. IND. LAMP	Output for door Open indicator lamp 24Vac max 2W
8	STOP	Input for stop command (emergency, external safety lock)
9	PHOTOCELLS	Input for safety devices (photocells, safety edges)
10	OPEN	Input for open command
11	CLOSE	Input for close command
12	STEP	Input for sequential operating mode (open stop close stop)
13	PEDESTRIAN	Input for pedestrian command (see Special Functions)
14	COMMON	Common contact for inputs
15-16	OUTPUT 2 CHANNEL	Output 2° channel (vers. CT-1AS)
17-18	AERIAL	Input for radio receiver aerial

CONNECTIONS MADE IN PRODUCTION

OP-CO-CL (MOTOR)	Output for motor connection. (If the direction of rotation is incorrect, invert the connector).
CAPAC.	Connection of motor capacitor
PRIMARY TRANSF.	Power supply transformer primary
SECONDARY TRANSF.	Power supply transformer secondary
CLPC-COM-OPPC	Limitswitch input

SET PANEL 900CT-1AS



Carefully read all instructions prior to installation. Failure to observe the above instructions, improper use or connection errors may impair the safety or correct operation of the device and consequently the entire system. The manufacturer declines all liability for malfunctions and/or damage caused by failure to observe instructions and specifications.

The company reserves the right to apply modifications for product improvements.

INSTALLATION

The logo consists of the letters 'GB' in a bold, black, sans-serif font, positioned inside a grey, semi-circular shape that is open on the left side.

Device installation must be carried out professionally by personnel with qualifications as specified by current legislation.

To guarantee safety of the operator and prevent damage to parts during connections, both low voltage (230V) and very low voltage (24V) or when connecting the radio card, the control unit must always remain disconnected from the power supply. Always keep power supply cables separate from control cables. In the case of power cables, motor lines, flashing unit/courtesy lamp lines and electric lock, use cables with a minimum section of 1,5 mm²; in the case of auxiliary utilities, commands and safety contacts, use cables with a minimum section of 0,5 mm². When control cables are very long (over 30 m) disconnection by means of relays in the control unit is recommended.

If a fuse trips, after eliminating the cause, replace with a version with the same characteristics. Install all safety devices, limit switches, photocells, safety edge, and stop pushbutton. If one or more of the safety devices are not installed, insert a jumper in the relative terminals with the controls common contact.

All N.C. contacts related to the same input must be connected in series.

All N.O. contacts related to the same input must be connected in parallel.

Install disconnection elements on the mains power supply in an accessible location.

STANDARD OPERATION

OPEN	The open command activates the flashing unit and then starts door opening.
CLOSE	The close command activates the flashing unit and then starts door closing.
STOP	The stop command stops the door and awaits a new command.
STEP	The step command acts on the door via a radio control or pushbutton, setting the system to different phases: <ul style="list-style-type: none">- from door open it anticipates the closing phase- from moving door it changes to the stop phase- from closed door it changes to the opening phase

PEDESTRIAN	<p>The pedestrian command starts door opening, which lasts 1/3 of the work time set by means of the trimmer.</p> <p>The door open indicator lamp notifies the user of the door status. door closed - lamp off. door in opening phase - slow flashing lamp. door open - lamp lit. door in closing phase - fast flashing lamp. During the programming phase, it acts as an indicator light, and at the end of programming returns to its original function (vers.CT-1A).</p>
DOOR OPEN INDICATOR	
PHOTOCELL	<p>The photocell command ensures that on interruption of the light beam, all controls are inhibited. During the opening phase, if the beam is interrupted, the door completes travel to the normal pause position. During the pause phase, if the beam is interrupted, the door remains in this status until the beam is restored. When the beam is restored, the door remains in pause status for a brief interval (1/4 of the set time) and then closes. During the closing phase, if the beam is interrupted, the door changes to the opening phase.</p>
STARTING TORQUE	<p>Thrust is activated on opening and closing setting the maximum force for 1.5 sec. to then return to the set power of the autotransformer.</p>
WORKING TIME	<p>Working time range from 2 sec. to 60 sec. (with extension fitted, the range is extended from 0 sec. to 120 sec.). The adjustment trimmer to facilitate brief time settings on door movements has an exponential range (more gradual at the start of the trimmer range and less at the end).</p>
PAUSE TIME	<p>Pause time range from 2 sec. to 180 sec. N.B. During opening, if the photocell beam is interrupted, the pause time is reduced to 1/4 of the set time.</p>
FLASHING UNIT OR COURTESY LAMP	<p>The courtesy lamp uses the same relay as the flashing unit, and extends operation time if selected for a fixed interval of 3 min.</p>

CT-1A – CT-1AR CODE SELF-LEARNING



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In the self-learning phase, all controls are inhibited.

To enter the self-learning phase, the door must be in the closed status (with G.O. indicator off). The led indicating all self-learning data is connected to the G.O. Indicator. During programming, the G.O. indicator flashes in the same way as the indicator led, and then returns to its original function on completion of the programming phase.

CONTROL UNIT POWER SUPPLY

When the control unit is powered up, the microprocessor performs an internal test and the indicator led emits two slow flashes and two fast flashes to indicate that it is ready for the next phases.

RESET

The integrated memory can be reset on start-up of the control unit by pressing and holding the self-learning pushbutton for 10 seconds. At the end of this phase, the self-learning indicator led remains lit for 5 sec. To indicate successful reset. On approach to the end of the 10 second interval, the indicator led flashes more quickly to indicate that this important and delicate operation is about to be completed.

STANDARD CODE SELF-LEARNING

When pushbutton P is pressed briefly, the indicator led emits a series of slow flashes for 10 sec. to indicate entry in the self-learning phase. During this interval, if the radio control is pressed, the code is acquired with the radio control channel on which it was transmitted (1°, 2°, 3°, or 4°). If the code is memorised correctly, the led remains lit for 2 sec. After the first memorisation command, the led flashes for a further 6 sec. on standby for a new memorisation command; if this is performed, it continues to flash for 6 sec.; otherwise it exits the programming phase. If a previously memorised code is entered during this phase, the led flashes quickly to indicate that the code has already been memorised. During the self-learning phase, there is also the option to memorise several codes also on different channels (e.g. an initial user memorises the code "x" from channel 1°, and a second user memorises the code "y" from channel 2°).

CODE DELETION

Press pushbutton P four times and the led emits a series of slow double flashes for 10 sec. To indicate entry in the code deletion phase. In this interval, if the radio control is pressed, the code can be deleted from the memory. Unlike the entry phase, the unit exits the deletion phase as soon as the code is transmitted. To delete another code, the same procedure must be repeated from the start. If deletion is successful, the led remains lit for 2 sec.

CT-1A CODE SELF-LEARNING VIA RADIO

The code self-learning process is possible via radio, by following a pre-set sequence. This sequence enables the memorisation of a new radio control when one is already memorised.

- CT-1A Before following the pre-set sequence, a special condition is required to specify entry in the radio memorisation mode. With the door closed, stand in front of the indoor control pushbutton and press the STOP pushbutton to indicate the various phases by means of the G.O. indicator.
Otherwise, if the pushbutton panel is not fitted, stand in front of the photocell beam to interrupt it.
- PHASE 1 Press for at least 10 consecutive seconds with a radio control already memorised.
- PHASE 2 Press once with the radio control to be memorised (with a maximum extra time interval of 10 seconds). If the sequence is performed correctly the memorisation phase is complete.

The control unit exits the programming phase:

- when the maximum time interval of 10 seconds elapses (during phase 2) when no command is given
- when a new radio control has been memorised.

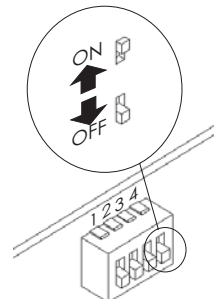
If more than one radio control is to be memorised, the pre-set sequence must be performed each time.

- CT1-AS For self-learning of codes look the instruction manual of card insertion.

STANDARD OPERATION OPTIONS

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- JUMPER 1** **FLASHING UNIT/COURTESY LAMP FUNCTION**
This enables the user to select whether to enable the output for a flashing unit or that of a courtesy lamp (which turns off 3 minutes after door movement).
- DIP SWITCH 1** **NORMAL/APARTMENT BLOCK OPERATION**
This selection enables the user to change from the standard operation of step mode (open stop close) to an open-only command.
- DIP SWITCH 2** **PHOTOCELL PAUSE ON OPENING FUNCTION**
This selection enables the user to change the standard photocell operating mode. During the opening phase, if the beam is interrupted the door stops and when the photocell beam is restored the door resumes opening. During the closing phase, if the photocell beam is interrupted the door stops and when the beam is restored the door inverts movement to open again.
- DIP SWITCH 3** **AUTOMATIC CLOSING DISABLE FUNCTION**
This selection enables the user to disable the automatic closing function. On completion of opening the door is not set to pause status for the set time, but remains stationary on standby for a ne close command.
- DIP SWITCH 4** **WORKING TIME EXTENSION FUNCTION**
This selection enables the user to double the working time of the door from the setting of 60 to 120 sec.
- JUMPER MEMORYBLOCK** **SELECTION MEMORYBLOCK**
With insert jumper i is not possible to memorize transmitter



TESTING

Testing of the entire system where the control unit is installed must be performed by qualified personnel who must conduct all tests according to the associated risks.

BEFORE POWERING UP THE AUTOMATION

- check all connections
- set all trimmers to minimum
- set all dip switches as required
- set the adjustment trimmer to minimum power

On completion of the above, the unit can be started up.

POWERING UP

- ensure correct operation of all inputs
- adjust the motor output to ensure compliance with current standards by means of the relative trimmer
- ensure correct direction of motor rotation
- set the work and pause trimmers
- perform the final operation test

MAINTENANCE / DISPOSAL

In the event of malfunctions, ensure exclusively qualified personnel perform repairs, maintenance or adjustments.

Dispose of all materials in compliance with current regulations.