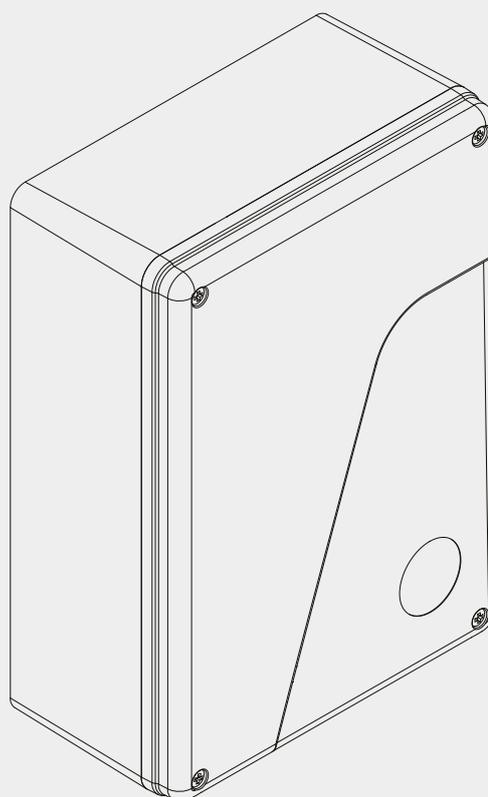
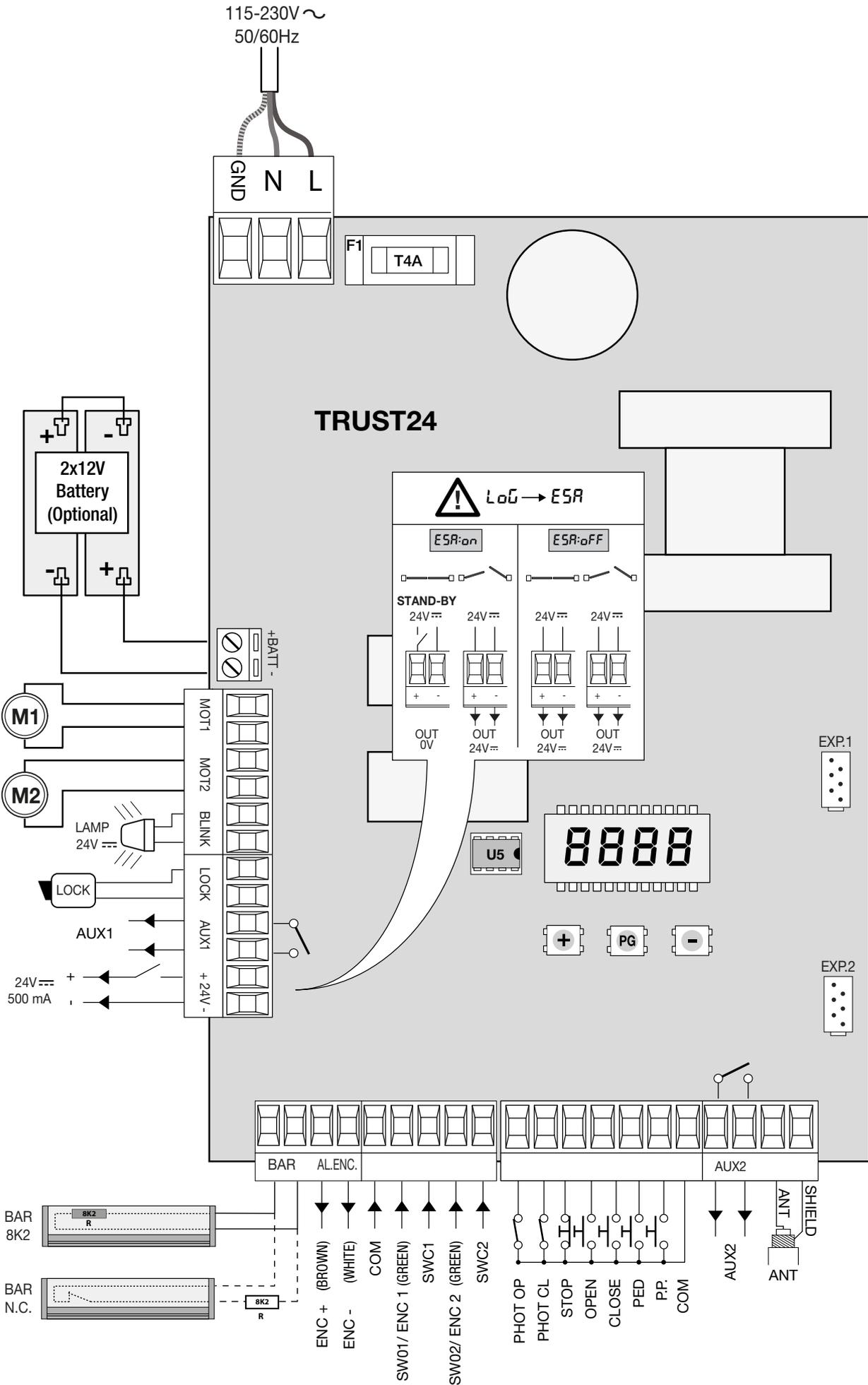


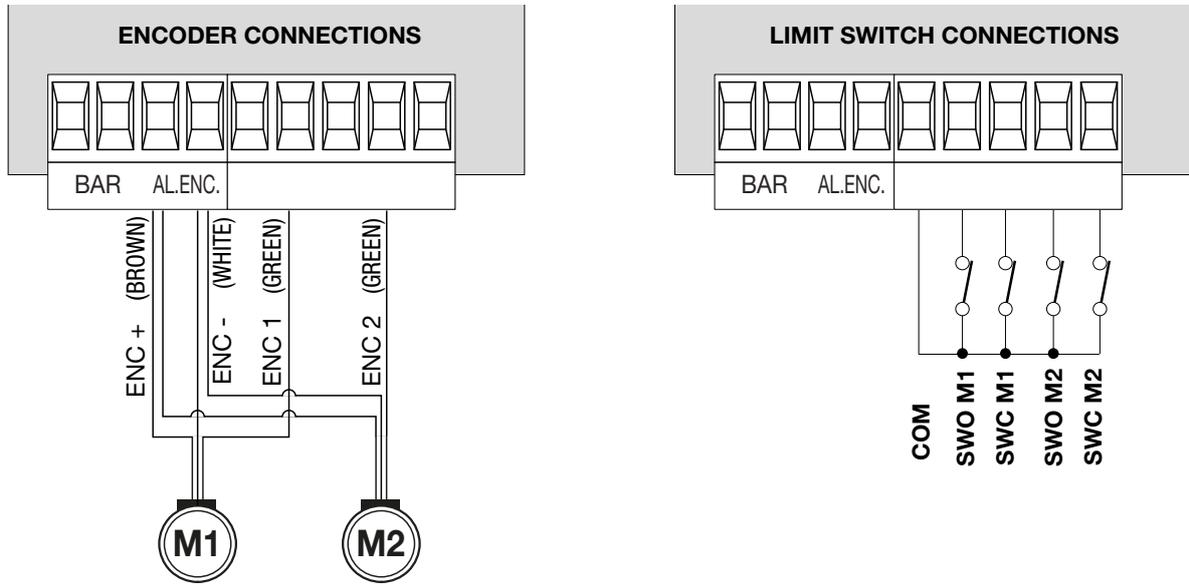
TRUST24



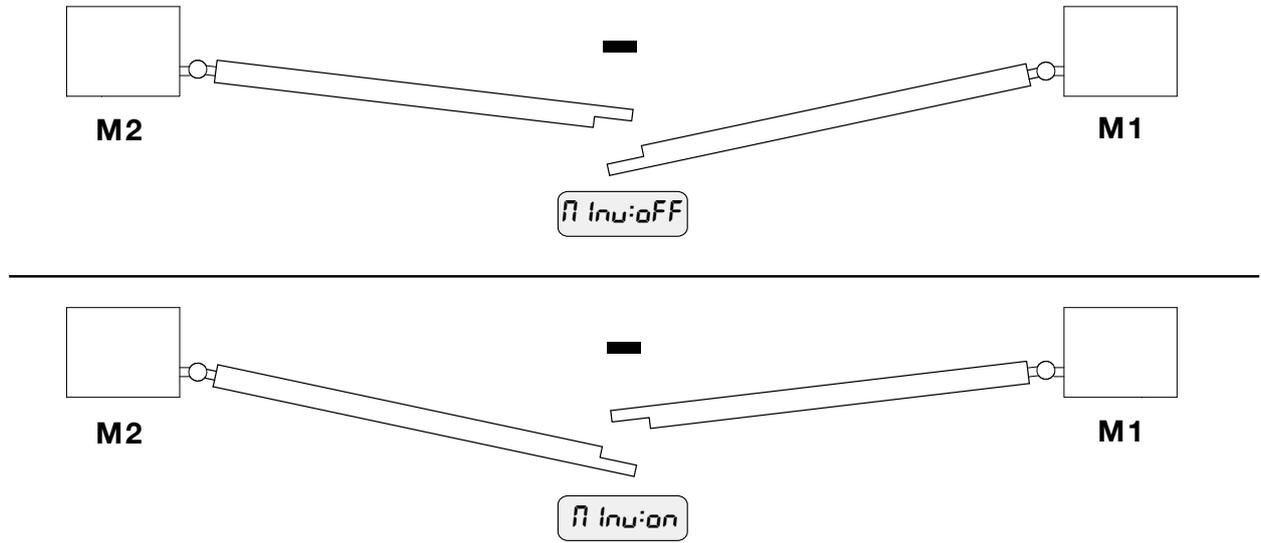
BENINCA[®]
TECHNOLOGY TO OPEN



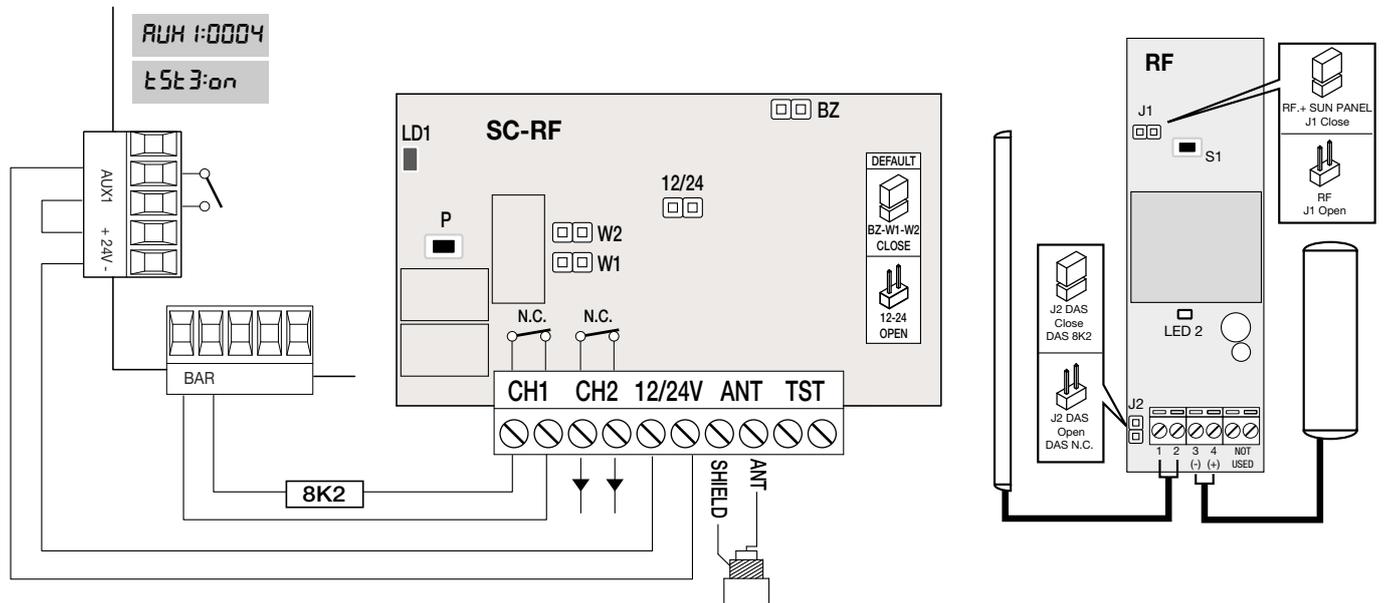
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3



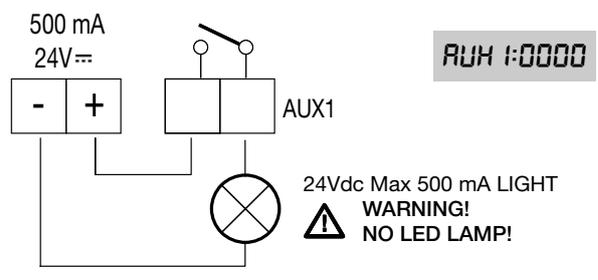
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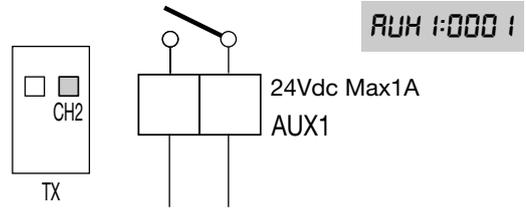
5

AUX 1

SCA

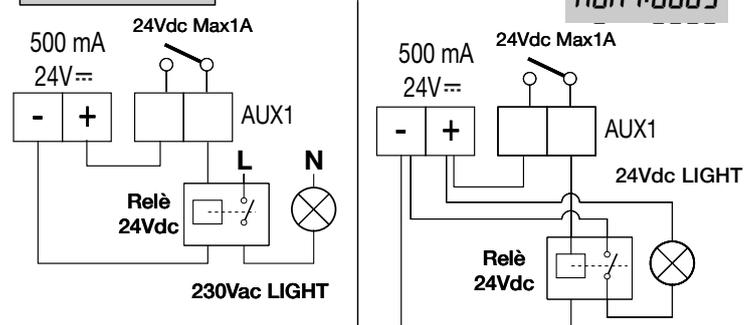


II° CH RADIO

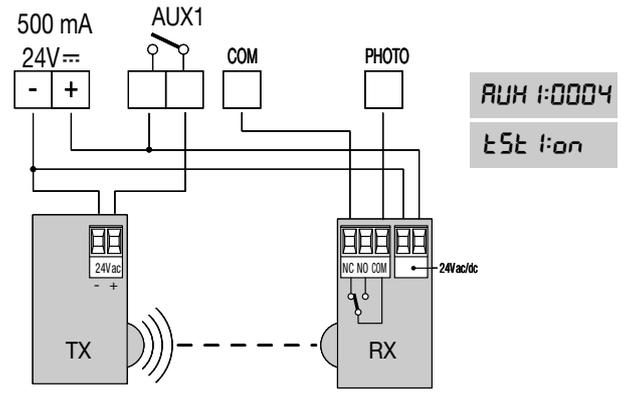


SERVICE LIGHT

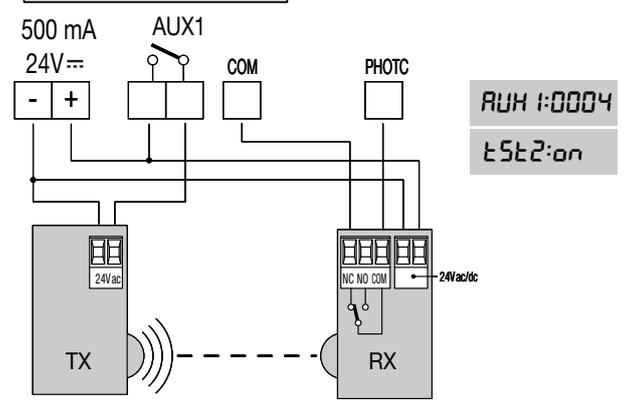
ZONE LIGHT



PHOTOTEST - PHOT OP



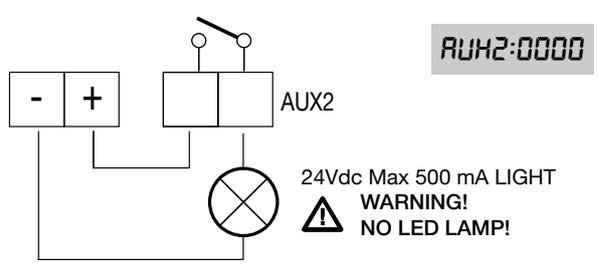
PHOTOTEST - PHOT CL



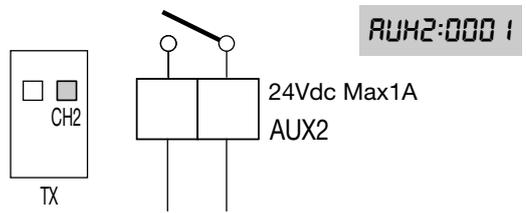
6

AUX 2

SCA

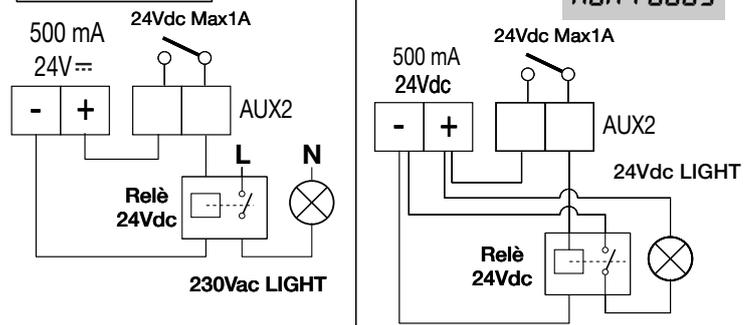


II° CH RADIO

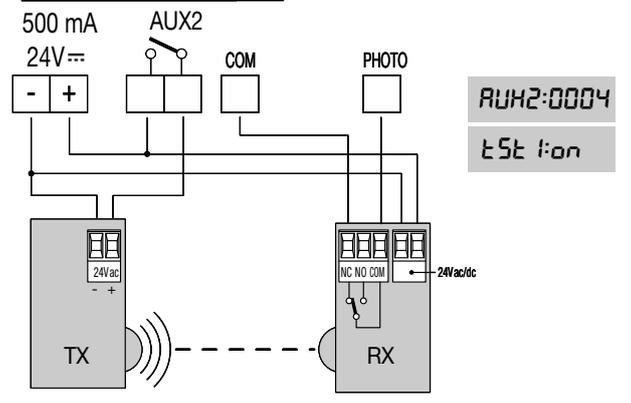


SERVICE LIGHT

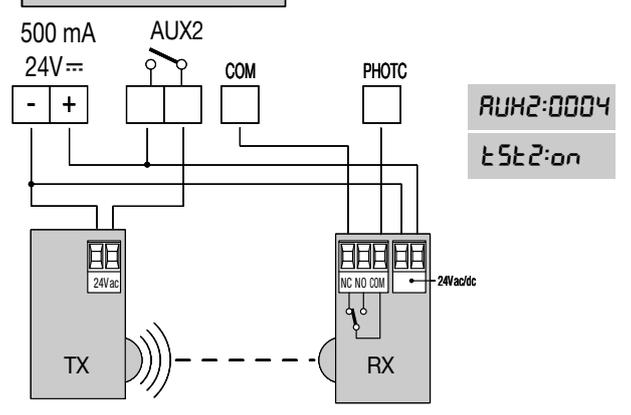
ZONE LIGHT

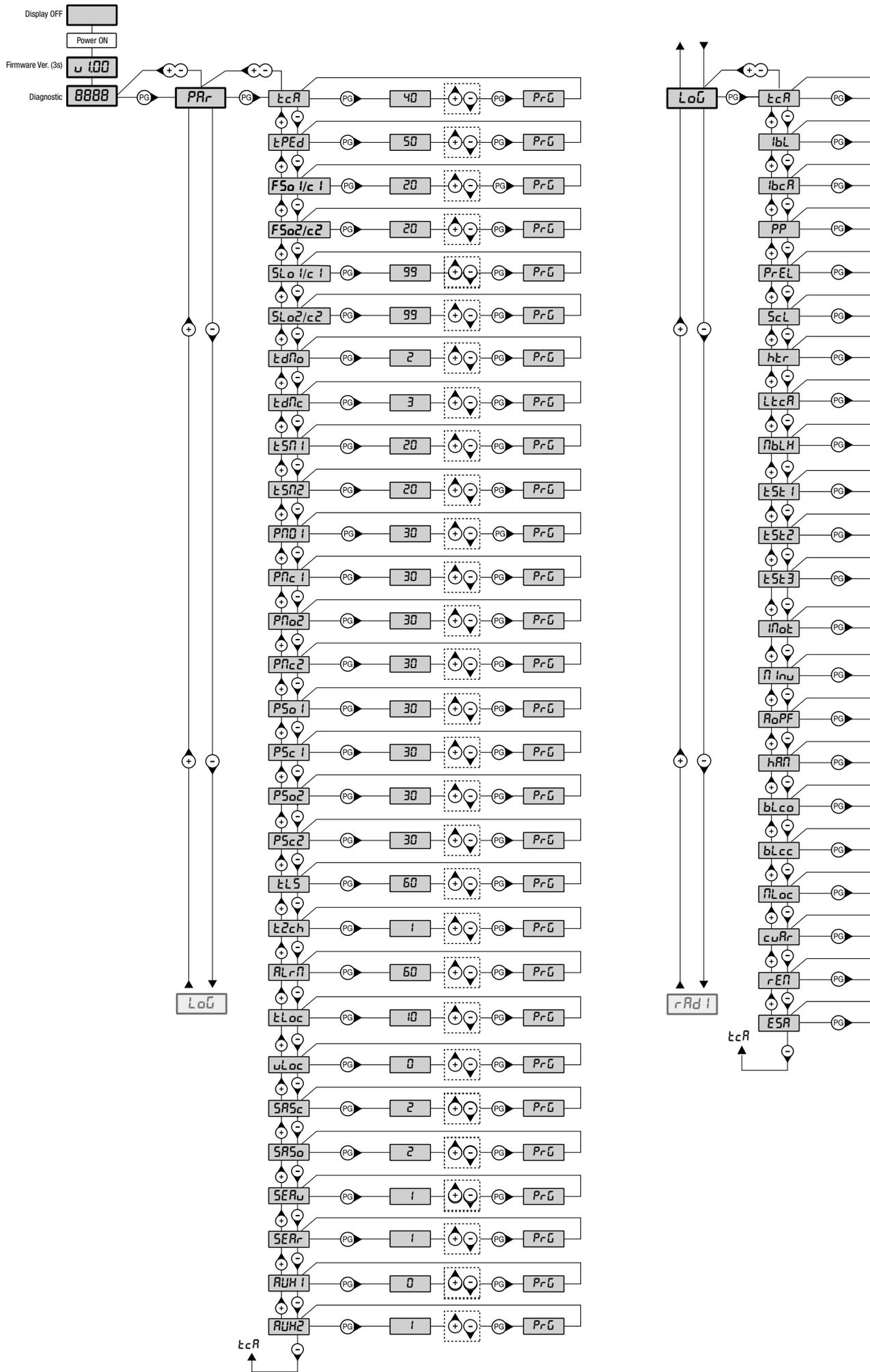


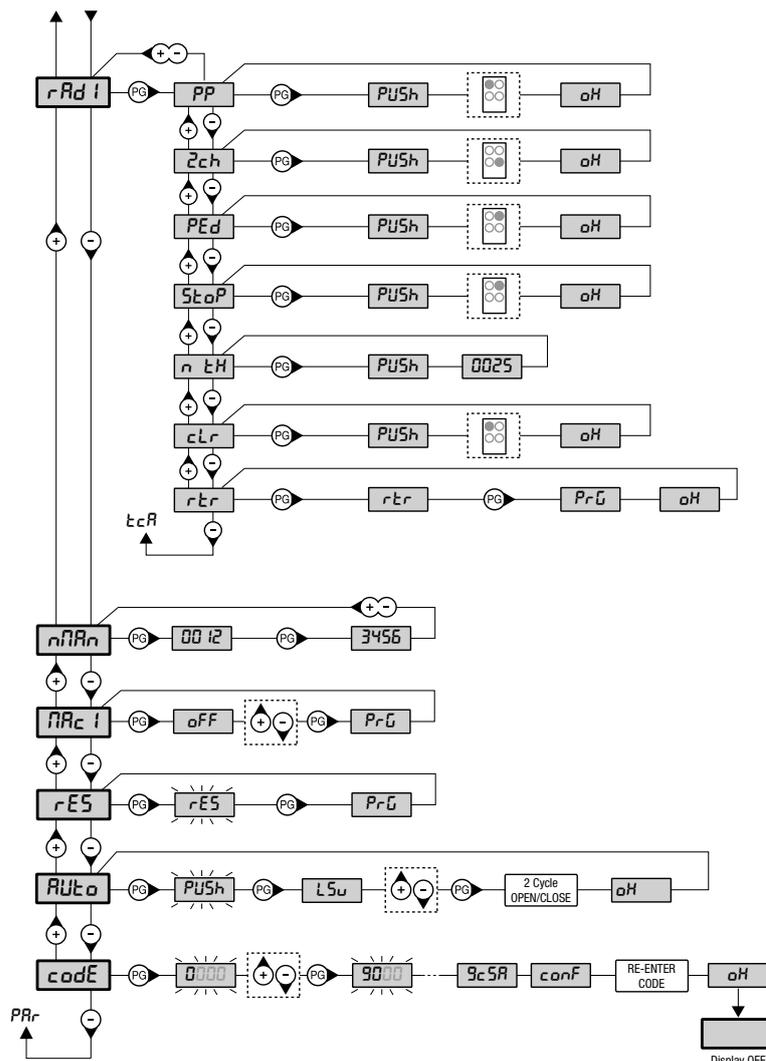
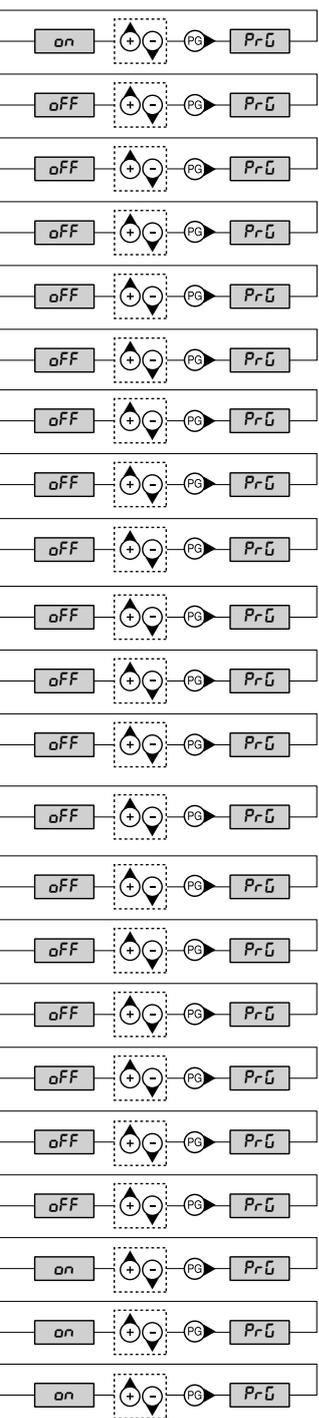
PHOTOTEST - PHOT OP



PHOTOTEST - PHOT CL







SCHEMA MENU DI PROGRAMMAZIONE
MENU PROGRAMMING LAYOUT
DIAGRAMM PROGRAMMIERMENÜ
MENU DE PROGRAMMATION
MENÚ DE LA CARTA DE PROGRAMACIÓN
UKŁAD MENU PROGRAMOWANIA

Legenda	
	Premere il tasto (-) / Press key (-) / Die Taste (-) drücken Appuyez sur la touche (-) / Presionar la tecla (-) / Wcisnąć przycisk (-)
	Premere il tasto (+) / Press key (+) / Die Taste (+) drücken Appuyez sur la touche (+) / Presionar la tecla (+) / Wcisnąć przycisk (+)
	Premere il tasto (PG) / Press key (PG) / Die Taste (PG) drücken Appuyez sur la touche (PG) / Presionar la tecla (PG) / Wcisnąć przycisk (PG)
	Premere simultaneamente (+) e (-) / Press simultaneously keys (+) and (-) Gleichzeitig (+) und (-) drücken / Presser simultanément (+) et (-) Presionar simultáneamente (+) y (-) / Naciskać jednocześnie (+) i (-)
	Selezionare il valore desiderato con i pulsanti (+) e (-) Increase/decrease the value with keys (+) and (-) Mit den Tasten (+) und (-) kann man eingerichtete Werte ändern Régler la valeur désirée avec les touches (+) et (-) Establecer con las teclas (+) y (-) el valor deseado Nastawia przyciskami (+) i (-) obraną wartoś
	Selezionare il pulsante del trasmettitore da associare alla funzione Press the transmitter key, which is to be assigned to function Taste des Sendegeřats drücken, dem diese Funktion zugeteilt werden soll. Appuyez sur la touche du transmetteur qu'e l'on désire affecter à cette fonction. Presionar la tecla del transmisor que se desea asignar a esta función. Wcisnąć przycisk nadajnika, który zamierza się skojarzyć z tą funkcją.



The product shall not be used for purposes or in ways other than those for which the product is intended for and as described in this manual. Incorrect uses can damage the product and cause injuries and damages.

The company shall not be deemed responsible for the non-compliance with a good manufacture technique of gates as well as for any deformation, which might occur during use. Keep this manual for further use.



This manual has been especially written to be use by qualified fitters. Installation must be carried out by qualified personnel (professional installer, according to EN 12635), in compliance with Good Practice and current code.

Make sure that the structure of the gate is suitable for automation.

The installer must supply all information on the automatic, manual and emergency operation of the automatic system and supply the end user with instructions for use.

Packaging must be kept out of reach of children, as it can be hazardous.

For disposal, packaging must be divided the various types of waste (e.g. carton board, polystyrene) in compliance with regulations in force.

Do not allow children to play with the fixed control devices of the product.

Keep the remote controls out of reach of children.



This product is not to be used by persons (including children) with reduced physical, sensory or mental capacity, or who are unfamiliar with such equipment, unless under the supervision of or following training by persons responsible for their safety.

Apply all safety devices (photocells, safety edges, etc.) required to keep the area free of impact, crushing, dragging and shearing hazard. Bear in mind the standards and directives in force, Good Practice criteria, intended use, the installation environment, the operating logic of the system and forces generated by the automated system.

Installation must be carried out using safety devices and controls that meet standards EN 12978 and EN 12453.

Only use original accessories and spare parts, use of non-original spare parts will cause the warranty planned to cover the products to become null and void. All the mechanical and electrical parts composing automation must meet the requirements of the standards in force and outlined by CE marking.



An omnipolar switch/section switch with remote contact opening equal to, or higher than 3mm must be provided on the power supply mains.

Make sure that before wiring an adequate differential switch and an overcurrent protection is provided.

Pursuant to safety regulations in force, some types of installation require that the gate connection be earthed.

During installation, maintenance and repair, cut off power supply before accessing to live parts.

Also disconnect buffer batteries, if any are connected.

The electrical installation and the operating logic must comply with the regulations in force.

The leads fed with different voltages must be physically separate, or they must be suitably insulated with additional insulation of at least 1 mm. The leads must be secured with an additional fixture near the terminals.

During installation, maintenance and repair, interrupt the power supply before opening the lid to access the electrical parts

Check all the connections again before switching on the power. The unused N.C. inputs must be bridged.

WASTE DISPOSAL



As indicated by the symbol shown, it is forbidden to dispose this product as normal urban waste as some parts might be harmful for environment and human health, if they are disposed of incorrectly.

Therefore, the device should be disposed in special collection platforms or given back to the reseller if a new and similar device is purchased.

An incorrect disposal of the device will result in fines applied to the user, as provided for by regulations in force.

Descriptions and figures in this manual are not binding. While leaving the essential characteristics of the product unchanged, the manufacturer reserves the right to modify the same under the technical, design or commercial point of view without necessarily update this manual.

TRUST24 CONTROL PANEL

ELECTRICAL CONNECTIONS

The following table shows the electrical connections in Fig. 1:

Terminals	Function	Description
L-N-GND	Supply	Mains input 115-230Vac 50-60Hz
+ BATT -	Batteries	Input for connection of the back-up batteries (accessory)
M0T1	Motor 1	Connector for connection of 24 Vdc MOT1
M0T2	Motor 2	Connector for connection of 24 Vdc MOT2
BLINK	Flashing light	24Vdc flashing connection 4W max.
LOCK	Electric lock	Electric lock connection.
AUX1	AUX 1 auxiliary output	Output with configurable N.O. contact from working parameter AUX1. Max load 500 mA.
+ 24V -	Output 24Vdc	Power supply output accessories 24Vdc/0.5A max. ATTENTION!! With ESA:ON logic, during the Stand-by phase, the power supply of the accessories is interrupted. See ESA Logic
BAR	Sensitive edge	Sensitive bar contact input, a resistor is pre-installed on the terminals of 8,2 KOhm. Resistive bar 8K2: connect the bar to the terminals eliminating the pre-installed resistance as indicated in Figure 1. Mechanical bar: connect the bar in series to the resistance as indicated in Figure 1. The intervention of the bar stops movement of the gate and inverts for approx. 3s.
+AL.ENC.-	Encoder power supply	Encoder power supply Power supply output for Encoder M1 and M2. Use a 3x0,5mm ² cable max. length 10m..
COM	Limit switch common	Common for limit switch inputs SW01/SW02/SWC1/SWC2
SW0/E1	FC/Encoder input 1	Input for limit switch contact Open Motor 1 or for signal Encoder Motor 1
SWC1	FC input	Input for limit switch contact Motor 1 closing
SW0/E2	FC/Encoder 2 input	Input for contact limit switch Open Motor 2 or for signal Encoder Motor 2
SWC2	FC input	Input for limit switch contact Motor 2 closing
PHOT OP	Photocell OPEN	Photocell input enabled in OPENING and CLOSURE (N.C. contact).
PHOT CL	Photocell CLOSE	Photocell input enabled in CLOSURE (N.C. contact).
STOP	STOP	STOP button input (N.C. contact)
OPEN	OPENED	OPEN button input (N.O. contact). You can connect a timer for opening in time slots.
CLOSE	CLOSED	CLOSE button input (N.O. contact).
PED	PEDESTRIAN	Pedestrian button input (N.O. contact), opening command of motor 1, see TPED parameter.
P.P.	Step-by-Step	Step-by-Step button input (N.O. contact). You can connect a timer for opening in time slots.
COM	Common Inputs	Common for the inputs for control and photocells and STOP
AUX2	AUX 2 auxiliary output	Output with configurable N.O. contact from working parameter AUX1. Max load 500 mA.
ANT-SHIELD	Antenna	Integrated radio-receiver board antenna connection (FRONT: Signal - SHIELD: Screen)
EXP1	Extension 1	Expansion connector for serial KNX or pro.UP
EXP2	Extension 2	Expansion connector for serial pro.UP

CONNECTIONS CHECK

- 1) Disconnect power supply.
- 2) Manually release the gates, bring them to approx. half the stroke and lock them again.
- 3) Restore the power supply.
- 4) Give a step by step command using the button connected to the input of the PP, remote control or button <->.
- 5) **The gates must move in opening.**
If this is not the case, simply invert the motor running wires.
- 6) **Using MINV logic, select the motor which must start to move first in opening, see Fig.3.**
- 7) Execute an autoreset procedure (see AUTOSET menu).

AUTOSET

This function is used to set the optimal automation operating values and, at the end of the procedure, the parameters of DISPLACEMENT, WORKING TIME and SLOWDOWN are adjusted.

To autoset, proceed as follows:

- 1) Ensure that in the manoeuvre area of the gates there are no obstacles of any kind.
If necessary, block off the area to prevent access to people, animals, cars, etc.
During the autoset phase, the anti-crushing function is not active.
- 2) Press the PG button to access programming, with the button + select the AUTO function and press PG.
- 3) Select the type of motor used:
ENC Motors with standard encoder
LSU Motors with electromechanical limit switch.
NLSU Motors without limit switch and encoder (timed function automatically calculated between the mechanical stops via amperometric detection)
- 4) Press OK to start the autoset phase.
- 5) The central unit performs a sequence of operations: single partial openings, full openings and closings at different speeds, and so on.
During this phase, the display will show some acronyms that indicate the operation that is being performed at that time:
OPM1/2: motor 1 or 2 in opening phase
CLM1/2: motor 1 or 2 in closing phase.
If the motor movement is opposite to what is indicated on the display, stop the autoset by pressing any of the programming buttons, reverse the +/- wires of the motor and repeat the autoset operation.
- 6) When the autoset phase has ended, the message OK is displayed.

Note:

If the autoset is not successful, an ERR error message is displayed, refer to the Error Message table and proceed accordingly, and then repeat the autoset operation.

PROGRAMMING

Programming of the various functionalities of the control panel is carried out using the LCD display on the control panel and setting the desired values in the programming menu described below.

The parameters menu allows a numerical value to be set to a function, similar to an adjustment trimmer.

The logic menu allows a function to be activated or deactivated, similar to the setting of a dip-switch.

Other special functions follow the parameters and logics menu and can vary according to the software revision.

TO ACCESS PROGRAMMING:

- 1 - Press the <PG> button to display the first "PAR" parameter menu.
- 2 - Choose with button <+> or <-> the menu you intend selecting (PAR>LOG>RAD>NMAN>MACI>RES>AUTO>CODE).
- 3 - Press the <PG> button, the display shows the first function available on the menu.
- 4 - Use the <+> or <-> button to select the function you wish to change.
- 5 - Press the <PG> button to display the value currently set for the selected function.
- 6 - Use the <+> or <-> button to select the value you wish to assign to the function.
- 7 - Press the <PG> button to display the "PRG" signal indicating successful programming.

NOTES:

Pressing <+> and <-> simultaneously within a function menu allows you to return to the top menu without making any changes.

Hold the <+> or <-> button to accelerate the increase/decrease of values.

After 60s standby, the control panel exits programming mode and the display switches off.

Pressing the button <-> with the display off is the same as a step by step command.

On switching on the board, the software version is displayed for approx. 5s.

PARAMETERS, LOGICS AND SPECIAL FUNCTIONS

The following table describes the individual functions available in the control panel.

PARAMETRS (PRr)			
MENU	FUNCTION	MIN-MAX-(Default)	MEMO
tCA	Automatic closure time Active only with "TCA"=ON logic. At the end of the time set, the control panel commands a closure manoeuvre.	3-240-(40s)	
tPEd	Adjusts the opening percentage of motor 1 (pedestrian function). Value is expressed as a percentage (99% complete opening of the gate).	1-99 (50)	
FSO1	Adjusts the motor 1 OPENING speed during the normal phase. Value expressed as a percentage.	50-99 (99%)	
FSO2	Adjusts the motor 2 OPENING speed during the normal phase. Value expressed as a percentage.	50-99 (99%)	
FSO1	Adjusts the motor 1 CLOSING speed during the normal phase. Value expressed as a percentage.	50-99 (99%)	
FSO2	Adjusts the motor 2 CLOSING speed during the normal phase. Value expressed as a percentage.	50-99 (99%)	
SLO1	Adjusts the motor 1 OPENING speed during the slowdown phases*. Value expressed as a percentage.	10-50 (25%)	
SLC1	Adjusts the motor 1 CLOSING speed during the slowdown phases*. Value expressed as a percentage.	10-50 (25%)	
SLO2	Adjusts the motor 2 OPENING speed during the slowdown phases*. Value expressed as a percentage.	10-50 (25%)	
SLC2	Adjusts the motor 2 CLOSING speed during the slowdown phases*. Value expressed as a percentage.	10-50 (25%)	
tdNo	Mot.2 opening delay time Adjusts the delay time in opening of motor 2 compared to motor 1	0-15-(2s)	
tdNc	Mot.1 closure delay time Adjusts the delay time in closure of motor 1 compared to motor 2	0-40-(3s)	
tSN1	Adjusts the slowdown phase in the opening and closing of the M1 motor. Value expressed as a percentage on the entire run.	1-99 (20%)	
tSN2	Adjusts the slowdown phase in the opening and closing of the M2 motor. Value expressed as a percentage on the entire run.	1-99 (20%)	
PNo1	Adjusts the intervention threshold of the anti-crushing device* (amperometric sensor) during the opening phase at normal speed - Motor 1	1-99-(30%)**	
PNc1	Adjusts the intervention threshold of the anti-crushing device* (amperometric sensor) during the closure phase at normal speed - Motor 1	1-99-(30%)**	
PNo2	Adjusts the intervention threshold of the anti-crushing device* (amperometric sensor) during the opening phase at normal speed - Motor 2	1-99-(30%)**	
PNc2	Adjusts the intervention threshold of the anti-crushing device* (amperometric sensor) during the closure phase at normal speed - Motor 2	1-99-(30%)**	
PSO1	Adjusts the intervention threshold of the anti-crushing device* (amperometric sensor) during the opening phase at slowdown speed - Motor 1	1-99-(30%)**	
PSO2	Adjusts the intervention threshold of the anti-crushing device* (amperometric sensor) during the opening phase at slowdown speed - Motor 2	1-99-(30%)**	
PSc1	Adjusts the intervention threshold of the anti-crushing device* (amperometric sensor) during the closure phase at slowdown speed - Motor 1	1-99-(30%)**	
PSc2	Adjusts the intervention threshold of the anti-crushing device* (amperometric sensor) during the closure phase at slowdown speed - Motor 2	1-99-(30%)**	
tLS	SERL (Service light) enabling time outputs AUX1/AUX2. On each manoeuvre, the contact closes for the time set. See connection screen Figure 5/6	1-240-(60s)	
t2ch	Enabling time of outputs AUX1/AUX2 when set as second radio channel. 0: Bistable output, the status of the output switches on each command received. 1-250: switching time in seconds	0-250-(1s)	
tLoc	Electric lock enabling time. Value expressed in 1/10s (0=0s - 50=5s)	0-50 (10=1s)	
uLoc	Electric lock power supply voltage. 0: 12V - 1:24V	0-1-(0)	

SASc	Sets a short inversion once the closure limit switch point has been reached. It may be useful to facilitate the manual release of the gate. Value expressed in 1/10 (0=0s - 40=4s)	0-40 (10)	
SASo	Sets a short inversion once the opening limit switch point has been reached. It may be useful to facilitate the manual release of the gate. Value expressed in 1/10 (0=0s - 40=4s)	0-40 (5)	
SEAv	Adjusts the intervention threshold of the anti-crushing device (encoder) during the phase at normal speed. 0:Off -1: minimum sensitivity - 99: maximum sensitivity	0-99-(1%)	
SEAR	Adjusts the intervention threshold of the anti-crushing device (encoder) during the slowdown phase*. 0:Off -1: minimum sensitivity - 99: maximum sensitivity	0-99-(1%)	
AUX 1	Configures the AUX1 output operating mode. 0: SCA output (default) 1: radio 2ch output 2: courtesy light output (based on the time set by TLS parameter). See Fig.5 3: zone light output (always on with motor in motion and during TCA count). See Fig.5. 4: Photo-test Used to power the transmitters of the photocells in TEST mode. 5: Flashing output, copies the behaviour of the BLINK output 6: Alarm output. If the photocells remain engaged for over double the TCA set time, the contact closes. ATTENTION!! The 24Vdc LED lamps, due to inrush current, cannot be directly connected to the AUX outputs, use a decoupling relay.	0-6 (0)	
AUX2	Configures the AUX2 output operating mode. 0: SCA output (default) 1: radio 2ch output 2: courtesy light output (based on the time set by TLS parameter). See Fig.6 3: zone light output (always on with motor in motion and during TCA count). See Fig.6. 4: Photo-test Used to power the transmitters of the photocells in TEST mode. 5: Flashing output, copies the behaviour of the BLINK output 6: Alarm output. If the photocells remain engaged for over double the TCA set time, the contact closes. ATTENTION!! The 24Vdc LED lamps, due to inrush current, cannot be directly connected to the AUX outputs, use a decoupling relay.	0-6 (1)	
* ATTENTION: FURTHER SETTING OF THESE PARAMETERS CAN BE DANGEROUS. COMPLY WITH LEGISLATION IN FORCE!			
With the motors without a limit switch and/or encoder, adjust the sensitivity of the sensor that causes stoppage during the slowdown phase.			
** 1: minimum force/torque - 99: maximum force/torque.			
<i>The control panel avails of two anti-crushing devices: the amperometric sensor (adjusted by parameters PMO1/2-PMC1/2-PSO1/2-PSC1/2) and the encoder (adjusted by the SEAV and SEAR parameters).</i>			
<i>Using the Autoset procedure, the sensitivity of the amperometric sensor is adjusted by default, while the encoder (with default setting) only activates if the gate stops completely following impact.</i>			
<i>You are advised to only use a system at a time, giving preference to the amperometric sensor, whose response time is less.</i>			

LOGIC (LoG)			
MENU	FUNCTION	ON-OFF- (Default)	MEMO
t c A	Enables and disables automatic closure. On: automatic closure enabled. Off = automatic closure disabled	(ON)	
ibL	Enables or disables the shared function. On: shared function enabled. The S.S. or transmitter impulse has no effect during the opening phase. Off: apartment complex function disabled.	(OFF)	
ibcA	Enables or disables the condominium function during TCA counting. On: apartment complex function enabled. The PP or transmitter pulse has no effect during TCA counting. Off: apartment complex function disabled.	(OFF)	
PP	Select the operating mode of the "P.P. button" and the transmitter. On: "Operation"; OPEN> CLOSE > OPEN> Off: "Operation"; OPEN>STOP>CLOSE>STOP>	(OFF)	
PrE	Enables or disables pre-flashing. On: Pre-flashing enabled. The flashing light activates 3s before the motor starts. Off: Pre-flashing disabled.	(OFF)	

ScL	Enables and disables rapid closure. On: rapid closure enabled. With the gate open or in the opening phase, intervention of the photocell causes automatic closure 3 s after complete opening. Active only with TCA:ON Off = rapid closure disabled	(OFF)	
htr	Person present function enabled or disabled. On: Person Present Operation The APRE/CHIUDE button must be kept pressed throughout the manoeuvre. Opening the STOP input stops the motor. All the safety inputs are disabled. Off: Automatic/semi-automatic operation.	(OFF)	
LtCR	Selection of the flashing light operating mode during the TCA time On: Flashing indicator light on during TCA Off: Flashing indicator light off during TCA	(OFF)	
nBLH	Sets the BLINK flashing output operating mode. On: The output provides intermittent voltage during the manoeuvre phase (2 flashes per second). Off: The output provides continuous voltage during the manoeuvre phase.	(OFF)	
tSt1	Enables or disables the photocells check on the PHOT Op input, enabled both in closure and in opening. On: Check enabled. If the check has a negative outcome, no manoeuvre is commanded. See Fig.5/6 - "PHOTO TEST". (AUX=4) Off: Check the photocells on each disabled manoeuvre. This setting requires maintenance of photocells every 6 months.	(OFF)	
tSt2	Enables or disables the photocells check on the PHOT Cl input, enabled both in closure and in opening. On: Check enabled. If the check has a negative outcome, no manoeuvre is commanded. See Fig.5/6 - "PHOTO TEST". (AUX=4) Off: Check the photocells on each disabled manoeuvre. This setting requires maintenance of photocells every 6 months.	(OFF)	
tSt3	Enables or disables the BAR input TEST. Activation of the TEST function is only possible using items SC.RF and RF/RF.SUN, consult the specific instructions. On: Check enabled. If the check has a negative outcome, no manoeuvre is commanded. See Fig.4 - "BAR TEST". (AUX=4) Off: Test disabled.	(OFF)	
PhcL	Selection of the PHOT CL input operating mode. On: PHOT CL input enabled only in closure. In closure: opening of the contact causes stoppage of the motor and instantaneous inversion of the running direction (opens). Off: Active PHOT CL input both in closure and opening. In opening: opening of the contact caused by stoppage of the motor, when the photocell is free, motor opening restarts. In closure: opening of the contact causes stoppage of the motor, when the photocell is free, the motor running direction inverts (opens).	(OFF)	
iMot	Selection of the motors 1 or 2 operating mode. On: Use for a single motor, connected to output M1 Off: Use for two motors.	(OFF)	
nInu	Motors start order: On: motor 2 starts first in opening. Off: motor 1 starts first in opening.	(OFF)	
RoPF	Enables or disables the "Forced opening function without mains) function (can only be enabled with the emergency batteries connected and working). On: Function enabled. In the event of a power cut, before the emergency battery goes completely flat, the control panel forces an opening manoeuvre. The automation remains open until the mains power supply is restored. Off: Function not enabled.	(OFF)	
hAn	Enables or disables inversion strike. On: Function enabled. Before each opening movement, the control panel commands a 2s movement in the opposite direction to facilitate release of the solenoid valve. Off: Function disabled.	(OFF)	
BLco	Enables or disables the block in opening function. On: Block function enabled. . Off: Block function disabled.	(OFF)	

BLcc	Enables or disables the block in closure function. On: block function enabled. Off: Block function disabled.	(OFF)	
NLoc	Selects the type of electric lock used. On: Magnetic electric lock, normally powered according to the Vloc setting. Output enabled with gate closed. Off: Latch electric lock, normally not powered. Before each opening movement, it is supplied according to the Vloc setting for the time set by the TLOC parameter.	(OFF)	
CUAr	Enables or disables the cloned ARC transmitters. On: The AK series transmitters closed from an ARC transmitter already stored are enabled. Off: The cloned transmitters are not enabled.	(ON)	
rEN	Enables or disables remote learning of the radio transmitters, as indicated in the "Transmitters remote learning" paragraph. On: Remote learning enabled. Off: Remote learning disabled.	(ON)	
ESA	Enables or disables the "ESA" energy saving functionality. On: The control unit, once the manoeuvre has terminated and enabling time is up of the service light, removes the power supply to the accessories output, setting in stand-by status. <i>The power supply of the accessories however remains enabled, only for the necessary time, if the AUX1/AUX2 parameters need it.</i> Off: Energy saving disabled. To use if you want to have the accessories power supply always enabled, for example if using 24 Vdc, or other devices that need to be always powered.	(ON)	

RADIO (rRd)

MENU	FUNZIONE
PP	Selecting this function, the receiver sets in standby (Push) of a transmitter code to assign to the step-step function. Press the transmitter key you intend to assign to this function. If the code is valid, it is saved and the message OK is displayed
2ch	Selecting this function, the receiver sets in standby (Push) of a transmitter code to assign to the second radio channel. Press the transmitter key you intend to assign to this function. If the code is valid, it is saved and the message OK is displayed
PEd	Selecting this function, the receiver sets in standby (push) of a transmitter code to assign to the pedestrian opening function (see TPED parameter). Press the transmitter key you intend to assign to this function. If the code is valid, it is saved and the message OK is displayed
StoP	Selecting this function, the receiver sets in standby (Push) of a transmitter code to assign to the STOP function. Press the transmitter key you intend to assign to this function. If the code is valid, it is saved and the message OK is displayed
n tH	Selecting this function, the LCD display shows the number of transmitters currently saved in the receiver.
cLr	Selecting this function, the receiver sets in standby (Push) of a transmitter code to delete from the memory. If the code is valid, it is cancelled and the message OK is displayed
rEr	Completely deletes the receiver memory. Confirmation is required of the operation. By selecting this function, the receiver sets in standby (Push) of a new PGM press to confirm the operation. At the end of the deletion, the message OK is displayed.

NUMBER OF MANOUEVRES (nRn)

It displays the number of complete cycles (open+close) carried out by automation. The first press of the <PG> button displays the first 4 digits, the second press displays the last 4. e.g. <PG> 00 i2 >>> <PG> 3456: executed 123.456 cycles.

MAINTENANCE CYCLES (nRc i)

This function allows you to enable the maintenance signal request after a number of manoeuvres established by the installation technician. To enable and select the number of manoeuvres, proceed as follows:
Press the <PG> button. The display shows OFF, which indicates the function is disabled (default value).
With the <+> and <-> buttons, select one of the numerical values proposed (from OFF to 100). The values should be intended as hundreds of manoeuvre cycles (e.g.: the value 50 indicates 5000 manoeuvres). Press the OK button to enable the function. The display shows the message PROG. The maintenance request is signalled to the user while maintaining the flashing indicator light on for another 10 s after conclusion of the opening or closure manoeuvre.

RESET (rE5)

Control panel RESET ATTENTION!: It returns the control panel to the default values.

Pressing the <PG> button for the first time causes the RES message to flash; pressing the <PG> button again resets the control panel.

Note: The transmitters are not deleted from the receiver or the access password.

All the logic and all the parameters are brought to the default values and it is therefore necessary to repeat the autoset procedure.

AUTOSET (Aut o)

This function is used to set the optimal automation operating values and, at the end of the procedure, the parameters of DISPLACEMENT, WORKING TIME and SLOWDOWN are adjusted.

To autoset, proceed as follows:

Ensure that there are no obstacles in the operating area of the gates, if necessary, cordon off the area to prevent access to people, animals, cars, etc.

During the autoset phase, the anti-crushing function is not active.

b) Select the *Aut o* function and press OK.

c) Select with the button <+> or <-> the sub-menu *nL5U*, *L5U* or *Enc* according to the presence of the limit switch and/or encoder:

nL5U: if the motor is without a limit switch and encoder

L5U: if the motor is equipped with a limit switch and encoder

Enc: if the motor is equipped with an encoder and without a limit switch.

d) Having selected the item, press OK to start the autoset phase.

The central panel executes a series of manoeuvres for learning of the gate stroke and for configuration of the parameters.

Initially both the gates are brought to the opening position, then after a few opening and closure manoeuvres at different speeds, of one or both gates, the control panel displays the message OK. If the operation does not have a positive outcome, the ERR message is displayed. Repeat the operation after checking the wiring and the presence of obstacles

During the manoeuvres, the display shows each code: *dPE n* during opening of motor 1 or 2 and *cL o5* during closure of motor 1 or 2.

PASSWORD (codE)

It allows you to enter the access protection code to control panel programming.

You can enter an alphanumeric code of four characters using the numbers from 0 to 9 and the letters A-B-C-D-E-F.

The default value is 0000 (four zeros) and indicates the absence of the protection code.

At any time, you can cancel the code entering operation, pressing the + and - keys simultaneously. Once the password is entered, you can operate the control panel, entering and exiting programming for a time of approx. 10 minutes, to allow the adjustment and test operations of the functions.

By replacing the code 0000 with any other code, you enable protection of the control panel, preventing access to all the menus.

If you want to enter a protection code, proceed as follows:

- select the Code menu and press OK.

- the code 0000 is displayed, even if a protection code has already been previously entered.

- use the + and - keys to change the value of the flashing character.

- the OK key confirms the flashing character and moves on to the next one.

- after entering the 4 characters, a "CONF" confirmation message appears.

- after a few seconds, the code 0000 is displayed again.

- it is necessary to reconfirm the previously entered protection code in order to avoid unintentional entries.

If the code corresponds to the previous one, an "OK" confirmation message is displayed.

The control panel automatically exits the programming phase and to access the menu again, the saved protection code will be necessary.

IMPORTANT: NOTE the protection code and KEEP IT IN A SAFE PLACE for future maintenance. To remove a code from a protected control panel, you should enter programming with the password and bring the code to the default value 0000.

IF THE CODE IS LOST, IT IS NECESSARY TO CONTACT THE AUTHORISED TECHNICAL SERVICE CENTRE FOR A TOTAL RESET OF THE CONTROL PANEL.

TRANSMITTERS REMOTE LEARNING

If you have a transmitter already stored in the receiver, it is possible to carry out radio remote learning (without having to access the control panel).

IMPORTANT: The procedure must be carried out with the gate in opening during the TCA pause or the gate open if the TCA logic is OFF. The REM logic must be ON.

Proceed as follows:

1 Press the hidden key of the transmitter already stored.

2 Press, within 5s, the key of the transmitter already stored corresponding to the channel to associate with the new transmitter. The flashing light comes on.

3 Press, within 10s, the hidden key of the new transmitter.

4 Press, within 5s, the key of the new transmitter to associate with the channel chosen in point 2. The flashing light goes out.

5 The receiver memorises the new transmitter and immediately exits programming.

FUSES AND GUARDS

F1: T4A - Main safety fuse.

F2: Resettable safety fuse for accessories power supply output.

Intervenes in the event of overload or short circuit on 24 Vdc output. In this case, disconnect the control panel and check the connections or the quantity of accessories connected to the 24Vdc output. Once the connections are reset in correct mode, the accessories power supply output will automatically start working again.

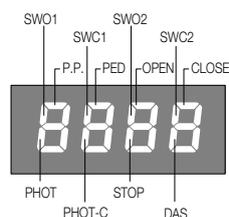
EMERGENCY BATTERY

The TRUST24 control panel includes the power supply board prepared for connection in series of two batteries 12V 2,1Ah DA.BT2 (optional) which enable operation of the automation also in the event of temporary absence of the mains power supply.

During normal operation of the mains, the TRUST24 board recharges the batteries.

The maximum load current is 1A, the average loading current is 300mA. (respect polarity).

DIAGNOSTICS



On each input, a display segment is associated which in the event of activation switches on, according to the following board.

The N.C. inputs are represented by the vertical segments.

The N.O. outputs are represented by the vertical segments.

The control panel displays the message AMP 1 or AMP2 in the event of intervention of the anti-crushing device amperometric sensor.

ERROR MESSAGES

The list is displayed of some messages which are shown on the display in the event of an operating anomaly:

<i>AMP 1</i>	Motor 1 obstacle error/anti-crushing	Check the presence of obstacles on the stroke of the motor gate 1
<i>AMP 2</i>	Motor 2 obstacle error/anti-crushing	Check the presence of obstacles on the stroke of the motor gate 2
<i>Enc 1</i>	Encoder 1 error/obstacle detection	Check correct connection of the encoder of motor 1 to the control panel, the presence of obstacles on the stroke of the gate and correct operation of the encoder.
<i>Enc 2</i>	Encoder 2 error/obstacle detection	Check correct connection of the encoder of motor 2 to the control panel, the presence of obstacles on the stroke of the gate and correct operation of the encoder.
<i>Err</i>	AUTOSET error	Repeat autosest procedure
<i>Err 1</i>	Motor 1 circuit test error	Check motor 1 connections. Motor disconnected or not working. Problem on control panel
<i>Err 2</i>	Motor 2 circuit check error	Check motor 2 connections. Motor disconnected or not working. Problem on control panel
<i>Err 4</i>	PHOTA photocell test error	Check connections, alignment of the photocell PHOT OP or obstacles present.
<i>Err 5</i>	PHOTC photocell test error	Check connections, alignment of the photocell PHOT LC or obstacles present.
<i>Err 8</i>	Inputs enabling error	During the autosest phase, an input activated (START/PP/Open/Close/PED) or one of the buttons (+/-/PG) activated. Repeat the autosest procedure.
<i>bAr</i>	BAR input intervention (sensitive edge)	During the manoeuvre, the sensitive edge detected an obstacle.
<i>thr n</i>	Motor thermal switch safety device intervention	Overheating due to permanent obstacles. Release the gate and check there are no friction points.
<i>oud 1</i>	Overload M1	Maximum power exceeded. Check motor or presence of friction.
<i>oud 2</i>	Overload M2	Maximum power exceeded. Check motor or presence of friction.

BENINCA'

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