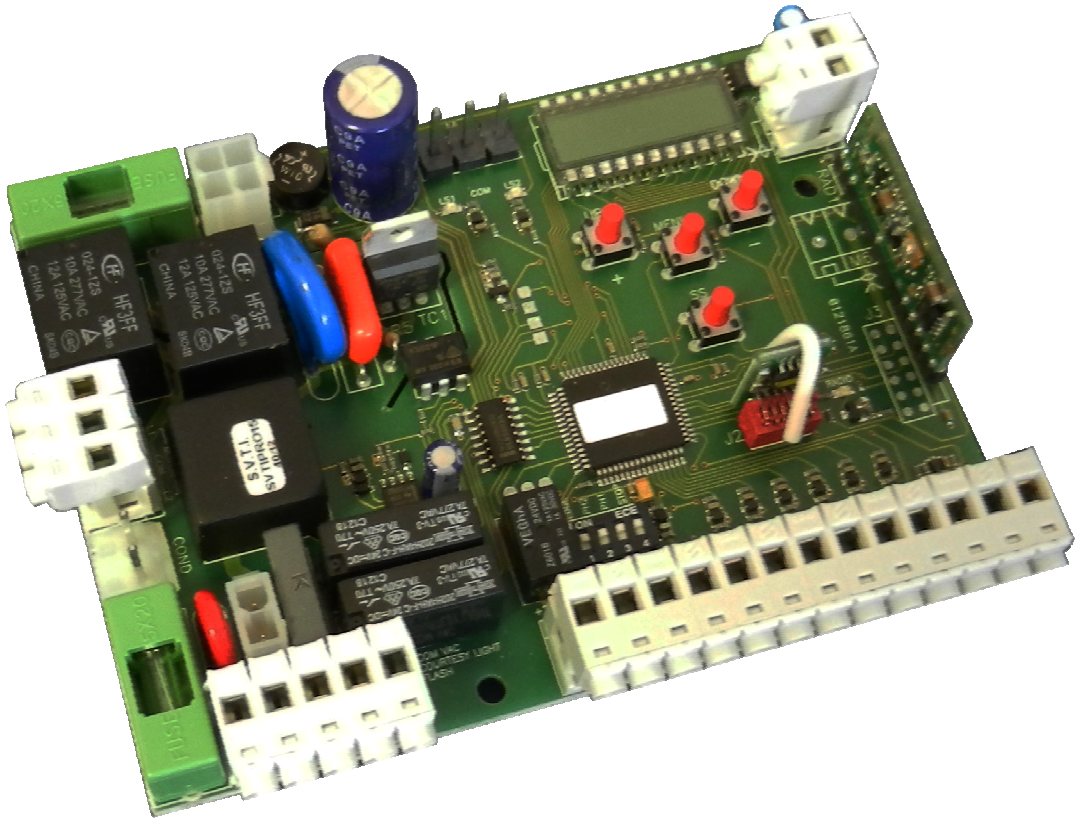
Compatible from firmware version BIOS1BRT01

CONTROL UNIT BIOS1 BRT

Programmable Control board for barriers BRT



Manual for installation

CE

ALLMATIC

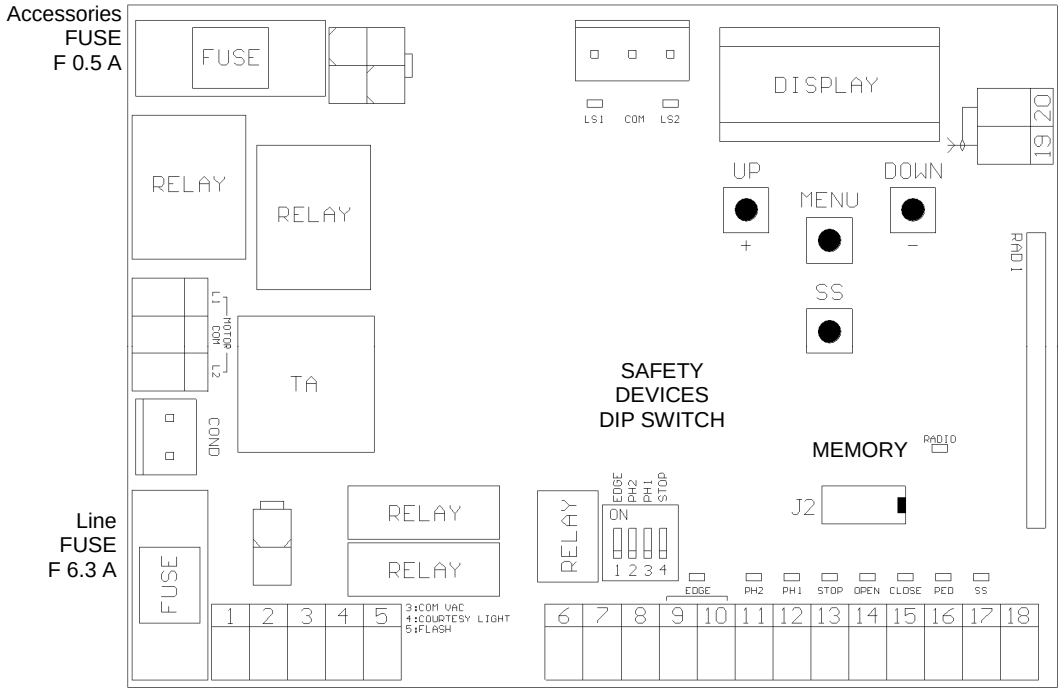
1. Introduction

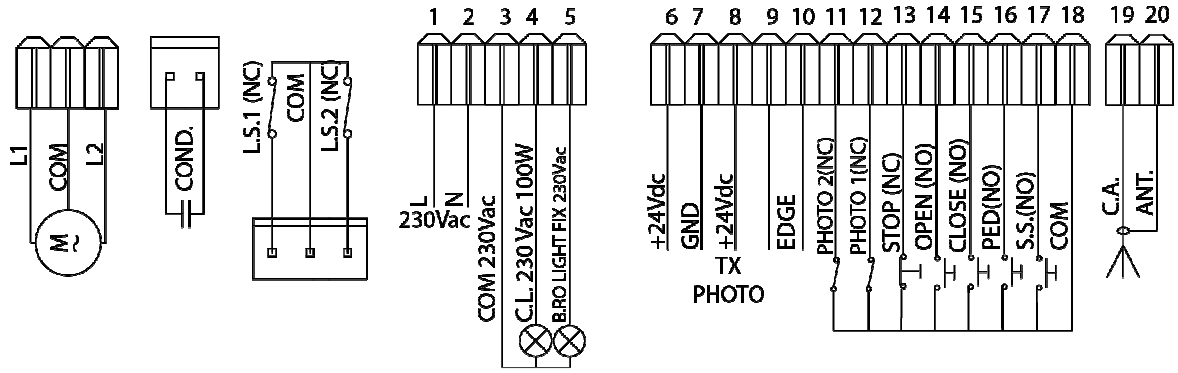
The control unit BIOS1 BRT is particularly indicated for barriers 230 Vac motor with maximum power absorbed of 700W. The control unit is equipped with a display that allows a precise regulation of the thrust. The control unit can memorize up to 1000 transmitters (8000 as optional), with the step by step, pedestrian, open and close functions.
It is supplied with inputs for photocells, safety edge (mechanical or 8k2), magnetic loop, the buttons for step by step, pedestrian, open, close and stop. The outputs include a 230 Vac flashing light, courtesy light/zone light/open gate light, 24 Vdc accessories power supply.

ATTENTION: DO NOT INSTALL THE CONTROL UNIT WITHOUT READING THE INSTRUCTIONS FIRST !!!
THE INSTALLATION SHOULD BE PERFORMED ONLY BY QUALIFIED PERSONNEL.

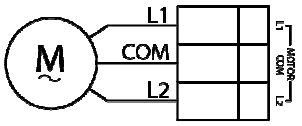
Be sure that the limit switches are connected and correctly adjusted (see mechanical instruction)

2. Configuration



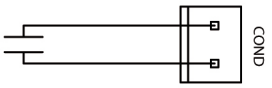


3. Connections

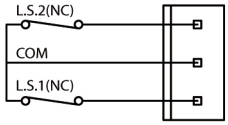


MOTOR OUTPUT
Connect the **common** of the motor to the clamp motor COM of the control unit.
Connect the **phase 1** of the motor to the clamp motor L1 of the control unit.
Connect the **phase 2** of the motor to the clamp L2 of the control unit.

Motor condensers 230 Vac
!Risk of electric shock!



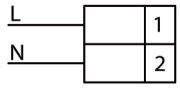
CAPACITOR
Connect the capacitor to the clamps COND of the control unit.



LIMIT SWITCHES
Connect the **NORMALLY CLOSED** contact of the limit switches to the control unit

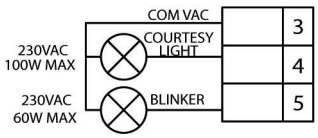
During the learning of the stroke phase the control unit recognize itself the opening and closing limit switch.

Compatible from firmware version BIOS1BRT01



POWER SUPPLY
Connect the power supply cable between clamp 1 and 2 of the control unit

Power supply 230 Vac 50 Hz
Do not connect the card directly to the electric network. Put a device which can ensure the disconnection of each pole from the power supply of the control unit.

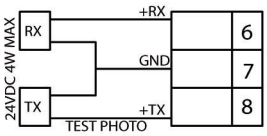


COURTESY LIGHT OUTPUT
Connect the courtesy light to the clamps 3 and 4, 230Vac 100W MAX.

FLASHING LIGHT OUTPUT
Connect the flashing light to the clamps 3 and 5.

It is possible to light up the action area of the automatism during each motion.
The functioning of the auxiliary light is controlled in the advanced menu FLY.

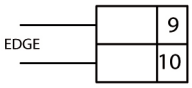
Use a flashing light without self flashing card
230Vac 60W MAX



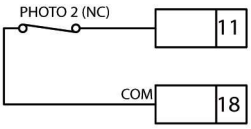
PHOTOCELLS POWER SUPPLY
Connect the **clamp 6** of the control unit to the **clamp +** of the power supply of the photocells receiver.
Connect the **clamp 7** of the control unit to the power supply **clamp -** of the photocells receiver and of the transmitter.
Connect the **clamp 8** of the control unit to the power supply **clamp** of the trasnmitter of the photocells.

The photocells test is activated in the advanced menu tPh.
ATTENTION: the control unit gives a voltage of 24 Vdc and can supply a maximum power of 4W.

For the safety edge test connect the test device of the safety edge on the power supply pins of the TX (test activated wiht low logic signal 0Vdc).
Please refer to the manual of the safety edge.

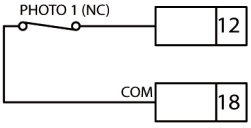


SAFETY EDGE INPUT
Connect the safety edge contacts to the clamps 9 and 10 of the control unit.
Select the type of security edge used (mechanical or 8K2) through the menu Edi.
In case of intervention, moves in opening immediately.
If not used set the DIP switch EDGE ON.



PH2 MULTIFUNCTION INPUT
Connect the **NORMALLY CLOSED** contact of the photocell (PHOTO 2) between the clamps 11 and 18 of the control unit. Otherwise use another function NO or NC.

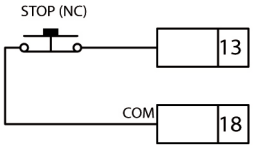
This input can be set on the menu Ph2 as closing photocell, magnetic loop or clock.
If not used set the DIP switch PH2 ON and select on the advanced menu Ph2=0.



PH1 PHOTOCELL INPUT
Connect the **NORMALLY CLOSED** contact of the photocell (PHOTO 1) between the clamps 12 and 18 of the control unit.

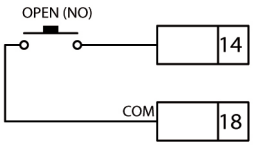
Functioning:
- Closing: immediate inversion of movement.
- Opening: no intervention during the movement.
- With barrier stopped, not allow the closing.

If not used set the DIP switch PH1 ON.

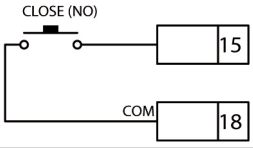


STOP INPUT
Connect the **NORMALLY CLOSED** contact of the STOP between the clamps 13 and 18 of the control unit.

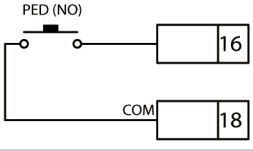
If not used set the DIP switch STOP ON.



OPEN INPUT
Connect the button OPEN or the opening loop (**NORMALLY OPEN** contact) between the clamps 14 and 18 of the control unit.

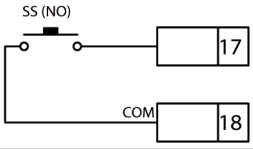


CLOSE INPUT
Connect the button CLOSE between the clamps 15 and 18 of the control unit.

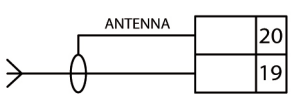


PED MULTIFUNCTION INPUT
Connect the button PED between the clamps 16 and 18 of the control unit. Otherwise use another function NO or NC.

This input can be set on the menu PEd as closing photocell, magnetic loop or clock.



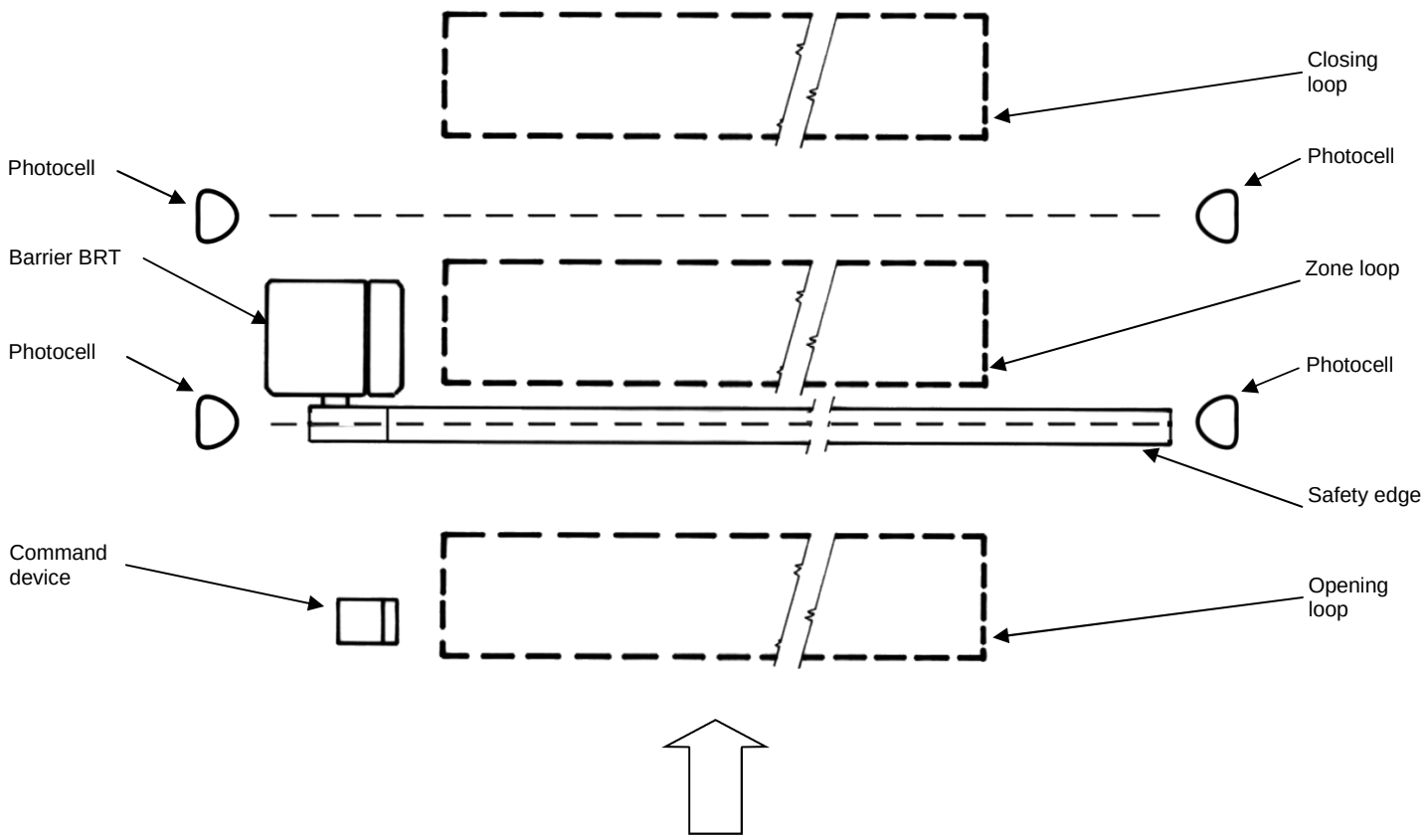
STEP BY STEP INPUT
Connect the button SS between the clamps 17 and 18 of the control unit.



ANTENNA
Connect the signal cable of the antenna to the clamp 19 and the ground of the antenna to the clamp 20 of the control unit.

The presence of the metallic parts or humidity in the walls could have negative influences on the range of the system. We suggest therefore to not place the receiving antenna and/or transmitters near big metallic objects, near the floor or on the ground.

4. Installation sample



5. Remote control learning

5.1 Learning of one transmitter

A transmitter is memorized a key at a time: The 1st memorized key performs the OPEN function, the 2nd key performs CLOSE function, the 3rd key performs the STEP by STEP function (opening and closing of the gate) and the 4th key performs the pedestrian opening.
The control unit exits from the learning phase if no new key or transmitter command is given in 10 seconds.
The learning procedure is the following:

1 Make sure that the board is out of any menus, press the button UP[+] — display: `--` ⇨ On the display will appear and the flashing light lights on — display: `rAd`

2 Press one key of the transmitter ⇨ On the display will appear `don`. — display: `don`
If the transmitter was already memorized will appear `Fnd`. — display: `Fnd`
After 2 seconds the display will show the memory location of the memorized transmitter, for example — display: `235`

If you want to memorize another key or a new transmitter repeat the procedure

4.2 Learning with the hidden key of an already memorized transmitter

With the hidden key of a transmitter it is possible to enter the learning phase in order to memorize new keys or new transmitters.
With the automation still, with the aid of a clip press the hidden button of an already memorized transmitter, the flashing light lights on, now it is possible to memorize new keys or transmitters.

4.3 Cancellation of one transmitter

Enter the learning phase with the UP[+] button or with the hidden key of a memorized transmitter (see 5.1 or 5.2).
Press in the same time the hidden key and 1st key of the transmitter that you want to cancel.
The flashing light bilnks 4 times and on the display will appear `CLr`

6 Setting stroke

6.1 Easy settings of the stroke (parameter LSI ≠ P)

Be sure that the limit switches are connected and correctly adjusted (see mechanical instruction)
Be sure that the barrier is positioned in the middle of the stroke. Limit switches must not be activated.

1	Unlock the barrier and move it to the middle of the stroke			
2	Press and keep pressed the buttons UP[+] e MENU for at least 5 seconds.	⇨	The barrier moves in **opening**. If the barrier moves in closing press the button DOWN to stop and reverse the direction of movement and give a step by step command (SS) to resume the procedure	LOP
3	When the barrier reaches the opening limit switch it stops by itself	⇨	The barrier moves in closing	LCL
4	When the barrier reaches the closing limit switch it stops by itself	⇨	The barrier moves in opening	LOP
5	When the barrier reaches the opening limit switch it stops by itself	⇨	The barrier closes with the settings of slowing down set in the menu. When the barrier is closed the learning phase is ended.	LCL

Warning: in case of intervention of a safety device, the learning is stopped and will appear on the display the written L--
Press Step by Step key to start again the learning from the 2nd point.

6.2 Advanced settings of the stroke (parameter LSI = P)

Be sure that the limit switches are connected and correctly adjusted (see mechanical instruction)
Be sure that the barrier is positioned in the middle of the stroke. Limit switches must not be activated.
In this procedure is necessary to provide the positions of beginning of slowing down with a step by step command (SS).

1	Unlock the barrier and move it to the middle of the stroke			
2	Press and keep pressed the buttons UP[+] e MENU for at least 5 seconds.	⇨	The barrier moves in **opening**. If the barrier moves in closing press the button DOWN to stop and reverse the direction of movement and give a step by step command (SS) to resume the procedure	LOP
3	When the barrier reaches the opening limit switch it stops by itself	⇨	The barrier moves in closing	LCL
4	When the gate reaches the position of beginning of slowing down give a step by step command (SS)	⇨	The barrier begins the slowing down	
5	When the barrier reaches the closing limit switch it stops by itself	⇨	The barrier moves in opening	LOP
6	When the gate reaches the position of beginning of slowing down give a step by step command (SS)	⇨	The barrier begins the slowing down	
7	When the barrier reaches the opening limit switch it stops by itself	⇨	The barrier closes with the settings of slowing down set in the menu. When the barrier is closed the learning phase is ended.	LCL

Warning: in case of intervention of a safety device, the learning is stopped and will appear on the display the written L--
Press Step by Step key to start again the learning from the 2nd point.

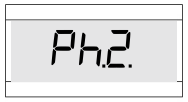
Compatible from firmware version BIOS1BRT01

7. Menu

Ex. Base menu

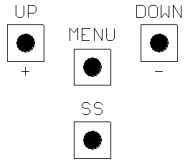
Entering the menu:
To enter the base menu settings keep pressed the MENU button for at least one second
To enter the advanced menu settings keep pressed the MENU button for at least five seconds

Ex. Advanced menu



Navigation into the menu:
It is possible to move from an entry to another one using UP[+] e DOWN[-] buttons.
To change a parameter keep pressed the MENU button for at least 1 second until the parameter begins blinking, so release the key.
Use UP[+] and DOWN[-] buttons to change the parameter.
At the end keep pressed MENU for al least 1 second until the parameter stops blinking to save the change.

A quick pressure of the menu key is enough to leave a menu



7.1 Base settings menu:

MENU	DESCRIZIONE	VALORI IMPOSTABILI min-max	DEFAULT	UNITÀ
tCL	Auto reclosing time (0 = disabled)	0-900	0	s
ttr	Auto reclosing time after transit(0 = disabled)	0-30	0	s
tr9	Motor torque (running torque)	10-100	100	%
SSL	Slowing down mode 0 = normal 1 = fast with more torque	0-1	1	
Sbs	Step by step configuration 0 = normal (OP-ST-CL-ST-OP-ST…) 1 = alternated STOP (OP-ST-CL-OP-ST-CL…) 2 = alternated (OP-CL-OP-CL…) 3 = condominium – timer 4 = condominium with immediate auto reclosing	0-4	1	
bLt	After black-out 0 = no action 1 = closing	0-1	0	
* SSt	Soft start 0 = disabled 1 = enabled	0-1	0	
* LSI	Amplitude of slowing down P = personalized during learning 0…100% = percentage of stroke	0-100	15	%

***ATTENTION!**
It is not advisable the disabling of the slowing downs and, if possible, use the "soft start" function.

Compatible from firmware version BIOS1BRT01

7.2 Advanced menu:

MENU	DESCRIZIONE	VALORI IMPOSTABILI min-max	DEFAULT	UNITÀ
PH2	PH2 multifunction input setting: 0 = Closing photocell 1 = Closing loop NO 2 = Closing loop NC 3 = Zone loop NO 4 = Zone and closing loop NO 5 = Loop for enable command OPEN 6 = Clock	0-6	0	
tPH	Photocells test 0 = disabled 1 = enabled PHOTO1 2 = enabled PHOTO2 3 = enabled PHOTO1 and PHOTO2	0-3	0	
EdI	Safety edge type 0 = contact (NC) 1 = resistive (8k2)	0-1	0	
tEd	Safety edge test 0 = disabled 1 = enabled	0-1	0	
LPo	Pedestrian opening	0-100	30	%
PEd	PED multifunction input setting: 0 = Pedestrian 1 = Closing loop NO 2 = Closing loop NC 3 = Zone loop NO 4 = Zone and closing loop NO 5 = Loop for enable command OPEN 6 = Clock	0-6	0	
FPr	Blinker output mode 0 = Fix 1 = Blinking	0-1	1	
tPr	Pre-flashing time (0 = disabled)	0-10	0	s
FCY	Courtesy ligth settings 0 = At the end of movement for a TCY time 1 = On if the barrier is not closed + TCY time 2 = On if courtesy light timer (TCY) not expired 3 = Open barrier light on/off 4 = Open barrier light with proportional flashing	0-4	3	
tCY	Courtesy light time	0-900	0	s
dEA	Dead-man 0 = disabled 1 = enabled	0-1	0	
SEr	Setting threshold of cycles for assistance request. Once limit is reached the next cycles will be done with fast blinking (only if FPr enabled) (0 = disabled)	0-100	0	x1000 cicli
SEF	Continuous blinking for assistance request (done only with closed gate). 0 = disabled 1 = enabled	0-1	0	
trS	Viewing of the memory location for a single transmitter	0-999		
trC	Cancellation of a single transmitter	0-999		
dEF	Restore defaul settings, enter to modify the parameter and then keep pressed the MENU button, a count down appears that ends with don on the display			
trF	Cancelling all transmitters, enter to modify the parameter and then keep pressed the MENU button, a count down appears that ends with don on the display			

Compatible from firmware version BIOS1BRT01

7.3 Menu description:

7.3.1 Base settings menu

tCL Auto reclosing time
Active when the barrier is in the completely open position or in pedestrian opening, the barrier automatically closes after tCL seconds. In this phase the display shows -tC with the blinking dash, that during the last 10 seconds will be replaced by the count down.

tCr Auto reclosing time after transit
If in the opening phase or in the completely open position the beam of the PH1 photocells is obscured and freed, the barrier automatically closes after tCr seconds when the completely open position is reached, In this phase the display shows -tC with the blinking dash, that during the last 10 seconds will be replaced by the count down.

trq Motor torque
Adjust the motor torque to ensure a correct functioning of the barrier. It is possible to adjust the percentage of torque between 10% to 100%. After the adjustement of this parameter it is recommended to perform a complete movimentation (opening and closing) to ensure a correct functioning of the barrier.

SSL Slowing down mode
The control unit has 2 different type of slowing downs : standard or with higher torque and speed.

SbS Step by step configuration (SS)

- SbS = 0 Normal (OP-ST-CL-ST-OP-ST…)
  Typical functioning of Step by Step. During the movement a SS command stops the barrier.
- SbS = 1 Alternated STOP (OP-ST-CL-OP-ST-CL…)
  Alternated functioning with STOP during the opening. During the opening phase a SS command stops the barrier.
- SbS = 2 Alternated (OP-CL-OP-CL…)
  The user cannot stop the barrier during the movement with a SS command.
  A SS command during the movement inverts the movement.
- SbS = 3 Condominium – timer
  A SS command only opens the barrier. When the barrier is completely open, if the command persist the control unit will wait until the opening of the contact before beginning the contdown of the automatic reclosing (if enabled). Another SS command in this phase will restart the contdown of the automatic reclosing.
- SbS = 4 Condominium with immediate auto reclosing
  Like condominium – timer (previous point) but during the countdown a SS command will close the barrier, when it is in the completely open position .

bLt After black-out
When the control unit turns on after a black-out,

- bLt = 0 No action – when the control unit turns on the barrier does not move until the first command, the first movement is a slow opening.
- bLt = 1 Closing– turning on the control unit it will perform a slow closing.

* SSt Soft start
The movement begins with reduced torque, used in light gates.

* LSI Amplitude of slowing down
With this parameter it is possible to adjust the amplitude of the slowing down and eventually disable it (LSI =0). If you need more precise or different slowing down between opening and closing it is possible to set the parameter LSI on P (personalized) and perform an advanced learning of strokes (6.2) providing also the beginning of slowing downs during the learning.

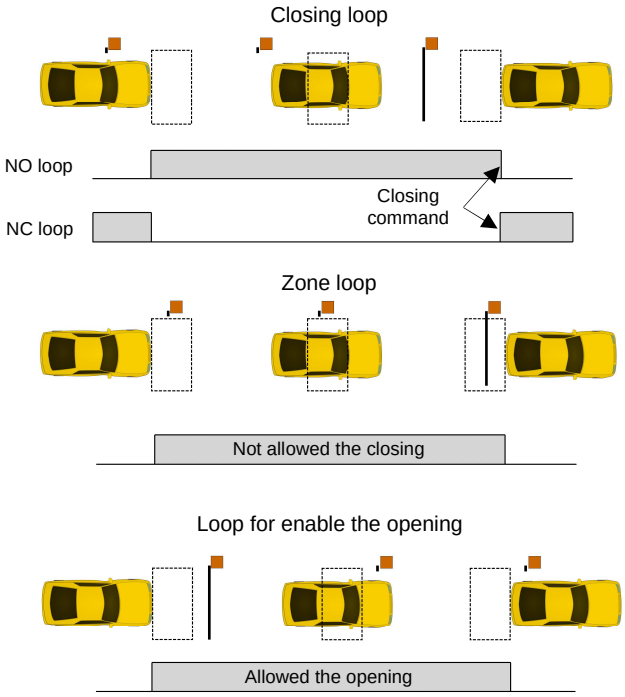
***ATTENTION!**
It is not advisable the disabling of the slowing downs and, if possible, use the "soft start" function.

7.3.2 Advanced menu

PH.2. PH2 multifunction input setting

The control unit has six different functionings for PH2:

- PH.2. = 0 **Closing photocell**:
  - Closing: immediate inversion of movement.
  - Opening: no intervention during the movement.
  - With barrier stopped, not allow the closing.
- PH.2. = 1 **Closing loop NO**: the control unit close the barrier when the **normally open** contact opens, in this way when a vehicle exits and free the loop, the control unit will command the closing.
- PH.2. = 2 **Closing loop NO**: the control unit close the barrier when the **normally closed** contact closes, in this way when a vehicle exits and free the loop the control unit will command the closing.
- PH.2. = 3 **Zone loop NO**: the control unit does not allow to close the barrier until the **normally open** contact is closed.
- PH.2. = 4 **Zone and closing loop NO**: the control unit does not allow to close the barrier until the **normally open** contact is closed; when a vehicle exits and free the loop, the contact opens and the control unit will command the closing.
- PH.2. = 5 **Loop for enable the command OPEN**: the control unit enables the OPEN key (radio or wired) when the **normally open** contact is closed.
- PH.2. = 6 **Clock**: it is possible to connect a timer, with a **normally open** contact, for the programming opening of the barrier. The contact is interpreted as request of opening and of permanence on the opening state until the contact remains closed. When the contact opens, the gate automatically closes.
  Warning: with function Clock activated user commands are inhibited.



tPH. Photocells test

Enabling this function, before each movement starting from still barrier, the control unit performs a functional check of the photocells. The check will not be performed in case of fast movement after the intervention of a safety devices. Follow chapter 3 for the connections of the photocells.

Ed.T. Safety edge type

The control unit can work with two different type of safety edge:

- Ed.T. = 0 Mechanical with normally closed contact
- Ed.T. = 1 Resistive 8k2

tE.d. Safety edge test

Enabling this function the control unit performs a functional check of the safety edge. This function is used if the edge connected to the control unit has an electronic self test (exp. radio edge R.CO.O). Connect the test contact of the edge to the power supply of the trasmitter of the photocells (chapter 3) and enable the self test with low voltage 0Vdc. For the compatibility follow the instruction of the manual of the safety edge.

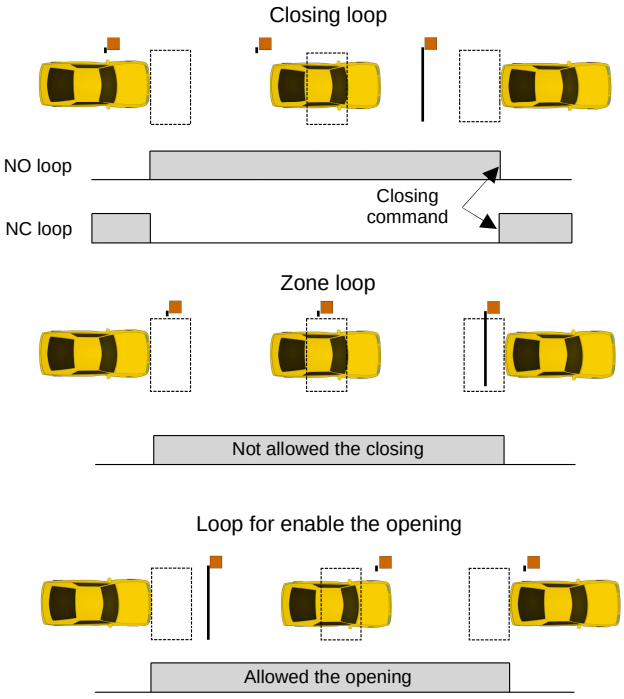
LP.o. Pedestrian opening

Pedestrian opening can be performed only starting from closed. The parameter sets the opening like a percentage of the total stroke of the barrier.

PE.d. PED multifunction input setting

The control unit has six different functionings for PED:

- PE.d. = 0 **Pedestrian**: it allows the partial opening of the barrier.
- PE.d. = 1 **Closing loop NO**: the control unit close the barrier when the **normally open** contact opens, in this way when a vehicle exits and free the loop, the control unit will command the closing.
- PE.d. = 2 **Closing loop NO**: the control unit close the barrier when the **normally closed** contact closes, in this way when a vehicle exits and free the loop the control unit will command the closing.
- PE.d. = 3 **Zone loop NO**: the control unit does not allow to close the barrier until the **normally open** contact is closed.
- PE.d. = 4 **Zone and closing loop NO**: the control unit does not allow to close the barrier until the **normally open** contact is closed; when a vehicle exits and free the loop, the contact opens and the control unit will command the closing.
- PE.d. = 5 **Loop for enable the command OPEN**: the control unit enables the OPEN key (radio or wired) when the **normally open** contact is closed.
- PE.d. = 6 **Clock**: it is possible to connect a timer, with a **normally open** contact, for the programming opening of the barrier. The contact is interpreted as request of opening and of permanence on the opening state until the contact remains closed. When the contact opens, the gate automatically closes.
  Warning: with function Clock activated user commands are inhibited.



Compatible from firmware version BIOS1BRT01

FP.r. Flashing light output mode
It is possible to choose 2 different functioning for the blinker output:

- FP.r. = 0 Fixed blinker output. It will be necessary to connect a self flashing blinker (B.RO LIGHT 230 Vac)
- FP.r. = 1 Flashing light blinker output. It will be necessary to connect a fix light blinker (B.RO LIGHT FIX 230 Vac)

tP.r. Pre-flashing time
Pre-flashing before each movement in both directions, tP.r. seconds of pre-flashing

FC.y. Courtesy light settings
The control unit has 4 different functionings for courtesy light:

- FC.y. = 0 the light switches off at the end of a movement after tC.y. seconds
- FC.y. = 1 the light switches off only with closed barrier after tC.y. seconds
- FC.y. = 2 lighted on for tC.y. seconds from the beginning of a movement, indipendently of the condition of the barrier (the light could switch off before the end of movement)
- FC.y. = 3 open barrier light - the light switches off immediately when the barrier reaches the closed position
- FC.y. = 4 open barrier light with proportional blinking:
  - ♦ opening – slow blinking
  - ♦ closing – fast blinking
  - ♦ opened – light on
  - ♦ closed – light off
  - ♦ stopped – 2flash + long wait + 2flash + long wait +…

tC.y. Courtesy light timer
Courtesy light activation timer

dE.A. Dead man
During dead man functioning mode the barrier moves only with a permanent command.
The enabled commands are OPEN and CLOSE. SS and PED are disabled. During dead man functioning all the automatic movements are disabled, like short or total inversions. All safety devices are disabled except for STOP.

SE.r. Setting threshold of cycles for assistance request
It is possible to set a number of cycles before the request of assistance. Once the limit is reached the next cycles will be done with fast blinking (only if FPr enabled)

SE.F. Continuous flashing light for assistance request
Once limit SE.r. is reached the flashing light will blink also with the barrier closed to show the request of assistance.

tr.S. Viewing of the memory position for a single transmitter
With the item of the menu tr.S. it is possible to view the memory location in which a transmitter is memorized.
To perform the function, move to tr.S. and then confirm by pressing the button MENU. Keep pressed MENU button untill the display will show SEE then release the button.

At this point press a button of the memorized transmitter (it does not active any command). The display shows:

- the memory location for 2 seconds, if is memorized;
- the written not for 2 seconds, if is not memorized.

After 2 seconds the display returns to the screen SEE and it will be possible to perform this function with another transmitter.
To exit from the function, press MENU button. Otherwise after 15 seconds without transmission, the control unit exits from the function and shows the written toUt

tr.C. Cancellation of a single transmitter
With the item of the menu tr.C. it is possible to delete a single transmitter from the memory.
To perform the function, move to tr.C. and then confirm by pressing the button MENU. Keep pressed MENU button untill the display will show 0, then release the button. Select the memory location of the transmitter. Press and keep pressed MENU button untill the display will show CLr, then release the button.

To exit from the function, press MENU button. If the display shows the written Err, there are problems with the memory (for example empty position or disconnected memory).

dE.F. Restore default settings
With this parameter it is possible to restore the default settings of the control unit. The reset will restore all the parameters of the base and advanced menu, but doesn't modify the learned strokes, the directions of motors and the transmitters.
Move to dE.F. then keep pressed MENU button until the display shows 0, release the button. Press again and keep pressed MENU button, the display will show a count down d80,d79,…,d01, do not release the button until the display showns don

tr.F. Erasing of all transmitters
With this parameter it is possible to erase all the transmitters learned.
Move to tr.F. then keep pressed MENU button until the display shows 0, release the button. Press again and keep pressed MENU button, the display will show a count down d80,d79,…,d01. Do not release the button until the display showns don

8. Display and control unit state

8.1 Normal functioning:

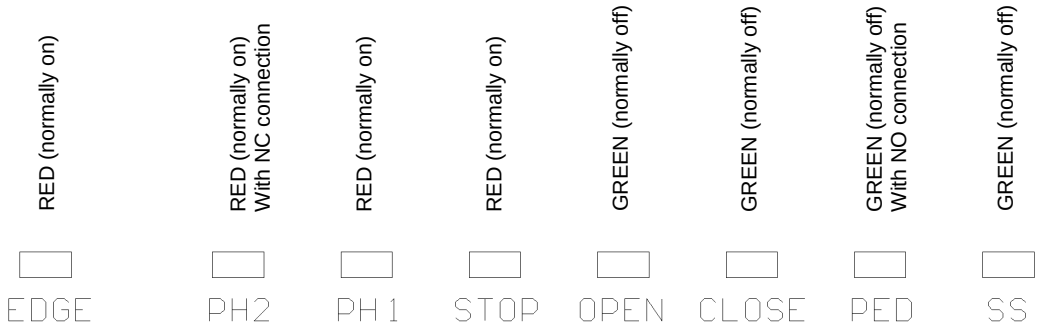
--	Standby - Barrier closed or after the switch on of the control unit (no in open position).
OP	Opening phase
CL	Closing phase
SO	Barrier stopped by user during the opening
SC	Barrier stopped by user during the closing
HA	Barrier stopped by an external event (photocell, stop)
oP	Barrier opened without automatic reclosing
PE	Barrier opened in pedestrian position without automatic reclosing
-tC	Barrier opened waiting for auto reclosing, last 10 seconds the dash will be replaced by the countdown
000.	During the normal functioning and out from any menu, the pression of the DOWN[-] button lets you see the number of cycles done, you will see units with dots on the bottom of display and thousand without dot, another pression of DOWN[-] or MENU button let you to leave the cycles visualization
000	
rAd	Visualized during the learning of transmitters
don	Visualized when memorized a new transmitter or at the and of a reset
Fnd	Visualized when memorized a key of a transmitter already memorized
CLr	Visualized when a trasmitter is erased
LOP	Visualized during the learnign of strokes to indicate that the control unit is opening the barrier and waiting for the command of opening mechanical stop
LCL	Visualized during the learning of strokes to indicate that the control unit is closing the gate and waiting for the command of closing mechanical stop
L--	Visualized during the learning of strokes if there is an intervention of safety devices
SEE	Visualized when the control unit waits a transmitter signal, during the function of viewing of the memory location.
not	Visualized when the transmitter is not stored on the memory, during the function of viewing of the memory location.
toUt	Visualized when the control unit exits from the function of viewing of the memory location for inactivity.

8.2 Errors:

EEd	Safety edge intervention
ELS	Limit switches error (both opening and closing electrical limit switches busy in the same time)
EPH	Malfunctioning of photocells
EmE	Memory error
FUL	Full memory
Err	Memory error during functions viewing memory location or cancellation of a single transmitter

The visualization of an error on the display persists until you press the key DOWN[-] or another movement command, whatever it is

8.3 Input LED and safety devices



9. Technical features

POWER SUPPLY AND CONSUMPTION

Power supply voltage	230 Vac - 50/60 Hz
Absorption from line (Standby) Standard configuration (2 couple of photocells, RX radio safety edge)	45 mA @ 230 Vac
Line fuse	F6.3A

MOTOR POWER SUPPLY

Number of motors	1
Motor power supply voltage	230 Vac - 50/60 Hz
Maximum power absorbed from motors	700W

ACCESSORIES POWER SUPPLY

Accessories power supply voltage	24 Vdc
Maximum current absorbed from accessories	170 mA
Maximum power absorbed from accessories	4 W
Accessories fuse	F 0.5 A
Blinker output	230 Vac 60W max
Courtesy light output / open gate light	230 Vac 100W max

FUNCTIONALITY

433 MHz radio receiver	Rolling code
Maximum transmitters	1000 (fino a 8000)
Safety edge input	NC / 8k2

ALLMATIC S.r.l
32020 Lentiai - Belluno – Italy
Via dell-Artigiano, n°1 – Z.A.
Tel. 0437 751175 – 751163 r.a. Fax 0437 751065
http://www.allmatic.com - E-mail: info@allmatic.com

GUARANTEE - In compliance with legislation, the manufacturer's guarantee is valid from the date stamped on the product and is restricted to the repair or free replacement of the parts accepted by the manufacturer as being defective due to poor quality materials or manufacturing defects. The guarantee does not cover damage or defects caused by external agents, faulty maintenance, overloading, natural wear and tear, choice of incorrect product, assembly errors, or any other cause not imputable to the manufacturer. Products that have been misused will not be guaranteed or repaired. Printed specifications are only indicative. The manufacturer does not accept any responsibility for range reductions or malfunctions caused by environmental interference. The manufacturer's responsibility for damage caused to persons resulting from accidents of any nature caused by our defective products, are only those responsibilities that come under Italian law.