

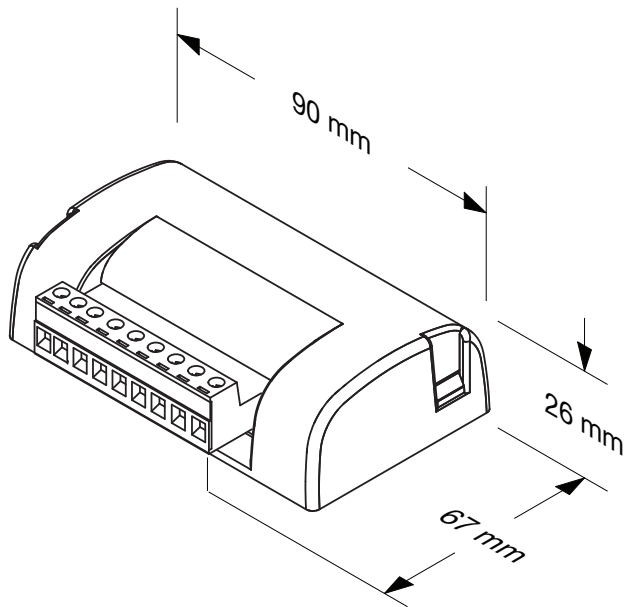
# SC.EN

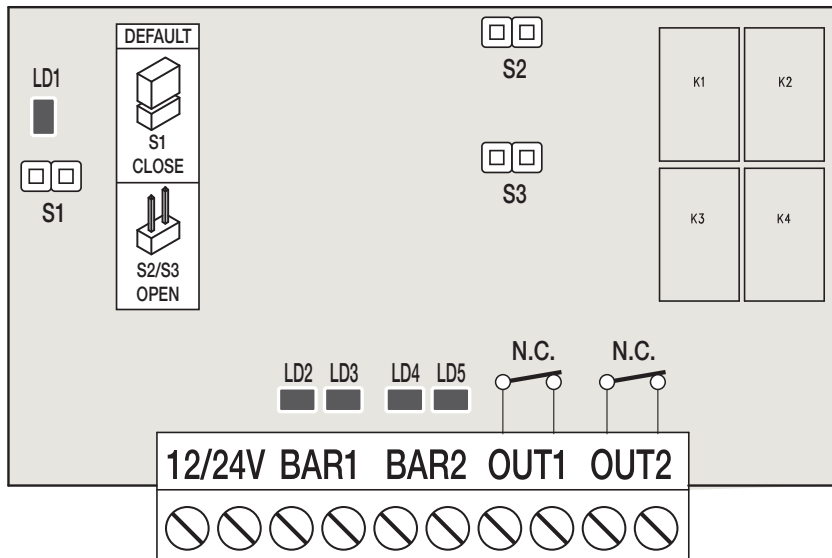


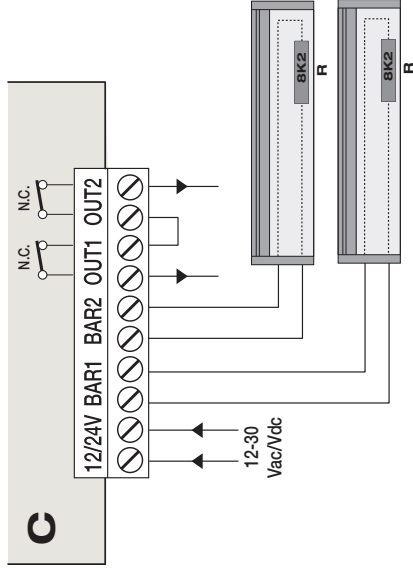
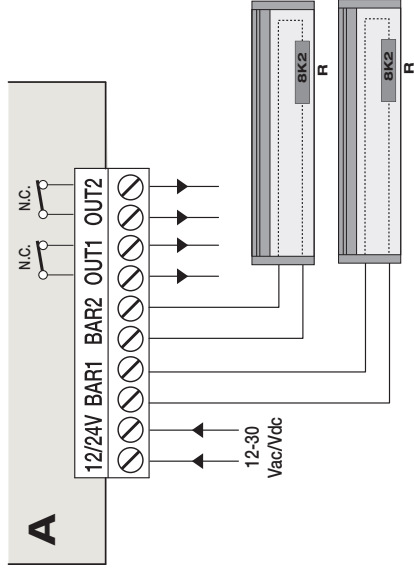
*UNIONE NAZIONALE COSTRUTTORI  
AUTOMATISMI PER CANCELLI, PORTE  
SERRANDE ED AFFINI*

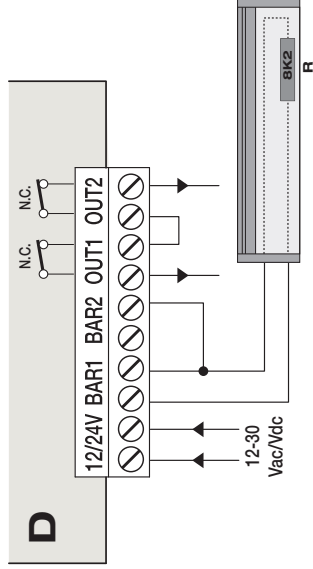
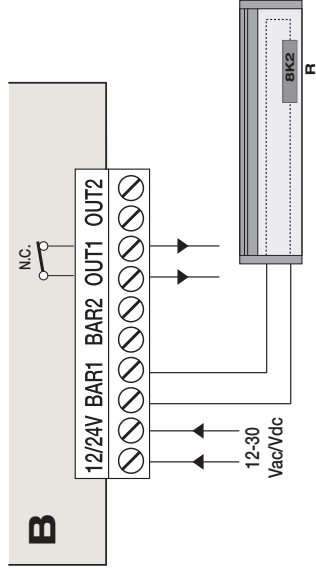


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## **CE Declaration of Conformity**

I, the undersigned, declares that the product:

**INTERFACE CARD FOR PRESSURE-SENSITIVE SAFETY EDGES**

**SC.EN**

is compliant with all technical regulations regarding the products included in the application field of the EU Directives 73/23/CEE, 89/339/CEE and 99/5/CEE:

**EN 12978**

**EN 954-1 cat 2**

**EN 60950-1 (2001)**

Manufacturer or Authoriser:

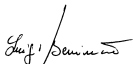
**AUTOMATISMI BENINCÀ SpA**

**Via Capitello, 45 - 36066 - Sandrigo (VI) ITALIA**

*This declaration has been issued under the exclusive responsibility of the manufacturer and, if applicable, of its Authoriser.*

Sandrigo, 10/05/2011

Benincà Luigi, Legal Representative



# SC.EN

Interface electronic card for pressure-sensitive safety edges of the resistive type (8K2 Ohm). This permits to use safety edges also on electronic devices without specific input or in the event two safety edges of the resistive type should be connected to devices equipped with one single input.

SC.EN is compliant with the EN 12978 regulation.

SPECIFICATION	
Power supply	12-30 Vac/Vdc
Max absorbed power	1W
Operating temperature	-20°C / +70°C
Input channels	2 Inputs for the connection of 8K2 pressure-sensitive safety edges
Output channels	2 Output channels with Normally Closed (N.C.) relays and self-test circuit. The outputs must be connected to the safety input/inputs (Photocell or STOP) available on the control unit. <b>Carefully check that the operating presetting on the safety input/inputs used are compatible with the intended use and the safety regulations in force.</b>
Dimensions	see Fig.1

<b>INPUTS/OUTPUTS</b>	
1-2	Power supply, 12-30VDC/VAC
3-4	First input, 8k2 resistive safety edge
5-6	Second input, 8k2 resistive safety edge
7-8	Self-tested output* regarding the first input of the resistive safety edge. Normally closed contact (N.C.) with powered card and pressure-sensitive safety edge at rest. The contact is opened when an obstacle activates the safety edge or in case power is cut off to the device
9-10	Self-tested output* regarding the second input of the resistive safety edge. Normally closed contact (N.C.) with powered card and pressure-sensitive safety edge at rest. The contact is opened when an obstacle activates the safety edge or in case power is cut off to the device

*\*Self-testing of outputs:*

*The SC.EN card has been specially designed to comply with regulations in force. Through a series of redundant self-testing, in fact, the microprocessor is always able to monitor the correct operation of the device. In addition, each single output of the card is controlled by 2 relays. At each activation of the resistive safety edge (or in case of power failure), the related output contact is opened and, upon recovery of the edge correct operation (or when power is reset), the card performs a self-testing on each single relay to check its correct operation. If one of the relays is blocked or not operating, the test outcome will be negative and the output contact will be kept open by the second relay.*

### **WIRE CONNECTIONS**

The extractable terminal board facilitates connections.

Figure 3 shows a wire diagram of possible connections to the SC.EN interface.



- A) 2 resistive safety edges and 2 independent outputs  
Each resistive safety edge controls the switching of the related output.
- B) 1 resistive edge and 1 output  
Either channel 1 and output 1 or channel 2 and output 2 can be used interchangeably.
- C) 2 resistive edges and 1 output  
The output switches if either one of the resistive safety edges is activated.
- D) 1 resistive edge / 2 outputs in series (maximum safety).  
In this operating mode, the output will be controlled by 4 relays connected in cascade, thus ensuring higher safety.

### JUMPER

S1: the relay selftesting is activated/deactivated

Closed Jumper chiuso = activated testing

Open Jumper = deactivated testing. In this case, S2 and S3 should be closed.

### LED DIAGNOSTICS

LD 1 (Red) Indicates the status of the device		
Status of the LED	Description	Notes
Switched on, fixed light	The device is switched on and correctly operates	
Switched off	Non-powered card	Check the presence of the power supply on terminals 12/24V
A flash + interval	Error, output 1	Check connections of output 1. If the indication is still on, the relay might be faulty. In this case, the card must be replaced
Two flashes + interval	Error, output 2	Check connections of output 2. If the indication is still on, the relay might be faulty. In this case, the card must be replaced

LD2 + LD3 : show the status of channel 1		
Status of the LED	Description	Notes
LD2 (green) on	edge 1 ok and output 1 ok	
LD3 (red) on	Edge 1 K.O. or faulty output 1	If the output is faulty, the LD1 red LED will flash as described above

LD4 + LD5 : show the status of channel 2		
Status of the LED	Description	Notes
LD4 (green) on	edge 2 ok and output 2 ok	
LD5 (red) on	Edge 1 K.O. or faulty output 2	If the output is faulty, the LD1 red LED will flash as described above

### DISPOSAL

When the device must be dismantled, the regulations in force on disposal should be complied with as regards differentiated disposal and recycling of the various components (metal, plastics, electric wires, etc.). It is advisable to contact your installed or a specialized company for disposal.

