

**SSR-200 PLUS**

**Rollover Safety System**

The device "SSR-200" is a tool to implement security and agricultural machinery operators against the risk of tipping as a result of traveling on land too steep / inclined. Moreover, in case of actual rollover, will automatically switch off the machine functions by limiting the dangers arising from the state of tipping. Through the continuous monitoring of the transverse axis and the longitudinal axis of the machine according to thresholds programmable, reaching / exceeding the values set in the device shall emit a signal (on-off or proportional with increasing intensity) to alert 'operator hazard. If the machine were to swing (maximum threshold is exceeded) the device stops a second signal for supplying a safety switch (normally supply combustion engine). The device is of particular interest for the application of all those machines with rotating tools (blades, mulches, etc.), Where today, in the event of rollover, disconnection command tool is entrusted exclusively to the operator. Another possible application is to control and safeguard against the operation of the internal combustion engine beyond the limits of inclination specified by the manufacturer. With the model PLUS is possible to obtain precise measurements even at medium-high speed with the aid of eight digital inputs which can measure the angular velocity of the medium.

The patented with patent number RE2008A000048.

**SPECIFICATIONS:**

- Power supply: 12V Model ..... (7V/15V).
- Model ..... 24V (15V/30V)
- Power consumption: ..... 200mA
- Operating Temperature ..... : -40 to +85 ° C
- Sensitivity: ..... 0.1 °
- Mean error: ..... 0.1 °
- Accelerometers 3-AXIS X, Y, Z: ..... 2 ...
- Output: 1. # 2 RELAY 'tipping NC contacts in series Alarm  
maximum current: ..... 2 ..... 16A.
- Early warning tipping Contacts NC: ..
- maximum current 2A 3. CANBUS port
- 4. Analog Signal tilt axis X: ..... 0 - 10V  
0 - 5V
- 5. Analog signal Y axis inclination: ..... 0 - 10V  
0 - 5V
- 6. Digital Signal: Open Collector .....
- 9. Digital inputs (selectable NPN or PNP): ..... No. 8
- 10. Relay outputs' 1st: ..... n ° 2

**Programming via PC (with software range and 1 suite USB-SPI):**

- Auto-learning of leading zeros
- Setting analog output (5V or 10V)
- Gain of the analog signal
- Sensitivity (average value bed set xn ° readings)  
field can be set from 1 to 100 readings
- Angle of operation ALARM relay
- Angle of operation PRE-ALARM relay
- Reading in the number of interventions of the PRE and
- Dell 'ALARM
- Measurement of the 'corner in Real Time
- N ° pulse encoder revolution or transducer Pk
- Wheel diameter in cm
- Distance between the wheels in cm
- Position of the level of the wheel in cm
- Angular velocity limit
- Intervals encoder reading (step by 100mS)



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Metal Box: ..... 100x100x59  
 Degree of protection: .....IP66/67  
 When the machine is safety relay contacts are closed, the arrival of a dangerous situation, the relays open up.

**PRODUCT COMPLIANCE WITH EUROPEAN DIRECTIVE 2002/95/EC CE RHOS**

**Item Code: F00176-000-PLUS**

**PANNELLO VISUALIZZAZIONE (OPTIONAL )**

**CARATTERISTICHE TECNICHE :**

- Alimentazione : .....8 - 30Vdc
- Grado di Protezione : ..... IP 65 lato frontale,  
IP30 Lato posteriore
- Temperatura di lavoro: .....-20°C + 85°C
- Temperatura max.: .....-35°C + 90°C
- Pulsanti retroilluminati.....7
- Ingressi Digitali.....20
- Ingressi Analogici/frequenza .....4
- Output di potenza (2 Ampère).....4
- Line CAN BUS .....2
- Ingressi NTSC/PAL .....4
  
- RS232 input ..... 1
- RS485 input ..... 1
- USB Input ..... 1
- SD Card Slots ..... 1
- GSM module (option) ..... 1
- Connectors: Molex ..... MINIFIT jr.
- Dimensions: 170x230x20mm .....

**EMC: ISO 7637-2 ISO 2575**

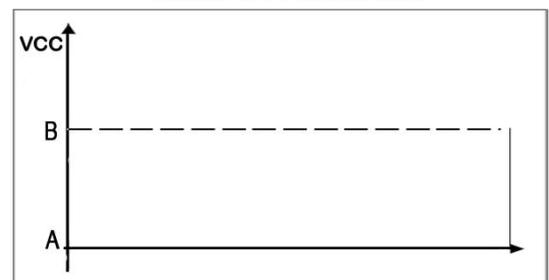
**MECHANICAL AND ELECTRICAL FEATURES OF PLASTICS:**

- Silicone: Non-Conductive
- Max: ..... -55 ° C ~ +250 ° C
- Specific Gravity 1.15 .....
- Tensile Strength: ..... 90Kg/cm<sup>2</sup>
- Tear Strength: ..... 20Kgf/cm
- Compression: ..... September 60% (180 ° C x 22hrs.)
- Elongation at break: ..... 350%
- Volume resistivity: ..... 8 x 10<sup>14</sup> ohm cm
- Breaking Isolation: ..... 24kV/mm
- Colour: black .....
- Dielectric Constant: ..... 4.2 (50Hz)
- Tangent Dielectric: ..... 13% (50Hz)
- High reesistenza to 'alcohol and sweat
- High resistance to ultra violet rays and detergents

**Item Code: F00208**



**SIGNAL OUT PRE ALLARME**



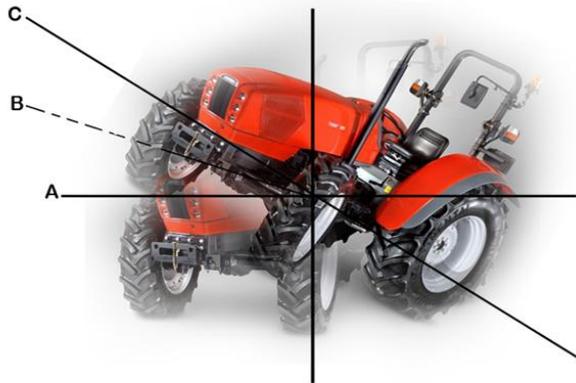


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### APPLICATION EXAMPLES:

As in the example in the tractor at the top, the same technology can be applied on a variety of machines, such as Forklifts, Tractors and Telescopic Platforms Scissors.





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The System Security Forklift Tipping applied on the possibility of being able to control the load in elevation on inclined planes.

Thanks to the continuous control of the x and y axes of the machine in the event of an overrun of the angles of security set, intervenes bringing the load in a safety position or blocking its operation.



Tractors Telehandler In the Security System Rollover warning authorizes during operation of the machine working angles.

In the case of approaching the corner of safety the operator is av-converted with a beep vision. At the overcoming of the angles of safety, the vehicle is stopped or brought within the limits of the security parameters.



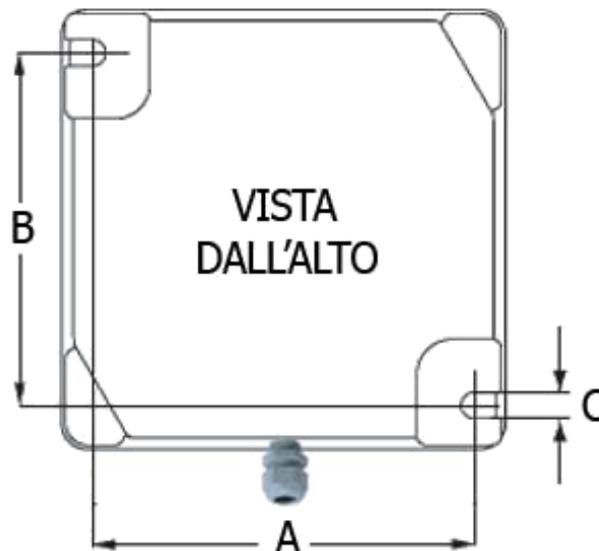
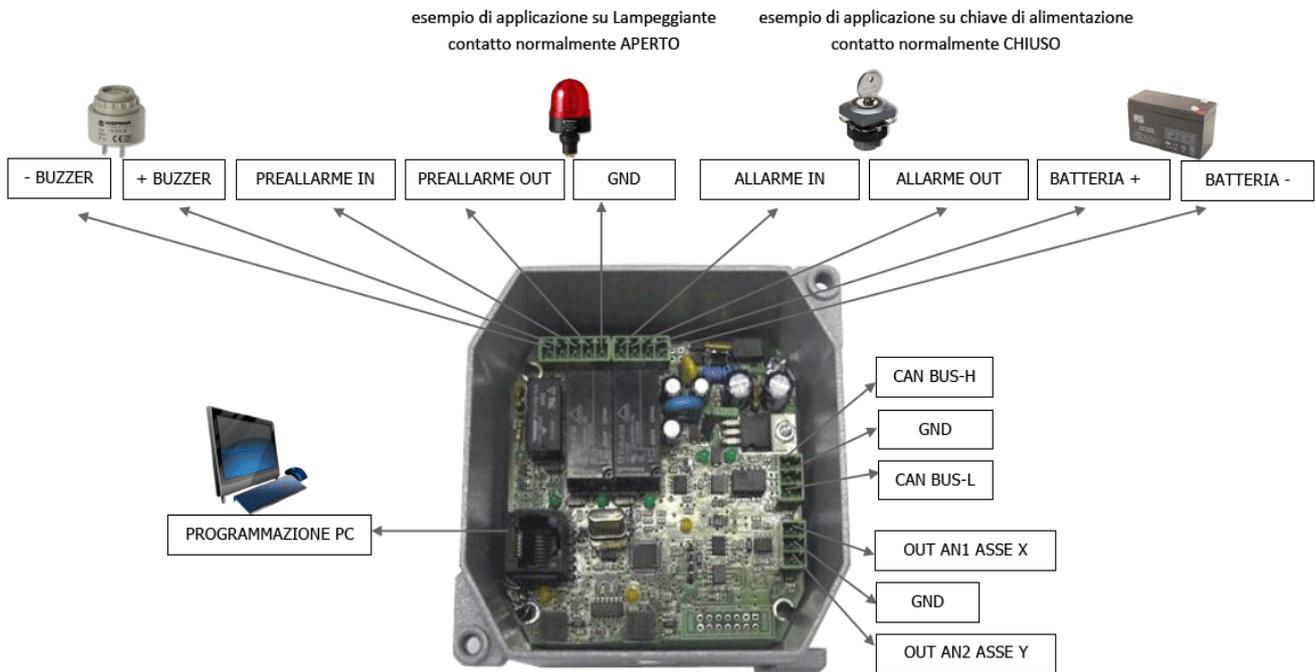
In the Scissors Platforms Security System Tipping monitors the efficiency of the machine through the working angles. In the case of approaching the corner of safety, the operator is alerted by an acoustic signal of view. After successful completion of safety corners are limited working heights of the Platform.



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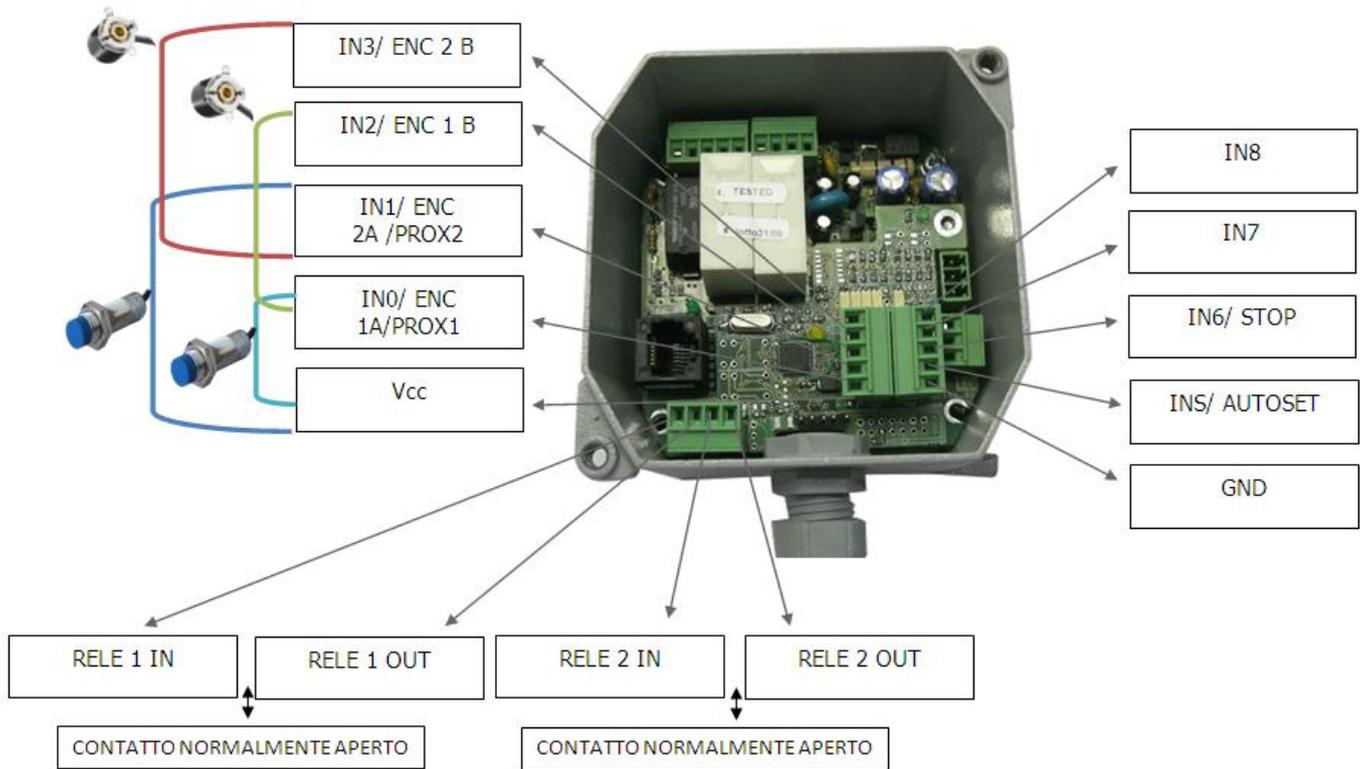
**Rollover Safety System**

**wiring Card:**



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**DISTANCE BETWEEN FIXING IN mm**

- A = 86mm
- B = 80mm
- C = 06mm

The company assumes no responsibility for any errors that may appear in this document and reserves the right to change the descriptions and data without prior notice.

