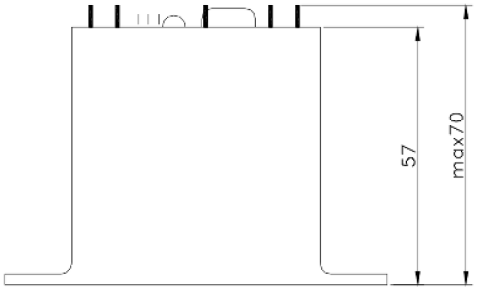
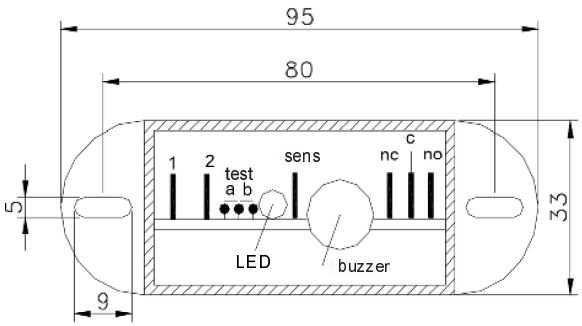
Dimensions





Perform the test once a month with the machine in safe mode.

Perform the test between "a" and central and between "b" and central.

The LED (red) and buzzer are active only if there is an alarm.

The presence of one of the two signals, **or the opening of the relay, or the concomitance of all three events, constitutes an indication of the Out of Isolation or System Fault status.**

INSTRUCTION BOOKLET

isolation **Loss Sensor** device

Introduction

SPI type control devices are not subject to EEC Directives 89/336, 89/392, 73/23 and subsequent amendments.

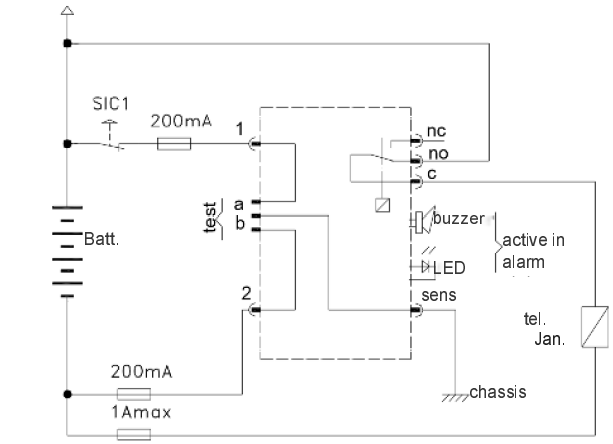
These devices are intended for use by manufacturers\and professionals for incorporation into equipment they manufacture.

SPI devices may not be used for safety functions or for controlling actions on which the safety or security of property and personnel may depend.

Operating principle

The SPI devices are to be considered as sensors that detect loss of insulation in the electrical power equipment (motors, batteries) on machines powered by batteries having a **maximum voltage of 48 V.**

***Functional and wiring* diagram**



Reference standards

The appliance complies with the following standards: CEI 48-11 Part 2 Electrical continuity and contact resistance tests, insulation and applied voltage tests, (where applicable).

General safety warnings

Do not use the **SPI** devices in functions related to the machine or personnel safety, without implementing use of redundant circuit techniques based on different operating principles (EN 60204-1 par.9.4.2).

Electrical specifications	
Power Supply	**12 Vdc 48 Vdc(1)**
Current consumption	**80 mA max**
Imax on relay contact.	**1 A**
Vmax on relay contact.	**48 Vdc**
Maximum test current.	**200 mA +/-20%**
Control frequency.	**3 Hz +/- 50%**
Max effective positive voltage applied to the frame.	**6 Vac +/- 20%**
Maximum positive current applied to the frame.	**0.1 mAc +/-50%**

1 - For greater supply voltages there are special indications that must be implemented.

Disconnect the SPI devices during the electrical insulation tests. Any tampering with or modification of SPI products (such as modifying the enclosure) shall void all liabilities of the manufacturer.