Features

- 1-channel
- · Loop powered
- · NAMUR sensor simulator and pulse generator
- · Simulates line faults

Function

This simulator imitates a NAMUR proximity sensor by implementing a three-position switch. A three-position switch facilitates the selection of various test conditions.

The first position (NAMUR voltage) simulates a 1 k Ω resistive load, while the second position (sensor static) offers various sensor-damping conditions, including a short circuit simulation. The third switch position (sensor dynamic) offers the user several frequency settings between 0.1 Hz ... 1 kHz using a rectangular wave with a 50 % duty cycle.

Assembly



CE

Connection



 Subject to reasonable modifications due to technical advances.
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Notes

Operation:

The simulator is used instead of a sensor and is connected to an input to EN 60947-5-6 NAMUR. Three different test functions may be selected using the function switch.

Switch position "NAMUR voltage"

The voltage of the control circuit can be tested according to EN 60947-5-6 NAMUR. In this case the initiator simulator has an internal resistance of 1 k Ω .

Function switch position "sensor static"

- Switch position 1 control circuit J > 2.1 mA •
- Switch position 2 control circuit J about 0.4 mA
- ٠ Switch position 3 control circuit J > 7.0 mA

(Initiator not damped) (Initiator damped) (Lead short circuit)

Function switch position "sensor dynamic"

A quartz controlled rectangular wave controller produces a signal with a duty ratio of 50 % : 50 %. The frequency can be adjusted from 0.1 Hz up to 1 kHz using the slide switch.

Subject to reasonable modifications due to technical advances.

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