PROGRAMMABLE SAFETY RELAY

SRP

Lovato electric

ENERGY AND AUTOMATION

Programmable safety relay SRP

The **SRPMFA164** programmable safety relay is a stand-alone safety device able to manage the main safety functions of a machinery or plant. Fully configurable, it allows you to simplify wiring and reduce costs.

- 16 digital inputs
- 4 individual inputs for restart interlock (restart), EDM or single devices input
- 4 pairs of OSSD safety outputs (PNP 400mA)
- 4 SIL 1/PL c status outputs (PNP 100mA)
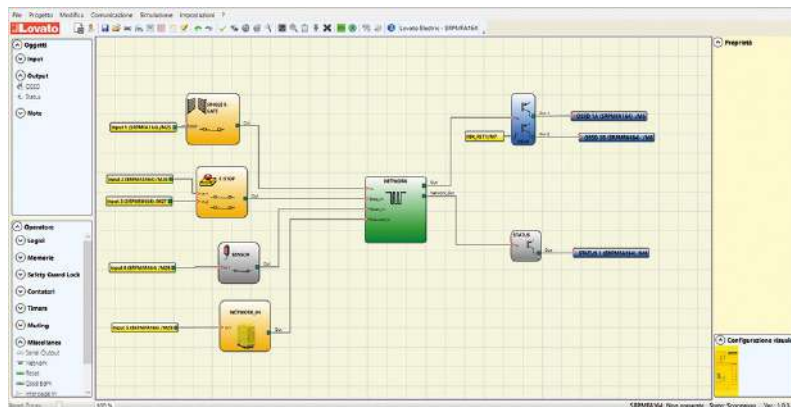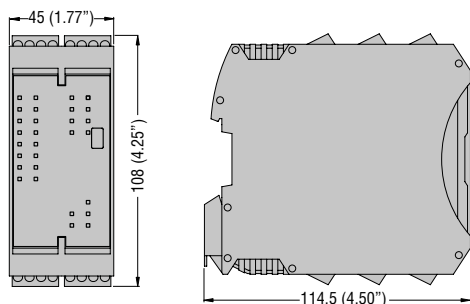- 4 test outputs
- 64 logical operators.

SRPMFA164

Order code	Inputs	Outputs	Function	Qty per pkg	Wt
				n°	[kg]
Programmable multi-function. Auxiliary supply voltage: 24VDC. Screw terminals.					
SRPMFA164	- 16 digital inputs - 4 restart/EDM inputs	- 4 OSSD outputs - 4 outputs status - 4 outputs test	Multi-function	1	0.248

SRPSW01 configuration software.

The configuration software is available in 10 languages, is easy to use and can be downloaded free of charge from www.LovatoElectric.com. The Drag & Drop function allows the creation of logical scenarios in a machine directive-compliant environment. Programming and design is thus simplified thanks to the user-friendly interface and a number of integrated functions including the monitoring function, automatic project validation, simulation function and the issuing of reports and log files, as well as the possibility of protecting the programme using passwords.

Dimensions [mm (in)]

General characteristics
The **SRPMFA164** programmable safety relay can in fact monitor and control safety circuits in applications with: light curtains, photocells, laser scanners, emergency stops, electromechanical interlocks, interlocked locks, magnetic safety switches, RFID sensors, sensitive mats and edges, two-hand devices and and maintained action enabling pushbuttons.

Advantages
The **SRPMFA164** programmable safety relay offers several advantages, including:
- the reduction in the number of components, therefore the size and quantity of wiring
- speeding up the construction times of the electrical panel
- the creation of security systems resistant to tampering attempts
- less wiring time: all the logic is created using the SRPSW01 configuration software, which can be downloaded free of charge from the website www.LovatoElectric.com, and not with a less safe and more complicated traditional electromechanical solution.
- fewer components means better Performance Level and therefore greater safety.

Operational characteristics
- auxiliary supply voltage: 24VDC
- 35mm DIN rail mounting (IEC/EN/BS 60715)
- compact size: 45mm wide
- fully programmable via USB serial port on the front
- 16 digital inputs (configurable individually as a single channel or in pairs as a double channel)
- 4 individual inputs for restart interlock, EDM or single input devices
- 4 pairs of OSSD safety outputs (PNP 400mA)
- 4 SIL 1/PL c status outputs (PNP 100mA)
- 4 test outputs
- 64 logical operators
- possibility of timing each output
- safety circuit diagnostics via LED indications for power supply, safety input status and safety output status
- the short circuit between the two input channels is detected
- OSSD safety outputs are periodically tested for possible lockouts at 0V or +24VDC or for faulty connections (e.g. two OSSD outputs shorted). If the test results are not consistent, the system fails and goes into a safe state
- removable screw terminal connection
- front protection degree: IP40
- terminal protection degree: IP20

Certifications and compliance
Certifications obtained: cULus, TÜV.
Compliant with standards: EN/BS/ISO 13849-1 (Cat 4, PLe), EN/BS/IEC 61496-1 (Type 4), EN/BS 61508-1, EN/BS 61508-2, EN/BS 61508-3 (SIL3), IEC/BS 62061 (max. SIL 3), EN/BS 81-20, EN/BS 81-50.

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