

# SAFETY RELAYS



 **Lovato**  
**electric**

ENERGY AND AUTOMATION

# SAFETY RELAYS SRA SERIES

With the SRA... series of safety relays you can monitor the most advanced types of safety systems including light curtains, RFID sensors and two-hand control devices. **The SRA series** also includes a multifunction model that allows to manage all the main safety functions in a single device.



- Multifunction model settable with a frontal trimmer, which includes the main safety functions in one product
- Single function models that can be used for: safe control of light curtains, two-hand control devices, laser scanner and RFID sensors.
- Safety relays with performance level up to Cat.4, PLe compliant to **EN/BS 13849-1**
- Alarm diagnostics through the frontal LED flashing
- Compact design with 35mm DIN rail mounting

### General characteristics

The SRAMF21 multifunction safety relay offers the possibility of having the safety functions above in one device. This is achieved by simply selecting the desired function using the dedicated frontal trimmer. The SRAMF21 multifunction safety relay monitors and controls safety circuits in applications with:

- Emergency stops
- Security accesses
- Magnetic safety switches
- Safety limit switches
- Electromechanical interlocks
- Input from OSSD (for ESPE and RFID), automatic restart or monitored manual restart
- Command of two-hand control devices (type IIIA and IIIC according to EN 574)
- Control for type 2 photocells, manual or automatic restart.

The Lovato Electric SRA... safety relays are designed in order to monitor and control safety circuits in applications with:

- SRATH21: monitoring of two-hand control devices (type IIIC according to EN 574)
- SRALC21: monitoring of safety devices equipped with OSSD (light curtains, laser scanner, RFID)
- SRASM20: monitoring of devices equipped with OSSD and integrated safety functions.

### Order code



SRATH21



SRALC21



SRASM20



SRAMF21

Order code	Auxiliary supply voltage [V]	Type of output contact	Function
Multifunction			
<b>SRAMF21</b>	24VDC	2NO + 1PNP	Multifunction
Single function			
<b>SRATH21</b>	24VDC	2NO + 1PNP	Two-hand control devices
<b>SRALC21</b>			Devices OSSD
<b>SRASM20</b>		2NO	

### Potential uses

	Emergency stop	Safety switch	Magnetic sensors	Two-hand control devices	Safety devices with OSSD outputs (light curtains, laser scanner, RFID,...)	Mechanical safety interlock
<b>SRAMF21</b>	•	•	•	•	•	•
<b>SRATH21</b>				•		
<b>SRALC21</b>					•	
<b>SRASM20</b>					•	

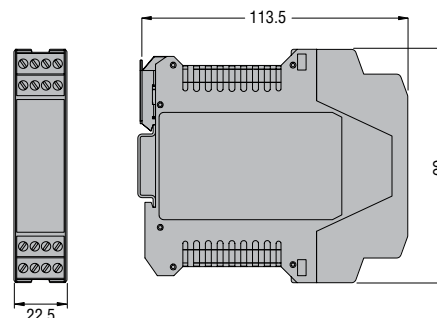
### Main characteristics

- Auxiliary supply voltage: 24VDC
- 35mm DIN rail mounting (IEC / EN / BS 60715)
- 1 PNP output for system monitoring
- 1 feedback input from external contactors
- 1 test input (for light curtains)
- Alarm diagnostics through LED flashing
- Front protection degree: IP20
- Terminal protection degree: IP20.

### Certifications and compliance

Certifications (pending): cULus, TUV.  
Compliant with standards: Cat. 4, PLe according to EN/BS 13849-1.

### Dimensions [mm]



# SAFETY RELAYS SRB SERIES

With SRB... series of safety relays you can monitor a safety system and execute commands to stop it or check its safety functions. **The SRB series** is composed of three independent relays that manage different functions such as emergency stops, safety stops and safety limit switches.



- They Can be used for: security control of emergency pushbuttons, safety limit switches, magnetic sensors
- Safety relays with performance level up to Cat.4, PLe compliant to **EN/BS 13849-1**
- Expansion module of safe outputs
- Slim and compact design (17,8mm) with 35mm DIN rail mounting
- Removable screw terminals for easier wiring

### General characteristics

LOVATO Electric safety relays are designed for applications up to Category 4 and performance level up to PLe according to EN/ISO/BS 13849-1. The SRB ... safety relays are designed in order to monitor and control safety circuits in applications with:

- Emergency stops
- Security accesses
- Magnetic safety switches
- Safety limit switches
- Electromechanical interlocks.

SRBEM41 is an expansion module to extend the number of safe outputs.

### Main characteristics

- Auxiliary supply voltage: 24VAC / DC
- 35mm DIN rail mounting (IEC / EN / BS 60715)
- Compact size: 17.8mm wide
- Double or single channel operation
- Control up to 3 NO safety outputs with electromechanical relay with forced guidance
- Start / reset operating mode (manual, automatic or monitored manual)
- Diagnostics of the safety circuit through indications of LEDs for power supply, safety input status and status of the safety outputs
- The short circuit between the two input channels is detected
- In the event of a fault, the safe outputs are deactivated (contacts opened)
- 1 NC auxiliary output (SRBES31) that can be used for remote status indication
- Removable screw terminal connection
- Front protection degree: IP40
- Terminal protection degree: IP20.

### Order code



**SRBES20**



**SRBES31**



**SRBEM41**

Order code	Auxiliary supply voltage	Type of output contact	Function
	[V]		
Single function			
<b>SRBES20</b>	24V AC/DC	2NO	Emergency stop
<b>SRBES31</b>		3NO+1NC	
Safe outputs expansion module			
<b>SRBEM41</b>	24V AC/DC	4NO+1NC	Expansion module

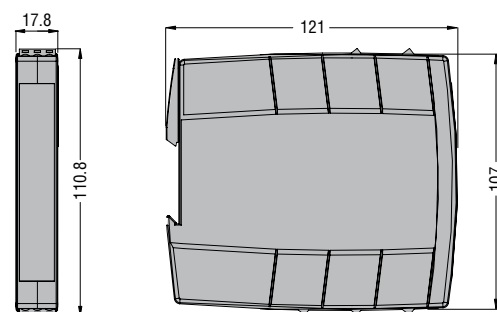
### Certifications and compliance

Certifications obtained: cULus, TUV.  
Compliant with standards: Cat. 4, PLe according to EN/BS 13849-1.

### Potential uses

	Emergency stop	Safety switch	Magnetic sensors	Mechanical safety interlock	Expansion module of safe outputs
<b>SRBES20</b>	●	●	●	●	
<b>SRBES31</b>	●	●	●	●	
<b>SRBEM41</b>					●

### Dimensions [mm]



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