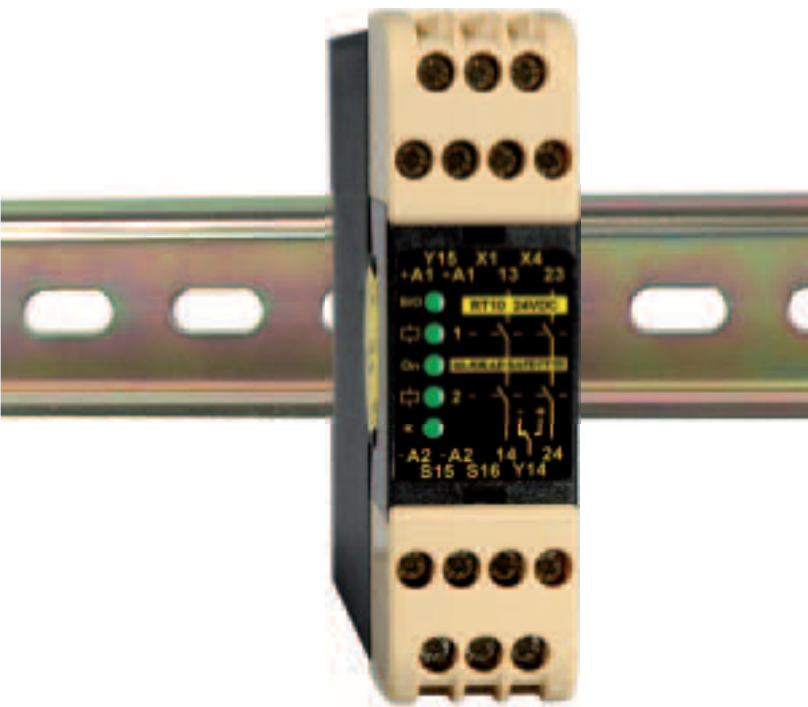


Safety relay RT10



Approval:

Not ready at the time of printing

Safety relay for:

Contact rails

Safety mats

Advantages:

Manual or automatic reset facility

Test input for monitoring external contacts

22.5 mm width

LEDs to indicate power on, inputs and outputs, short-circuits and open circuits

2 NO relay outputs

One relay output with dual information

Operating voltage 24 V DC

Detachable connection blocks

Two-wire connection

Safety relay for contact rails, bumpers and safety mats

The RT10 is a safety relay that monitors one or more series-connected contact rails, bumpers or safety mats with a two-wire connection and termination resistance.

Operation, a short-circuit or an open circuit in the contact rail, bumper or safety mat, or a change in the termination resistance will be detected by the RT10 and any hazardous machinery movement inhibited.

Despite its compact design, the RT10 has two safety outputs, two information outputs, five LEDs, dual connection terminals for supply voltage and a detachable terminal block which considerably simplifies installation and servicing.

In addition there is a manual or automatic reset facility. Manually supervised resetting can be used, for example,

with safety mats across which passage is permitted. Automatic resetting can be used when passage over or through the protection area is not possible and if suitable from a risk viewpoint.

Regulations & standards

The RT10 is designed and approved in accordance with appropriate directives and standards.

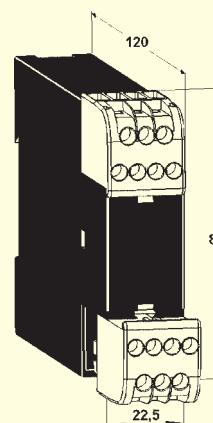
Examples of applicable regulations and standards are 98/37/EC, EN ISO 12100-1/-2, EN 60204-1 and EN 954-1/EN ISO 13849-1.

Connection examples

You will find examples of how our safety relays can solve various safety problems in "Connection examples".

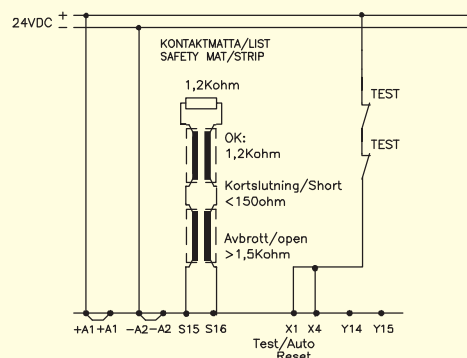
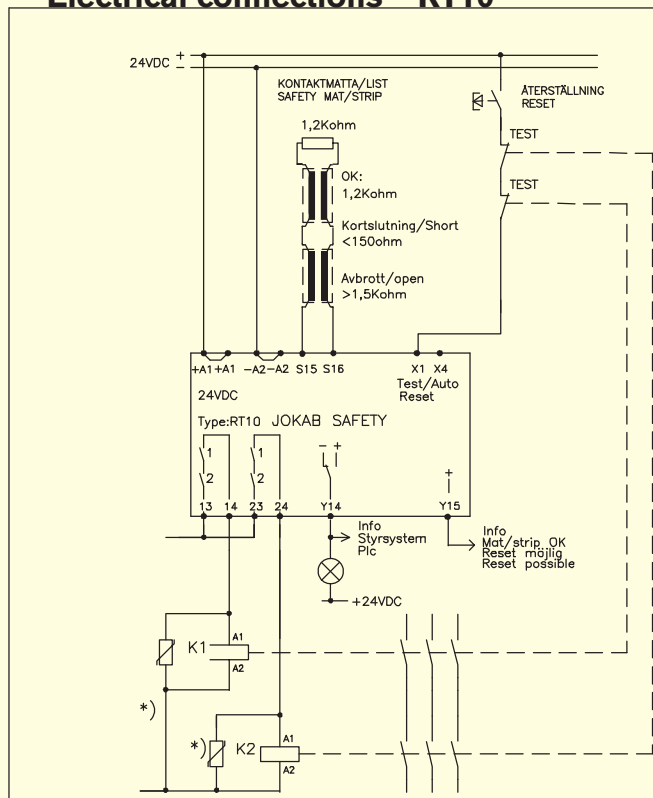
Technical data - RT10	
Manufacturer	JOKAB SAFETY AB, Sweden
Article number/ordering data:	10-029-50 RT10 24DC
Colour	Black and beige
Weight	210 g
Operating voltage Operating voltage (A1-A2)	24 VDC +/- 20%
Power consumption At nominal voltage	2 W
Safety input resistance S15/S16 OK Short-circuit Open circuit	1.2 kOhm less than 150 Ohms more than 1.5 kOhm
Reset input X1 Supply for reset X1 Minimum closing time at nominal voltage Minimum closing time at undervoltage (-20%)	+ 24 V DC 300 mA pulse when closing thereafter 30 mA 80 ms 100 ms
Response times At activation At start (input-output) At deactivation At loss of power	<100 ms <20 ms <20 ms <80 ms
Relay outputs NO Max. switching capacity res. load AC Max. switching capacity res. load DC Max. total switching capacity res. load Max. switching capacity Contact material Mechanical life	2 6A/250 V AC/1500 VA 6A/24 V DC/150 W 8A distributed on all contacts 10 mA/10 V (at max. load <100 mA) Ag + Au flash 10 ⁷ operations
Relay output with dual information Y14 -(0V) +(24V) Max. load at Y14 Short-circuit protection for information output	Indicates that the RT10 is not reset. Indicates that the RT10 is reset. 250 mA Internal automatic fuse

LED indications	<p>On ● Supply voltage OK, LED continuously lit. LED flashing on undervoltage, overload or current limiting.</p> <p>S/O ● Indicates short-circuit or open circuit at safety input.</p> <p>R ● Input conditions fulfilled OK.</p> <p>☑ ● 1 ☑ ● 2 Indicates that the output relays are activated.</p>
Installation Rail Ambient temperature	35 mm DIN rail -10°C to + 55°C
Connection blocks (detachable): Max. torque, terminal screws Max. connection area: Solid conductors: Conductor with socket contact: Air and creep distance:	1 Nm 1 x 4 mm ² /2 x 1.5mm ² /12 AWG 1 x 2.5mm ² /2 x 1 mm ² 4 kV/2 IEC 60664-1
Protection class Enclosure Connection blocks	IP 40 IEC 60529 IP 20 IEC 60529



Connector blocks are detachable (without cables having to be disconnected)

Electrical connections - RT10



B) Kontaktmatta/list med automatisk återställning
Safety mat/strip with automatic reset

A) Kontaktmatta/list med manuell återställning samt övervakning av yttre kontaktorer/releider
Safety mat/strip with manual reset and monitoring of external contactors/relays

*)OBS: Använd alltid transient skydd t.ex. VDR!
*)NOTE: Always use transient suppressors, e.g. VDR's!