

Expansion Relay SAFE-EXP

Short operation instructions for electricians - Errors and technical changes reserved

Short information

Brand SALZ Automation
 Product Name SAFE-EXP
 Function Expansion relay with forcibly guided contacts.
 5 N/O, 1N/C up to SIL 3
 Product SKU/Order No. SA-SAFE-EX-01-00 | 1 pc
 SA-SAFE-EX-50-00 | 50 pcs

Additional documentation

Before working with or on the device, it is mandatory to read the online documentation! This brief description for the electrician does not replace the detailed operating instructions provided online. The complete operating instructions are available via the link and QR code below - see section **Download**.

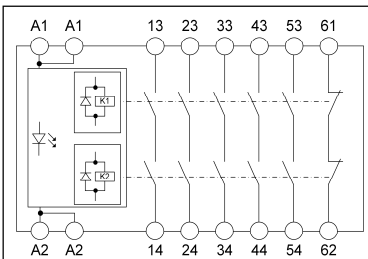
Intendend use

SAFE-EXP is an expansion relay with forcibly guided contacts according to EN 61810-3, which can be used in safety-related applications according to EN ISO 13849-1 and EN 62061 / EN 61508 up to PL e or SIL 3. The SAFE-EXPANSION can be used for contact expansion of safety relays such as from the SALZ SAFE-Series. It can also be used as coupling relay for safe signals of e.g. pulsed PLC's to the periphery for galvanic isolation and power adjustment.

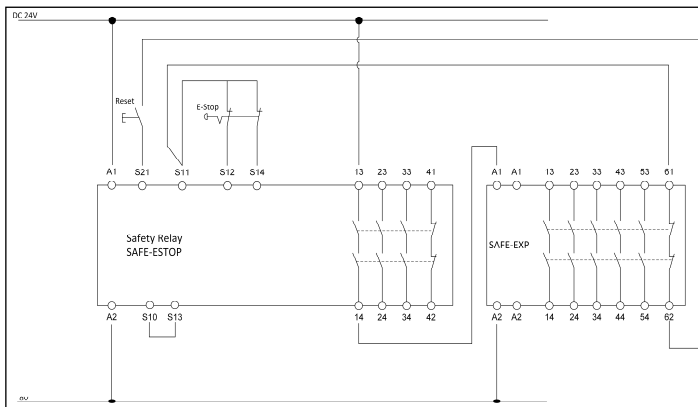
Safety precautions

- Installation and commissioning of the device must be performed only by authorized personnel and who has read and understood this operating instructions.
- Observe the country-specific regulations when installing the device.
- The electrical connection of the device is only allowed to be made with the device isolated.
- The wiring of the device must comply with the instructions in this operating instructions, otherwise there is a risk that the safety function will be lost.
- It is not allowed to open the device, tamper with the device or bypass the safety devices.
- The contact protection and the insulation of the supply cables must be designed for the highest voltage to the device
- It is not allowed to open the device, tamper with the device or bypass the safety devices.
- All relevant safety regulations and standards are to be observed.
- The overall concept of the control system in which the device is incorporated must be validated by the user.
- Failure to observe the safety regulations can result in death, serious injury and serious damage.
- Note down the version of the product (see label "Rev.") and check it prior to every commissioning of a new device. If the version has changed, the overall concept of the control system in which the device is incorporated must be validated again by the user.

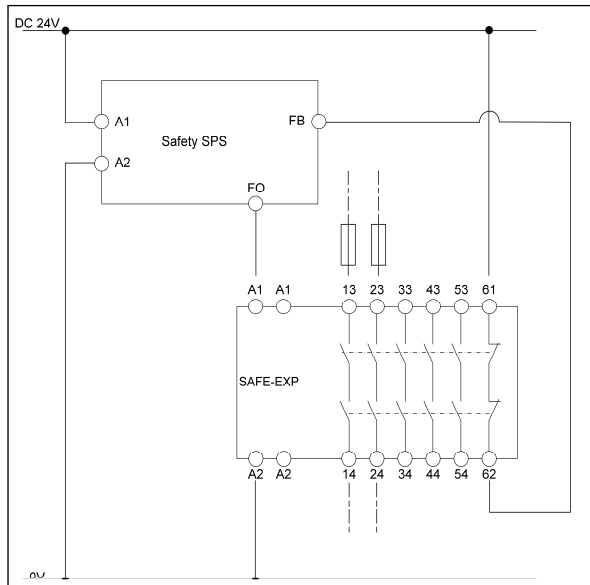
Block diagram



Application example - Expansion relay for safety relay



Application example - Coupling relay for safe PLC



Technical data

Operating voltage	DC 24 V +/- 10 %
Power consumption	2.3 W
Max. switching voltage	AC 250 V
Contact rating NO contacts	AC: 250 V, 2000 VA, 8 A for DC-1 250 V, 5 A for AC-15
6 switching cycles/ min	DC: 30 V, 240 W, 8 A for 24 V for DC-1 24V, 5 A for DC-13
Max. thermal total current I _{th}	See total current limit curve
Contact rating NC contact	AC: 250 V, 500 VA, 2 A for DC-1 DC: 30 V, 60 W, 2 A for DC-1
Min. contact load	5 V, 10 mA
External fuses	10 A gG (NO)
Switch-on delay	< 30 ms
Switch-off delay	< 50 ms
Wire width	0.14 - 2.5 mm ²
Tightening moment (Min./Max.)	0.5 Nm / 0.6 Nm
Contact material	AgSnO ₂
Service Life	mech. approx. 1 x 10 ⁷
Dielectric strength	4 kV
Rated insulation voltage	250 V
Degree of pollution /	2 / 3 (EN 60664-1)
Overvoltage category	
Protection	IP20
Temperature range - Ambient	-15 °C to +55 °C
Max. altitude	≤ 2000 m (above sea level)
Mounting	DIN rail according to EN 60715 TH35
Max. altitude	≤ 2000 m (above sea level)
Mounting	DIN rail according to EN 60715 TH35

Content of the EU Declaration of Conformity

The above mentioned product conforms with the most important requirements of the following directives and their modification directives:

2014/35/EU	Low Voltage Directive
2014/30/EU	Electromagnetic Compatibility Directive (EMC)
2011/65/EU	RoHS Directive
Originator:	Thomas Hüttemeier, Managing Director
Manufacture:	SALZ Automation GmbH Max-Planck-Str. 64 32107 Bad Salzufflen Germany

The complete EU declaration of conformity is available via the link and QR code below - see section **Download**.

Download

Download operating instruction:
www.salz-automation.com

