

I-relay, 1 contact, 6 A Datasheet



Application

Our interface relays are applied mainly in industrial and power automation systems, in signaling and protection systems, and in other control and electric drives systems. Ideal to operate as output relay for plc controllers.

Description

The basic features of the general purpose relays are:

- Number of contact: 1
- Rated contact switching current 6 A
- Mounting for 35 mm rail (EN 50022)

Features

- Compact 0.2 mm design
- 1 C/O contact
- Standard LED indicator
- Screw connections
- Marking tag
- Cadmium free contacts
- 35 mm rail mounting

Benefits

- Proven reliability
- Compact size
- Long term availability
- Competitive pricing

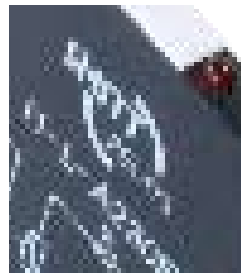
Industry compliancy

- EN 60255 Relay design and environmental conditions
- EN 60947 Low voltage switch gear and control gear
- EN 60947-5-1 Electromechanical control circuit devices and switching elements
- IEC 61810 Electromechanical elementary relays
- The relays meet the requirements of the RoHS directive



I-relays

Technical specifications

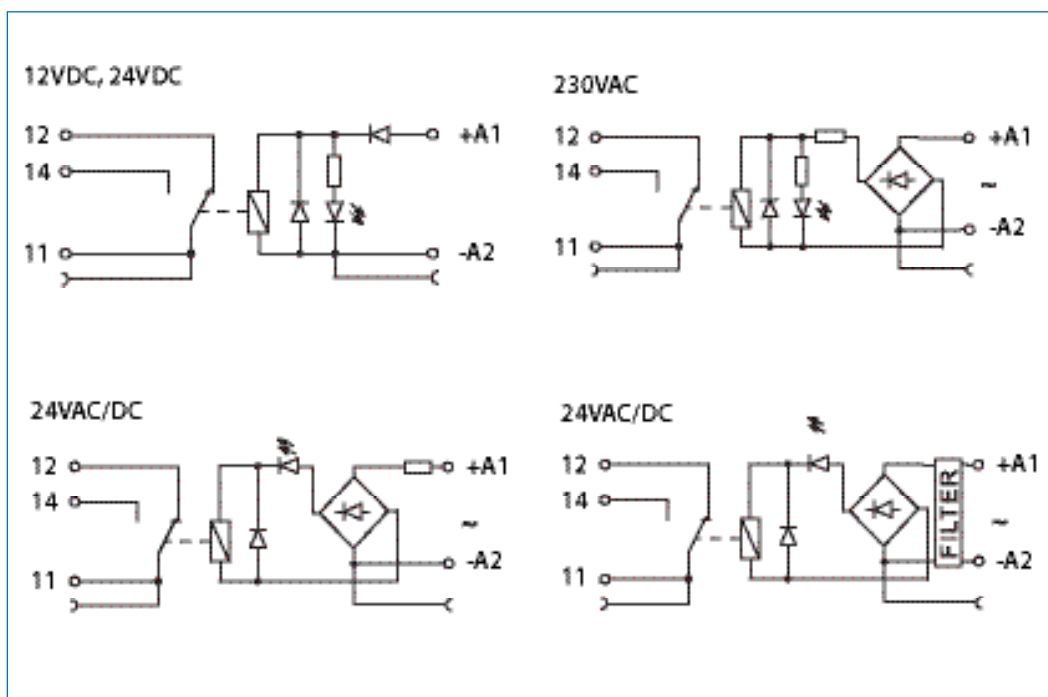


Integrated LED



Schedule on side

Connection diagrams



I-relays

Technical specifications

Coil data

Operating time at nominal voltage		
Pull-in time		7/6 ms
Release time		15/10 ms
Operating voltage range in %		0.8 - 1.1 Unom
Nominal power consumption	DC	0.3...0.7 W
	AC/DC	0.3...1.6 VA / 0.3...1.6 W
Min hold-up voltage		0.8 Unom

Coil code	Rated voltage Un	Coil operating range	
		min. (at 20°C)	max. (at 55°C)
D 012 R	12 VDC	9.6	14.1
D 024 R	24 VDC	19.2	28
U 024 R	24 VAC/VDC	19.2	26.4
A 230 R	230 VAC	184	253
U 230 R	230 VAC/VDC	184	253

**other voltages on request*

Contact data

Maximum make current	10 A
Maximum continuous current	6 A (AC1; IEC 60947)
Maximum switching voltage	250 V, 400 V
Minimum switching voltage/current AgNi	10 V / 100 mA
Material	AgNi
Contact resistance	≤100 mΩ (100 mA, 24 V)

** AgNi/Au 0,2μm on request*



I-relays

Technical specifications

Performance characteristics

Electrical life (AC1)	$\geq 0.6 \times 10^5$
Mechanical life	$\geq 2 \times 10^7$ cycles (Unpowered)
Dielectric strength	Input output 4000 VAC Mass input output 2500 VAC Contact clearance 1000 VAC
Isolation class	C400
Max. operating frequency	At rated load 360 cycles/hour (AC1) No load 72000 cycles/hour

Mechanical data

Dimensions (d x w x h)	80 x 93.8 x 6.2 mm
Weight	40 g

Environment conditions

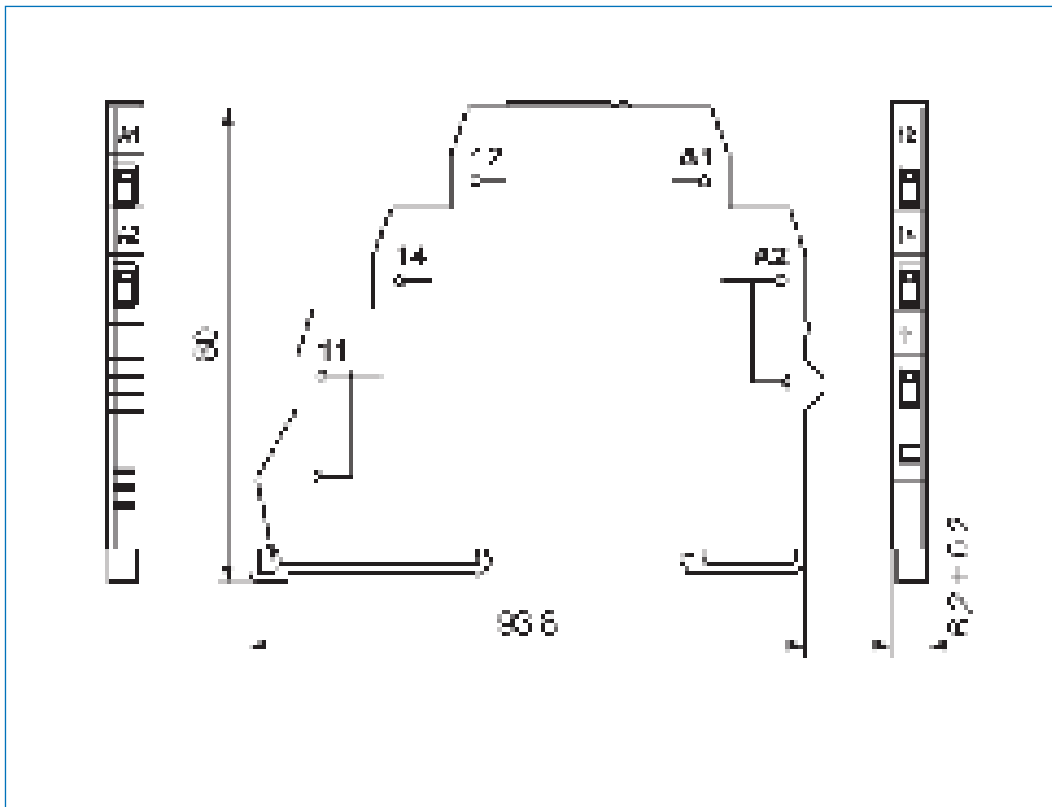
Storage temperature	-40 °C...+70 °C
Operating temperature	AC -40 °C...+55 °C DC -40 °C...+60 °C
Environment protection	EN 116000-3 RTI
Degree of protection	EN 60529 IP20



I-relays

Technical specifications

Dimensions



I-relays

Instructions

Installation, operation, maintenance

Installation

- Install relay correctly according identification to terminals
- Do not reverse the polarity of the coilconnection
- Relays can be mounted tight next to each other
- Warning! Never use silicon near by relays!

Operation

- Before operate always apply voltage to coil to check correct operation
- Also switching the load a few times is advised
- Do not use the relay in places with flammable gas as the arc generated from switching could ignite gasses

Maintenance

- When the relay does not appear to operate correct, please check presence of coil voltage
- Use a multimeter.
- If LED is used coil presence should be indicated, if coil voltage is present but the relay does not work, a short circuit of suppression diode is possible (The coil connection was reversed)
- If relay does not work after inspection, please replace the relay by a similar model



I-relays

Ordering codes

I relays		
I1-L-D012R	12 VDC	321000800
I1-L-D024R	24 VDC	321000801
I1-L-A024R	24 VAC/VDC	321000802
I1-L-A230R	230 VAC	321000803
I1-L-U2302R	230 VAC/VDC	321000804

** other voltages on request*





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