

SLI-relays for mA size loads: AC-control, DC-load

- Galvanic isolation 4 kV, 8 mm creep distance
- Effective interference elimination
- Compatible with NPN/PNP logic
- LED indication



General description

The relays are used as an interface between AC sensors and control systems. The integrated interference protection provides reliable operation even in very demanding electrical environments. Thanks to interference protection, signal cables can be run alongside power cables on, for example, cable racks for more than

1.5 km without capacitive cross-talk affecting relays. The relays have no mechanical parts, which provides very reliable application. The CRP models are especially designed for connecting to 2-wire sensors that generate leakage current. The CRP relays are blind to leakage currents up to 3.5 mA.

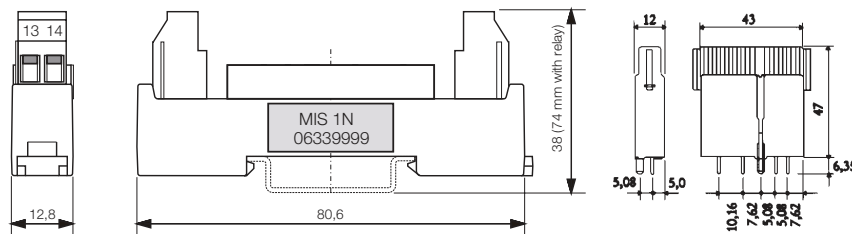
Technical data

(Values at +25 °C)

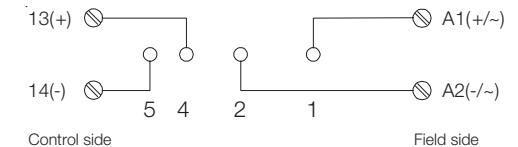
PRIMARY CIRCUIT		SLI25CR	SLI120CR	SLI120CRP	SLI230CR	SLI230CRP	SLI380CRS*
Input voltage	nom.	24 V AC	120 V AC	120 V AC	230 V AC	230 V AC	400 V AC
Input voltage	max.	32 V AC	140 V AC	140 V AC	265 V AC	265 V AC	440 V AC
Power consumption	max.	15 mA	7 mA	8 mA	6 mA	7.5 mA	5 mA
Input impedance	typical	2 kΩ	20 kΩ	17 kΩ	45 kΩ	35 kΩ	80 kΩ
Activation voltage	typical	16 V AC	80 V AC	80 V AC	170 V AC	170 V AC	320 V AC
Drop-out voltage	typical	14 V AC	60 V AC	60 V AC	110 V AC	140 V AC	220 V AC
Drop-out current	typical			3.5 mA		3.5 mA	
SECONDARY CIRCUIT							
Load voltage	max.	0-60 V DC	0-60 V DC	0-60 V DC	0-60 V DC	0-60 V DC	0-60 V DC
Voltage drop at max. load	typical	0.2 V DC	0.2 V DC	0.2 V DC	0.2 V DC	0.2 V DC	0.2 V DC
Load current	max.	50 mA	50 mA	50 mA	50 mA	50 mA	50 mA
Activation time	typical	20 ms	50 ms	20 ms	50 ms	40 ms	50 ms
Drop-out time	typical	60 ms	50 ms	40 ms	50 ms	40 ms	50 ms
Operating temperature		See table below					

*The socket is securely fitted to the relay.

Dimensions



Connections



AC input module

Ambient temperature is defined as the temperature in direct proximity to the relays. The surface temperature of the relay (measured at the

middle of the relay's top surface) must be kept under 70-75 °C for a long lifetime. Each 10 °C increase halves the lifetime of the relay.

Ambient temperature	Applies to	Limitations
-25 °C to +40 °C	All input relays	None
+40 °C to +55 °C	120 V AC and 230 V AC relays	Only every other module should be constantly activated when the relays are mounted beside one another.
+55 °C to +70 °C	Relays with voltages from 48-230 V AC	If the modules are in the activated state the majority of the time, the modules must be 12.5 mm apart. On a mounting base, every other position must be empty.

Ordering guide

Part number	Description	Input	Output	Mounting
SLI25CR	Input relay	24 V AC	0-60 V DC/50 mA	Plug-in
SLI120CR	Input relay	120 V AC	0-60 V DC/50 mA	Plug-in
SLI230CR	Input relay	230 V AC	0-60 V DC/50 mA	Plug-in
SLI120CRP	Input relay	120 V AC	0-60 V DC/50 mA	Plug-in
SLI230CRP	Input relay	230 V AC	0-60 V DC/50 mA	Plug-in
SLI380CRS	Input relay	400 V AC	0-60 V DC/50 mA	Plug-in
MIS1GN	Socket for input relays. Standard			DIN rail
JUMPER 16-13	Jumper bar for Delcon's sockets, max. 16/bar.			