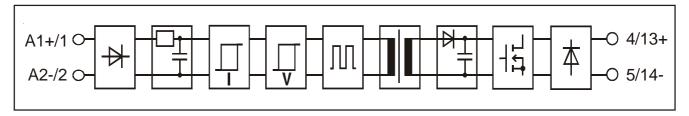


SL-series solid state input relay

- Plug-in fast input relay for 24 VDC voltage
- Switching frequency up to 10 kHz
- 50 mA maximum load current
- 0...60 VDC load voltage
- Works without logic supply (4 pole)
- For PLC input signal conditioning
- Immune to disturbances on signal lines
- Shielded signal cabling not required
- cULus tested (UL and CSA)
- CE (EMC and LVD tested)
- Integrated status LED

Block diagram



Specifications (at temperature of 25 °C)

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Input voltage	nominal	24 VDC
Input current	typical	6 mA
at nominal voltage	maximum	7 mA
Input voltage	minimum	18 VDC
range (abs.)	maximum	32 VDC
Input impedance	typical	$4 k\Omega$
Switch-on voltage	typical	16 VDC
	maximum	18 VDC
Switch-off voltage	typical	14 VDC
	minimum	12 VDC
Noise immunity	typical	0,7 μJ

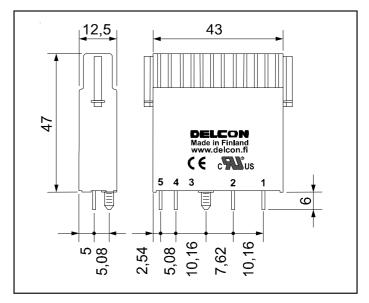
Secondary

Load voltage	minimum	0 VDC
	maximum	60 VDC
Load current	maximum	50 mA
Voltage drop at max. load	typical	0,2 V
	maximum	0,4 V
Switch-on delay	typical	5 μs
	maximum	10 μs
Switch-off delay	typical	20 μs
	maximum	25 μs

Physical dimensions and other data

Breakdown voltage 4000 VAC rms minimum Resistance minimum $10^{10}\,\Omega$ Material of casing UL 94 V-0 thermoplastic 40 g Weight typical Air/creepage distance minimum 8 mm Capacitance I/O typical 3 pF

Color of casing: white



Dimensions in mm.

Temperature limitations

There are no limitation needs for this relay.

Temperature range:

Storage: -40 °C...+70 °C Operation: -25 °C...+70 °C

Derating when switching inductive loads

This relay is ment for PLC inputs and similar loads. A clamp diode must be used when swiching inductive loads.

Fusing

To protect relay against short circuit and overload a fast fuse with the correct rating for the load and the capacity of the relay should be chosen, for instance from the Wickman 193 range. Note that when overload current is not large it is possible that the fuse will not protect the relay because of the tolerance on the fuse rating.

Approvals





The relay fulfils EMC-directive 89/336/EEC requirements. Product has been tested according generic standards EN50081-2 and EN50082-2. The relay fulfils also requirements of the low voltage directive 73/23/EEC.

Guarantee

The solid state I/O relays and accessories made by Delcon Oy are guaranteed free from design and manufacturing defects for a period of three years from the shipping date. For electromechanical relays the guarantee is one year. The guarantee liability is limited to replacement of defective material and related shipping charges. Defective products must be returned to the factory for evaluation. This guarantee does not cover damage due to incorrect use or electrical overload.

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