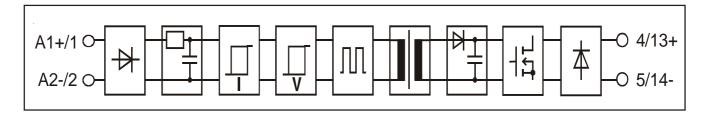


# SL-series solid state input relay

- Plug-in input relay for 110...125 VDC voltages
- 50 mA maximum load current
- 0...60 VDC load voltage
- Switches up to 500 Hz signals
- 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	110125 VDC
Input current	typical	4 mA
at nominal voltage	maximum	4,1 mA
Input voltage	minimum	95 VDC
range (abs.)	maximum	140 VDC
Input impedance	typical	31 kΩ
Switch-on voltage	typical	80 VDC
	maximum	95 VDC
Switch-off voltage	typical	60 VDC
	minimum	50 VDC
Noise immunity	typical	0,2 mJ

#### Secondary

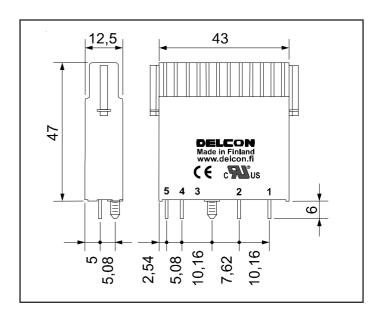
Load voltage	minimum maximum	0 VDC 60 VDC
Load current	maximum	50 mA
Voltage drop at max. load	typical	0,2 V
Constant on delay	maximum	0,4 V
Switch-on delay	typical maximum	0,5 ms 1 ms
Switch-off delay	typical maximum	0,5 ms 1 ms

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ical	0,2 m

# Physical dimensions and other data

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

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**



UL-file E 162828



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.

**Delcon Oy** 

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