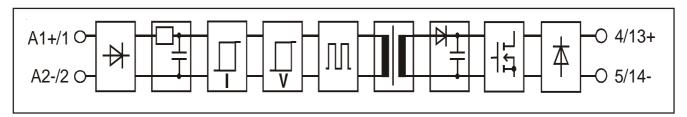


## SL-series solid state input relay

- DIN-rail mount input relay for 110...125 VDC voltage
- 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)

Primary			Secondary		
Input voltage	nominal	110125 VDC	Load voltage	minimum	0 VDC
Input current	typical	4 mA		maximum	$60\mathrm{VDC}$
at nominal voltage	maximum	4,2 mA	Load current	maximum	50 mA
Input voltage	minimum	95 VDC	Voltage drop at max. load	typical	0,2 V
range (abs.)	maximum	140 VDC		maximum	0,4 V
Input impedance	typical	31 kΩ	Switch-on delay	typical	0,5 ms
Switch-on voltage	typical	80 VDC		maximum	-
	maximum	95 VDC	Switch-off delay	typical	2 ms
Switch-off voltage	typical	$60\mathrm{VDC}$		maximum	-
	minimum	50 VDC			
Noise immunity	typical	0,2 mJ			

# Physical dimensions and other data

Breakdown voltage Resistance	minimum minimum	$4000$ VAC rms $10^{\scriptscriptstyle 10}\Omega$
Materials:		
housing	thermoplastic	UL 94 V-0
socket	thermoplastic	UL 94 V-2
Weight	typical	60 g
Air/creepage distance	minimum	8 mm
Capacitance I/O	typical	3 pF
Screw terminals:		
solid wire	4 mm <sup>2</sup>	(AWG 12)
stranded	2,5 mm <sup>2</sup>	(AWG 14)
Torque	maximum	0,5 Nm

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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