

#### SL-series solid state input relay

0 VDC

0,3 V 0.5 V

0,5 ms

0,5 ms

60 VDC 100 mA

minimum maximum

maximum

maximum

maximum

maximum

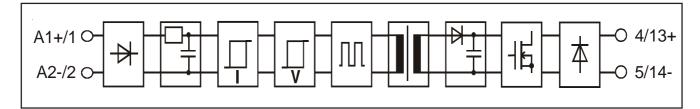
typical

typical

typical

- Plug-in input relay for 12 VDC voltage
- 100 mA maximum load current
- 0...60 VDC load voltage
- Secondary is conducting without input signal (NC)
- Works without logic supply (4 pole)
- For PLC input signal conditioning
- Immune to disturbances on signal lines
- Shielded signal cabling not required
  CE (EMC and LVD tested)
- CE (ENIC and LVD test
- Integrated status LED

## **Block diagram**



Secondary Load voltage

Load current

Switch-on delay

Switch-off delay

Voltage drop at 30 mA load

# Specifications (at temperature of 25 °C)

#### Primary

Input voltage	nominal	12 VDC	
Input current	typical	6,5 mA	
at nominal voltage	maximum	7,5 mA	
Input voltage	minimum	9 VDC	
range (abs.)	maximum	18 VDC	
Input impedance	typical	1,8 kΩ	
Switch-on voltage	typical	7,5 VDC	
	maximum	9 VDC	
Switch-off voltage	typical	6 VDC	
	minimum	5 VDC	
Noise immunity	typical	20 µJ	
(On-state means that relay is on and secondary is not			

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## Physical dimensions and other data

Breakdown voltage	minimum	4000 VAC rms
Resistance	minimum	10 <sup>10</sup> Ω
Material of casing	thermoplastic	UL 94 V-0
Weight	typical	40 g
Air/creepage distance	minimum	8 mm
Capacitance I/O	typical	3 pF

Color of casing: white

#### 12,5 43 47 DELCON le in Finland w.delcon.fi CE 5 4 2 3 TĮ Ê ശ 10,16 10,16 5,08 2,54 5,08 7,62

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**

CE

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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