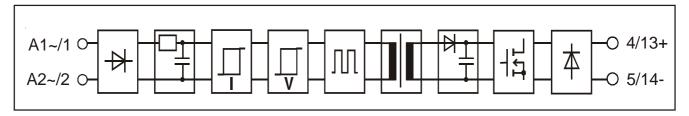


# SL-series solid state input relay

- Plug-in input relay for 220...240 VAC voltages
- 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
- · For use with proximity switches
- · 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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220...240 VAC Input voltage nominal typical Input current 6.5 mA at nominal voltage maximum 7,5 mA 190 VAC Input voltage minimum 265 VAC range (abs.) maximum Input impedance  $35~\mathrm{k}\Omega$ typical Switch-on voltage typical 170 VAC maximum 190 VAC Switch-off voltage typical 140 VAC minimum 120 VAC Switch-off current typical

Noise immunity

3,5 mA typical 30 mJ

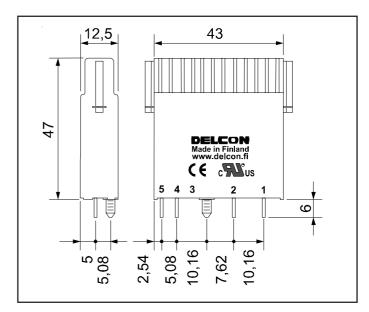
### Secondary

Load voltage minimum 0 VDC 60 VDC maximum Load current maximum 50 mA Voltage drop at max. load typical 0,2 V 0,4 V maximum Switch-on delay 40 ms typical maximum Switch-off delay typical 40 ms maximum

# Physical dimensions and other data

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

Color of casing: orange



Dimensions in mm.

# **Temperature limitations**

# Ambient temperature -25 °C...+40 °C No limitations +40 °C...+55 °C Only every other relay should be in on-state when assembled side by side. +55 °C...+70 °C If relays are most of the time on, there should be a gap in both sides at least 12,5 mm. In multichannel mounting bases every other place should be empty.

#### 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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