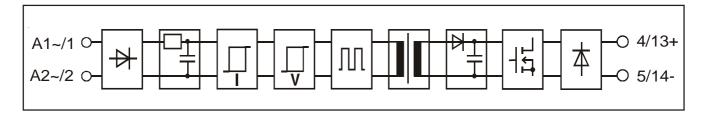


SL-series solid state input relay

- 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
- Internal transient protection in input side
- · 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

Input voltage nominal 220...240 VAC Input current typical 5 mA at nominal voltage maximum 6 mA Input voltage 190 VAC minimum range (abs.) 265 VAC maximum Input impedance typical $45 \, \mathrm{k}\Omega$ Switch-on voltage 170 VAC typical maximum 190 VAC 110 VAC Switch-off voltage typical

80 VAC minimum

Noise immunity 55 mJ typical

Secondary

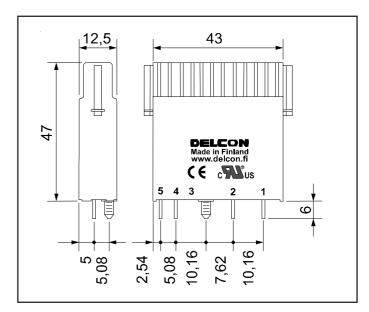
Load voltage minimum 0 VDC 60 VDC maximum Load current maximum 50 mA Voltage drop at max. load 0,2 V typical 0,4 V maximum Switch-on delay typical 50 ms maximum Switch-off delay typical 50 ms

maximum

Physical dimensions and other data

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

Color of casing: yellow



Dimensions in mm.

Temperature limitations

Ambient temperature	Limitation
-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.

Delcon Oy

 Veikkointie 4
 Tel. +358 9 7771180

 03100 Nummela
 Fax +358 9 77711840

 Finland
 www.delcon.fi

9.8.2004