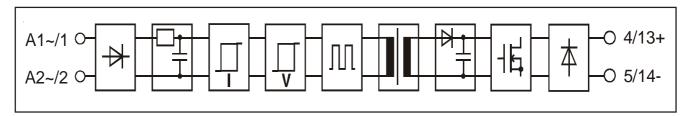


SL-series solid state input relay

- Plug-in input relay for 220...240 VAC voltages
- 100 mA maximum load current
- 0...60 VDC load voltage
- Secondary is conducting without input signal (NC)
- 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)

Pi	rin	na	rv
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Input voltage	nominal	220240 VAC		
Input current	typical	5 mA		
at nominal voltage	maximum	6 mA		
Input voltage	minimum	190 VAC		
range (abs.)	maximum	265 VAC		
Input impedance	typical	45 kΩ		
Switch-on voltage	typical	170 VAC		
	maximum	190 VAC		
Switch-off voltage	typical	110 VAC		
	minimum	80 VAC		
Noise immunity	typical	55 mJ		
(On-state means that relay is on and secondary is not				
conducting.)				

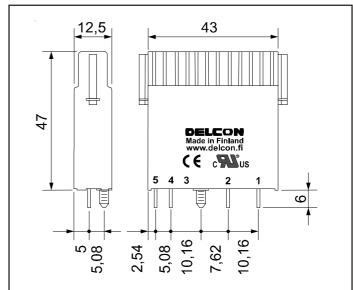
Secondary

Load voltage	minimum maximum	0 VDC 60 VDC
Load current	maximum	100 mA
Voltage drop at 30 mA load	typical maximum	0,3 V 0.5 V
Switch-on delay	typical	50 ms
	maximum	-
Switch-off delay	typical maximum	100 ms
	maximam	

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 typical 40 g Air/creepage distance minimum 8 mm Capacitance I/O 3 pF typical

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.

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