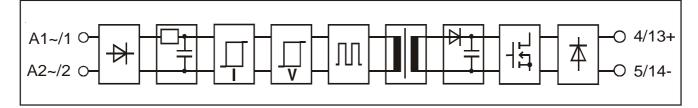


## SL-series solid state input relay

- DIN-rail mount input relay for 380...400 VAC voltages
- 100 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 applies not required.
- Shielded signal cabling not requiredCE (EMC and LVD tested)
- Integrated status LED
- · megrateu status L

# Block diagram



Secondary

### Specifications (at temperature of 25 °C)

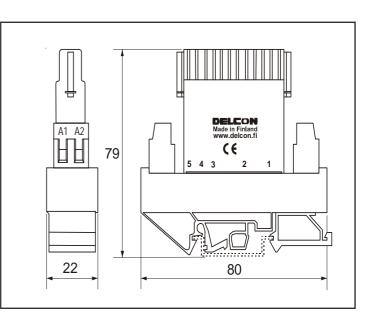
#### **Primary**

Input voltage	nominal	380400 VAC	Load voltage	minimum	0 VDC
Input current	typical	4,6 mA		maximum	60 VDC
at nominal voltage	maximum	5 mA	Load current	maximum	100 mA
Input voltage	minimum	350 VAC	Voltage drop at 50 mA load	typical	0,2 V
range (abs.)	maximum	440 VAC		maximum	0,4 V
Input impedance	typical	80 kΩ	Switch-on delay	typical	50 ms
Switch-on voltage	typical	320 VAC		maximum	-
	maximum	350 VAC	Switch-off delay	typical	50 ms
Switch-off voltage	typical	220 VAC		maximum	-
	minimum	180 VAC			
Noise immunity	typical	95 mJ			

## Physical dimensions and other data

Breakdown voltage Resistance Materials:	minimum minimum	4000 VAC rms $10^{10} \Omega$
housing	thermoplastic	UL 94 V-0 UL 94 V-2
Weight	thermoplastic typical	75 g
Air/creepage distance Capacitance I/O	minimum typical	8mm 3pF
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: yellow



Dimensions in mm.

### **Temperature limitations**

Ambient temperature	Limitation
-25 °C+40 °C	Input voltage 440 VAC (absolute maximum).
+40 °C+55 °C	Input voltage 400 VAC (absolute maximum).
+55 °C+70 °C	Input voltage 380 VAC (absolute maximum).

#### 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**

CRUS UL-file E 162828

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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