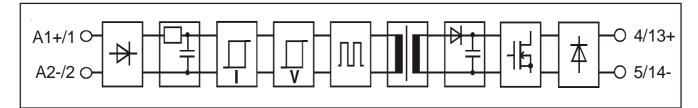


# SL-series solid state input relay

- · Plug-in input relay for 220...250 VDC voltages
- 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)
- Integrated status LED

# **Block diagram**



# Specifications (at temperature of 25 °C)

#### **Primary**

Input voltage	nominal	220250 VDC	
Input current	typical	3,7 mA	
at nominal voltage	maximum	4,0 mA	
Input voltage	minimum	190 VDC	
range (abs.)	maximum	265 VDC	
Input impedance	typical	68 kΩ	
Switch-on voltage	typical	170 VDC	
	maximum	190 VDC	
Switch-off voltage	typical	110 VDC	
	minimum	80 VDC	
Noise immunity	typical	1 mJ	
(On-state means that relay is on and secondary is not			

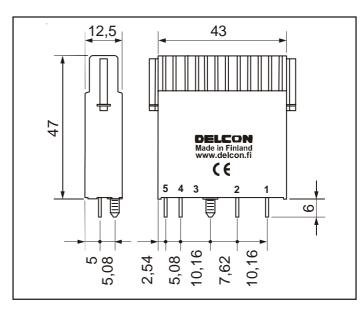
#### Secondary Load volta

Load voltage	minimum maximum	0 VDC 60 VDC
Load current	maximum	100 mA
Voltage drop at 30 mA load	typical	0,3 V
	maximum	0,5 V
Switch-on delay	typical	1 ms
	maximum	-
Switch-off delay	typical	1 ms
	maximum	-

# conducting.)

# Physical dimensions and other data





Dimensions in mm.

### **Temperature limitations**

Ambient temperature	Limitation
-25 °C+55 °C	No limitations
+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 ºC+70 ºC
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.

**Delcon Oy** Veikkointie 4 03100 Nummela Finland

Tel. +358 9 7771180 Fax +358 9 77711840 www.delcon.fi

27.2.2004