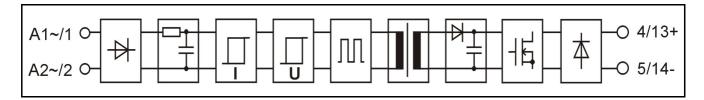


SL-series plug-in relay

## Main features

- Solid state input relay
- cULus Listed, CE (EMC and LVD)
- Integrated status LED
- Used with mechanical limit switches and also with long signal cables
- Normally closed function

## Functional block diagram



## Main specifications

Breakdown voltage I/O	minimum	4300	VAC rms
Air/creepage distances I/O	minimum	8	mm
Capacitance I/O	typical	3	pF
Material of the casing	PBT	UL 94V-0	
Colour of the casing		Yellow	
Weight	typical	40	g
Temperature range:			
Storage	range	-40+70	°C
Operation	range	-25+70	<b>3</b> °

# Electrical specifications ( $T_A = 25 \ ^{\circ}C$ )

Primary			Secondary				
Input voltage	nominal	110120	VAC	Load voltage	minimum	0	VDC
Input current at	typical	5,6	mA		maximum	60	VDC
nominal voltage	maximum	6	mA	Load current	maximum	100	mA
Input voltage	minimum	95	VAC	Voltage drop at 30 mA load	typical	0,3	V
range (abs.)	maximum	140	VAC		maximum	0,5	
Input impedance	typical	21	kΩ	Switch on delay	typical	40	ms
Switch-on voltage	typical	80	VAC	Switch-on delay	maximum	-	
	maximum	95	VAC	Switch off dolog	typical	100	ms
Switch-off voltage	typical	60	VAC	Switch-off delay	maximum	-	
	minimum	50	VAC	Leakage current (on-state)	maximum	10	μΑ

Ambient temperature ( $T_A$ ) means the temperature immediate in vicinity of relays, where the air flow meets the relays.

On-state means that relay is on and secondary is not conducting.



## **Temperature limitations**

Ambient temperature (T <sub>A</sub> )	Limitations
-25 ℃+40 ℃	No limitations
+40 ℃+55 ℃	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.

### Derating when switching inductive loads

This relay is meant for PLC inputs and similar loads. A clamp diode with the load must be used when switching inductive loads.

## Fusing

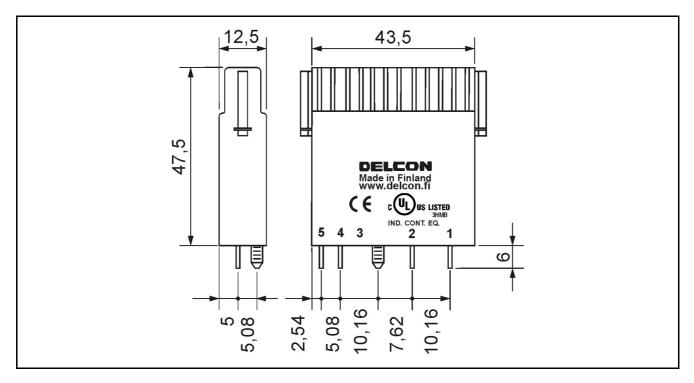
To protect relay against short circuit and overload a fast fuse with the correct rating for the load and the capacity of the relay should be chosen. Note that when overload current is not large it is possible that the fuse will not protect the relay because of the tolerance on the fuse rating.

## Assembling

Can be assembled to all MIS 1... -mounting sockets and MB/MBS 8/16... -mounting bases. Fixing with a captive screw.



### Mechanical dimensions



SLI-relay (plug-in), dimensions in mm.

## Approvals

CUUS LISTED 3HMB IND. CONT. EQ.	Certificate: E162828
CE	Fulfils main requirements of the EMC-directive 2004/108/EC. The secondary side of the relay has designed to operate up to specified low voltage levels, thus the relay does not comply with the high test voltages specified in the EN61000-4-5 standard. Fulfils requirements of the low voltage directive (LVD) 2006/95/EC.

#### Guarantee

This solid state I/O relay type made by Delcon Oy is guaranteed free from design and manufacturing defects for a period of 10 years from the production date. The guarantee liability is limited to replacement of defective material and related shipping charges. Defective products must be returned to the manufacturer for evaluation. This guarantee does not cover damage due to incorrect use or electrical overload.