

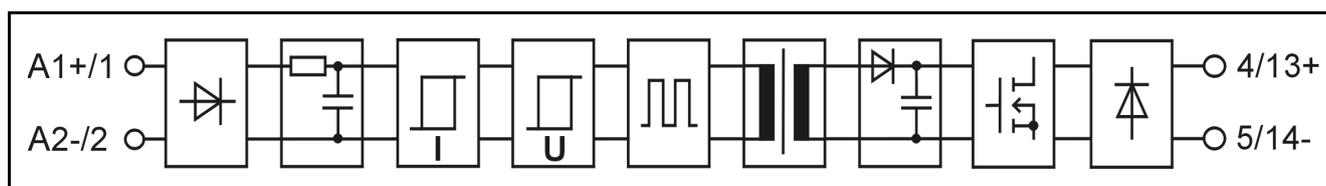
SLI 125CR

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

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	White		
Weight	typical	40	g
Temperature range:			
Storage	range	-40...+70	°C
Operation	range	-40...+70	°C

Electrical specifications ($T_A = 25\text{ °C}$)

Primary				Secondary			
Input voltage	nominal	110...125	VDC	Load voltage	minimum	0	VDC
	typical	4	mA		maximum	60	VDC
Input current at nominal voltage	maximum	4,2	mA	Load current	maximum	50	mA
	minimum	90	VDC	Voltage drop at max. load	typical	0,2	V
Input voltage range (abs.)	maximum	140	VDC		maximum	0,4	
	typical	31	kΩ	Switch-on delay	typical	0,3	ms
Switch-on voltage *	typical	80	VDC		maximum	0,5	ms
	maximum	90	VDC	Switch-off delay	typical	0,3	ms
Switch-off voltage	typical	60	VDC		maximum	0,5	ms
	minimum	50	VDC	Leakage current (off-state)	maximum	1	μA

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

* When the operational temperature range is $-25\text{ °C} \dots +70\text{ °C}$ the switch-on voltage is 93,5 VDC maximum (110 VDC -15 %). At -40 °C the switch-on voltage is 99,0 VDC maximum (110 VDC -10 %).

Limitations

Ambient temperature (T_A)	Limitations
-40 °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.

These limitations apply when assembled to the horizontal rail. If assembled to the vertical rail, must be taken care that the relays do not heat up too much.

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.

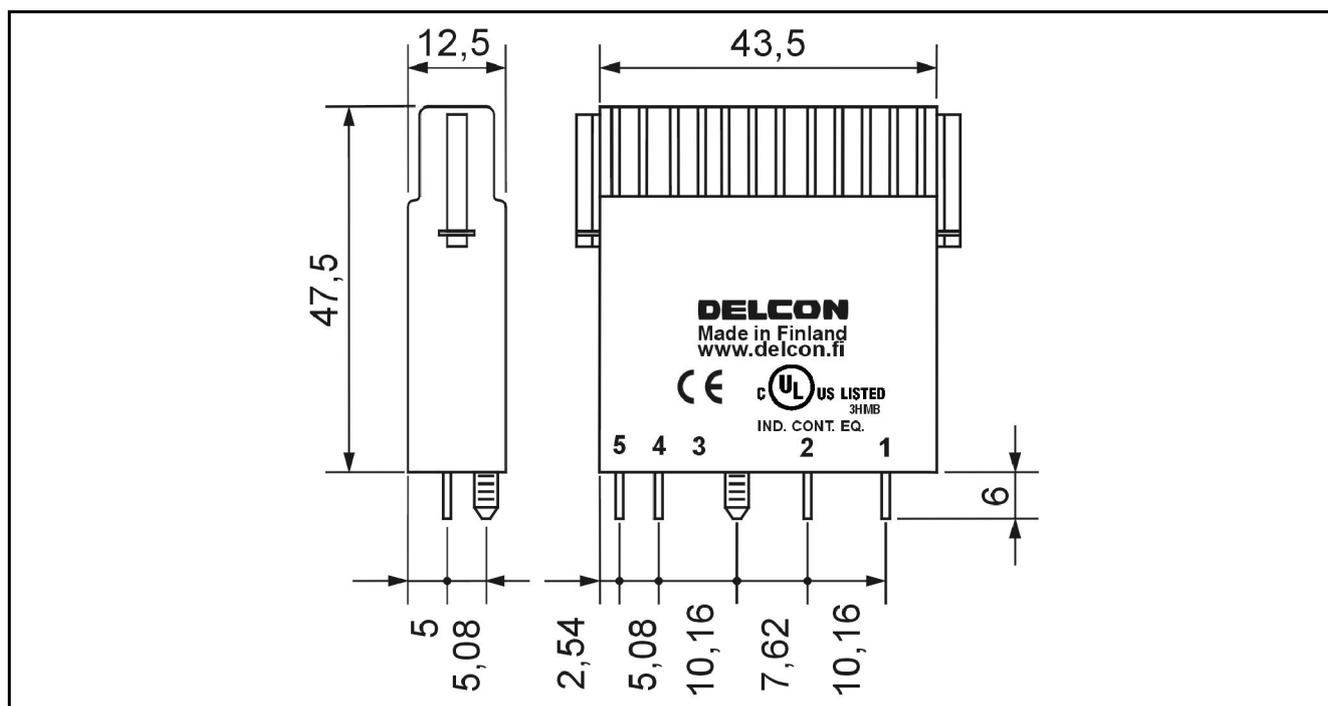
Fusing

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 all MB/MBS 8/16... -mounting bases. Fixing with a captive screw. The recommended installation is to the horizontal rail for better cooling of the relays.

Mechanical dimensions



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

Approvals

	<p>Certificate: E162828</p>
	<p>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.</p>

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.