

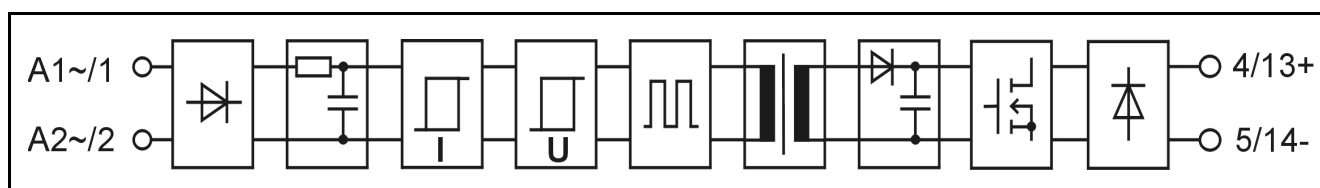
## SLI 230CR

SL-series plug-in input 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		Yellow	
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	220...240	VAC	Load voltage	minimum	0	VDC
Input current at nominal voltage	typical	4,6	mA		maximum	60	VDC
	maximum	5	mA	Load current	maximum	50	mA
Input voltage range (abs.)	minimum	190	VAC	Voltage drop at 50 mA load	typical	0,2	V
	maximum	265	VAC		maximum	0,4	
Input impedance	typical	50	kΩ	Switch-on delay	typical	50	ms
Switch-on voltage	typical	160	VAC		maximum	-	ms
	maximum	190	VAC	Switch-off delay	typical	50	ms
Switch-off voltage	typical	120	VAC		maximum	-	ms
	minimum	80	VAC	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 195 VAC maximum (230 VAC -15 %). At  $-40\text{ °C}$  the switch-on voltage is 207 VAC maximum (230 VAC -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.

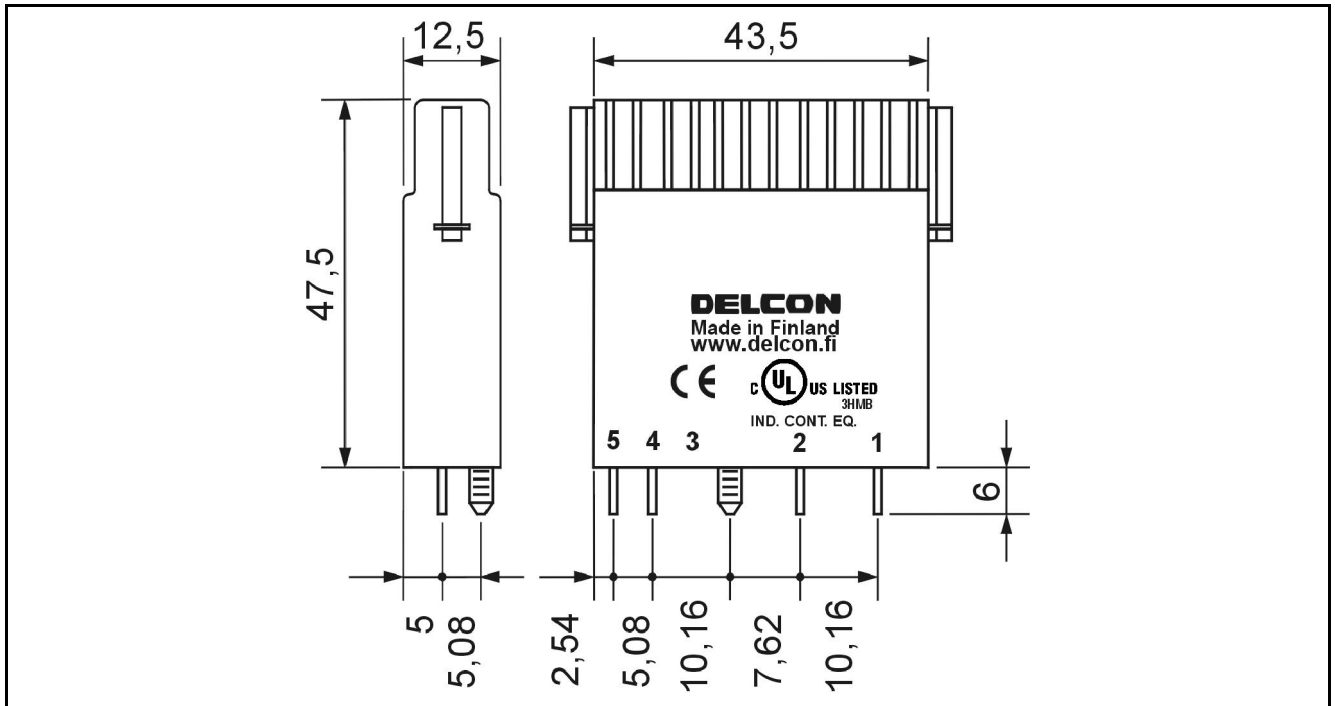
## Fusing

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 MB/MBS 8/16... -mounting bases and to PCU 1/PCI 1 PCB-sockets. 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.