

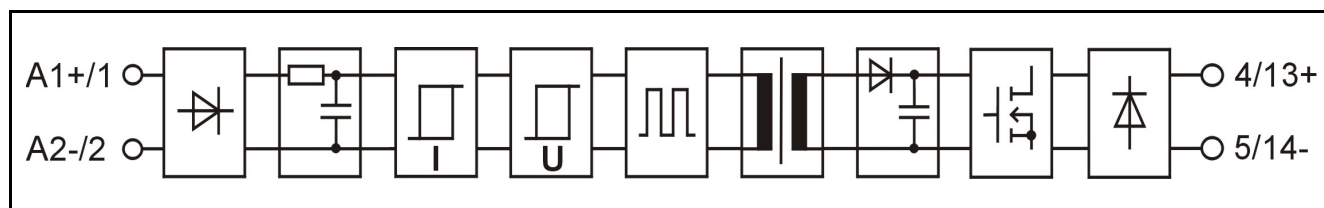
## SLI 24CRF

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
- Fast switching up to 10 kHz

### 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   | -25...+70 | °C      |

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

| Primary                          |         |    |     | Secondary                   |         |     |     |
|----------------------------------|---------|----|-----|-----------------------------|---------|-----|-----|
| Input voltage                    | nominal | 24 | VDC | Load voltage                | minimum | 0   | VDC |
| Input current at nominal voltage | typical | 6  | mA  |                             | maximum | 60  | VDC |
|                                  | maximum | 7  | mA  | Load current                | maximum | 50  | mA  |
| Input voltage range (abs.)       | minimum | 18 | VDC | Voltage drop at max. load   | typical | 0,2 | V   |
|                                  | maximum | 32 | VDC |                             | maximum | 0,4 | V   |
| Input impedance                  | typical | 4  | kΩ  | Switch-on delay             | typical | 5   | μs  |
| Switch-on voltage                | typical | 16 | VDC |                             | maximum | 10  | μs  |
|                                  | maximum | 18 | VDC | Switch-off delay            | typical | 20  | μs  |
| Switch-off voltage               | typical | 14 | VDC |                             | maximum | 25  | μs  |
|                                  | minimum | 12 | 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.

## Temperature limitations

No limitations.

## 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.

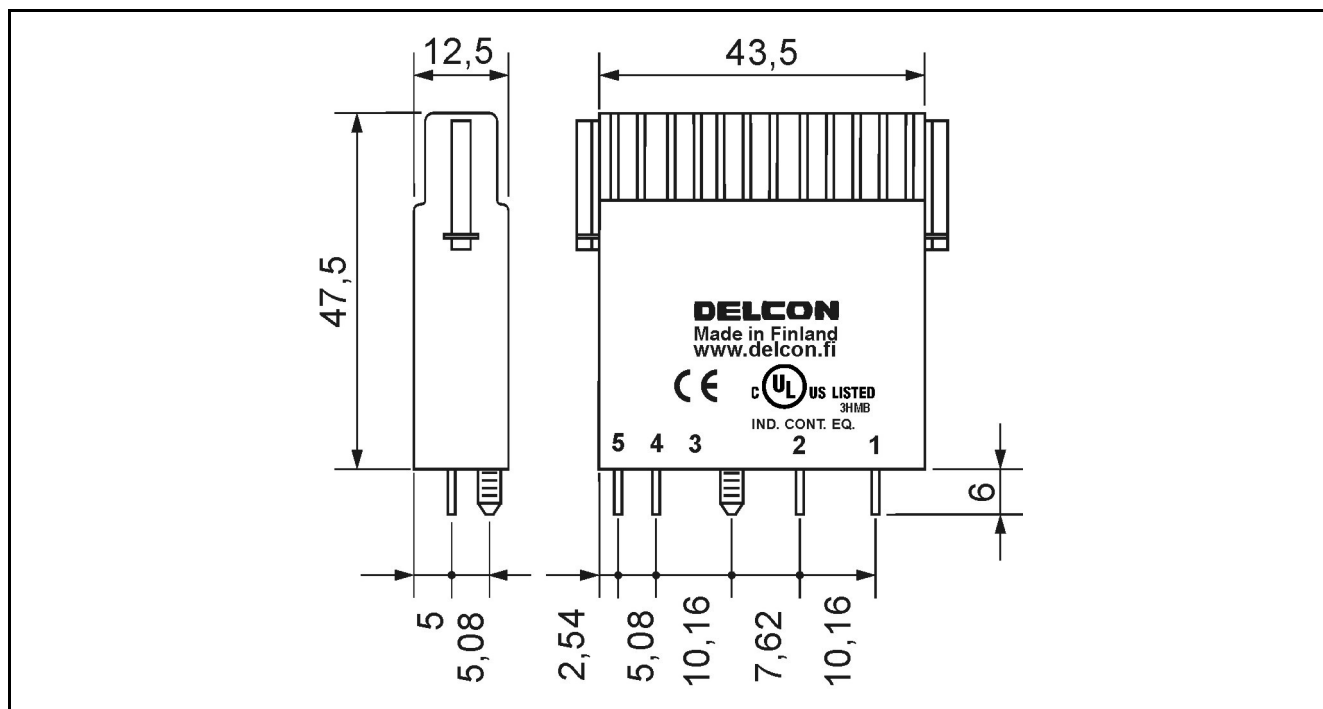
## Fusing

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.

## Mechanical dimensions



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

## Approvals

|  |  |
|--|--|
|  | Certificate: E162828   |
|  | <p>Fulfils main requirements of the EMC-directive 2004/108/EC.</p> <p>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.</p> <p>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.