

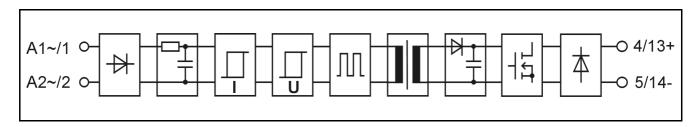
#### SLI 400CRS

SL-series DIN-rail relay

### **Main features**

- Solid state input relay with integrated status LED
- CE (EMC and LVD)
- Used with mechanical limit switches and also with long signal cables

# Functional block diagram



### Main specifications

Breakdown voltage I/O	minimum	4600	VAC rms		
Air/creepage distances I/O	minimum	8	mm		
Capacitance I/O	typical	3	pF		
Screw terminals:					
Field side	Wieland 8391/2 or equivalent, AWG 1222				
Logic side	Phoenix MKDS3/2 or equivalent, AWG 1224				
Materials:					
Relay casing	PBT	UL 94V-0			
DIN-rail socket	PVC/PA	UL 94V-0			
Colour of the relay casing		Yellow			
Weight	typical	70	g		
Temperature range:					
Storage	range	-40+70	$^{\circ}$		
Operation	range	-40+70	${\mathfrak C}$		

# Electrical specifications ( $T_A = 25$ °C)

Primary				Secondary			
Input voltage	nominal	400	VAC	Load voltage	minimum	0	VDC
Input current at	typical	4,2	mA	Load voltage	maximum	60	VDC
nominal voltage	maximum	4,5	mA	Load current	maximum	100	mA
Input voltage	minimum	340	VAC	Voltage drop at 50 mA load	typical	0,2	V
range (abs.)	maximum	440	VAC		maximum	0,4	
Input impedance	typical	95	kΩ	Switch-on delay	typical	50	ms
Switch-on voltage	typical	280	VAC	Switch-on delay	maximum	-	
*	maximum 340 VAC Switch-off delay	typical	50	ms			
Switch-off voltage	typical	230	VAC	Switch-on delay	maximum	-	
	minimum	180	VAC	Leakage current (off-state)	maximum	1	μΑ

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

\* Switch-on voltage is 340 VAC maximum over the operational temperature range -25 °C...+70 °C (400 VAC – 15 %). At -40 °C the switch-on voltage is 360 VAC maximum (400 VAC – 10 %).



#### Limitations

Ambient temperature (T <sub>A</sub> )	Limitations
-40 °C+40 °C	Input voltage 440 VAC (absolute maximum)
+40 ℃+70 ℃	Input voltage 400 VAC (absolute maximum)

## **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**

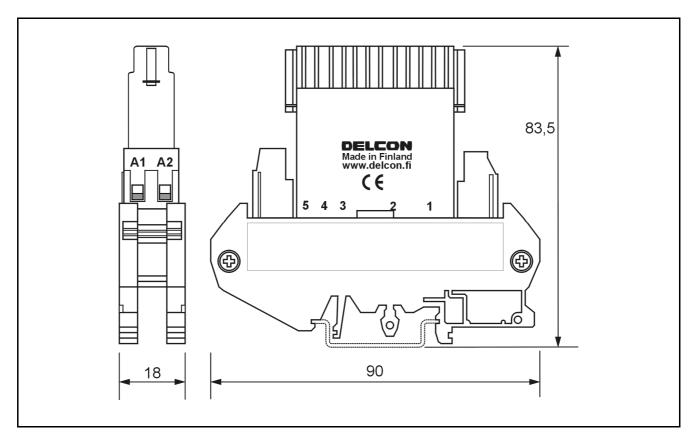
To protect relay against short circuit and overload a fast fuse with the correct rating for the load and the capacity of the relay should be chosen. Note that when overload current is not large it is possible that the fuse will not protect the relay because of the tolerance on the fuse rating.

## **Assembling**

Can be assembled to standard 35 mm DIN-rail. Use proper tool size to tighten the screws. Over-torqueing may cause screw terminal breakage. The recommended installation is to the horizontal rail for better cooling of the relays.



#### **Mechanical dimensions**



SLI 400CRS (dimensions in mm, nominal).

### **Approvals**



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 6 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.