

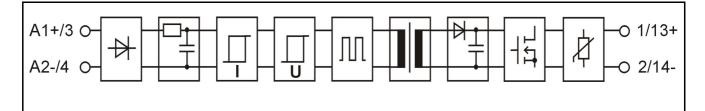
SLO 24CRA

SL-series plug-in relay

Main features

- Solid state output relay
- cULus Listed, CE (EMC and LVD)
- Integrated status LED
- For resistive and inductive loads

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		Red		
Weight	typical	40	g	
Temperature range:				
Storage	range	-40+70	D °	
Operation	range	-25+70	D °	

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

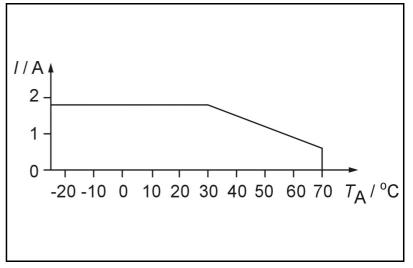
Primary				Secondary			
Input voltage	nominal	24	VDC		minimum	0	VDC
Input current at	typical	12	mA	Load voltage	nominal	250	VDC
nominal voltage	maximum	15	mA		maximum	300	VDC
Input voltage	minimum	16	VDC	Load current	maximum	1,8	А
range (abs.)	maximum	32	VDC	Load current	maximum	12	A (10 ms)
Input impedance	typical	2	kΩ	Voltage drop	typical	1	V (1,8 A)
Switch-on voltage	typical	16	VDC	Switch-on delay	typical	0,3	ms
	maximum	18	VDC		maximum	0,5	ms
Switch-off voltage	typical	14	VDC	Switch-off delay	typical	0,3	ms
	minimum	12	VDC		maximum	0,5	ms
				Inductive load, L/R	maximum	10	ms (250 V, 1,8 A)
				Inductive load, L/N	maximum	100	ms (24 V, 1,8 A)
				Leakage current (off-state)	maximum	1	mA

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



Temperature derating

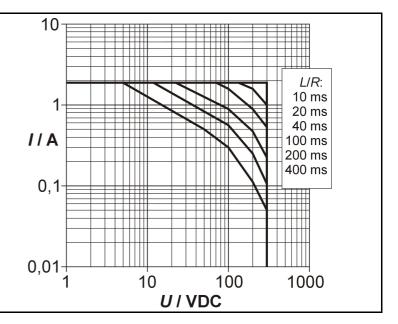
Allowed load is derated to 1/3 linearly from +30 °C to +70 °C ambient temperature. When relays are mounted together as a bank the maximum load current for long period of time should be restricted in total to 50 % of the current from the curve. I.e. all relays at 50 % load continuously or 50 % of the relays at 100 % load continuously or all relays at 100 % load 50 % of the time. This restriction does not apply if there is at least 12,5 mm gap between relays.



Derating curve for SLO 24CRA.

Derating when switching inductive loads

This relay is meant for resistive and inductive loads. The surge current is not allowed to exceed the specification. For reasons of heat dissipation, when the load will be switched frequently, the average current over a reasonable time should not exceed the specification for continuous operation.



Derating curve for inductive loads.

Fusing

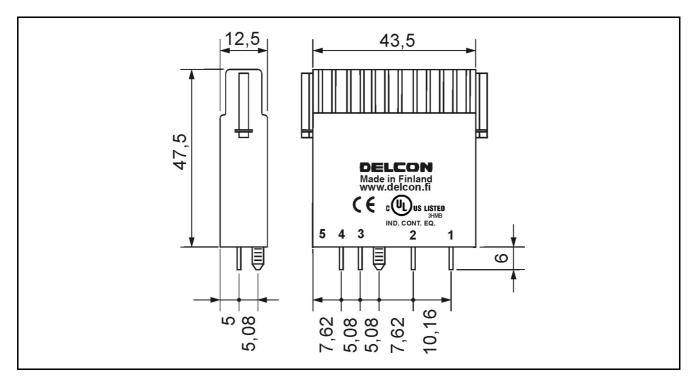
To protect relay against short circuit and overload a fast fuse with the correct rating for the load and the capacity of the relay should be chosen. Note that when overload current is not large it is possible that the fuse will not protect the relay because of the tolerance on the fuse rating.

Assembling

All MOS 1... -mounting sockets, all MB/MBS 8/16... -mounting bases.



Mechanical dimensions



SLO-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. 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 manufacturing 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.

Delcon Oy Veikkointie 4 FIN-03100 NUMMELA Finland