SLO 24COA

SL-series type plug-in relay, 1 CO 0,8A/250 VDC

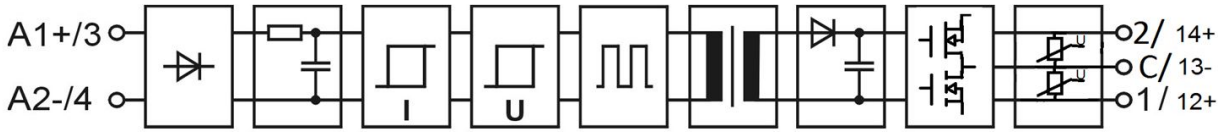
Typically used

- Versatile relay for various DC applications

Main features

- Switch over function with negative common
- 10-year warranty
- For resistive and inductive loads
- CE (EMC and LVD)
- Integrated status LED

Functional block diagram



Filters against electrical noises *galvanic isolation 4,6 kV* *CO contacts with protection*

Main specifications

Breakdown voltage I/O	minimum	4600	VAC rms
Air/creepage distances I/O	minimum	8	mm
Capacitance I/O	typical	3	pF
Material of the casing	PBT	UL 94 V-0	
Colour of the casing		Red	
Weight	typical	43	g
Temperature range:			
Storage	range	-40...+85	°C
Operation	range	-25...+75	°C

Electrical specifications (T_A = 25 °C)

Primary				**Secondary**			
Input voltage	nominal	24	VDC	Load voltage	minimum	0	VDC
Input current at nominal voltage	typical	9	mA		nominal	250	VDC
	maximum	10	mA		maximum	265	VDC
Input voltage range (abs.)	minimum	16	VDC	Load current	maximum	0,8	A
	maximum	32	VDC	Load current	maximum	12	A (10 ms)
Input impedance	typical	2,4	kΩ	Voltage drop	typical	0,4	V (0,8A)
Switch-on voltage *	typical	15	VDC	Switch-on delay (at 24 V input)	typical	0,5	ms
	maximum	16	VDC		maximum	1	ms
Switch-off voltage *	typical	12	VDC	Switch-off delay (at 24 V input)	typical	0,5	ms
	minimum	10	VDC		maximum	1	ms
				Inductive load, *L*/*R*	maximum	6	ms (250VDC, 0,8A)
				Inductive load, *L*/*R*	maximum	80	ms (24VDC, 0,8A)
				Switching frequency	maximum	200	Hz resistive load
				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.

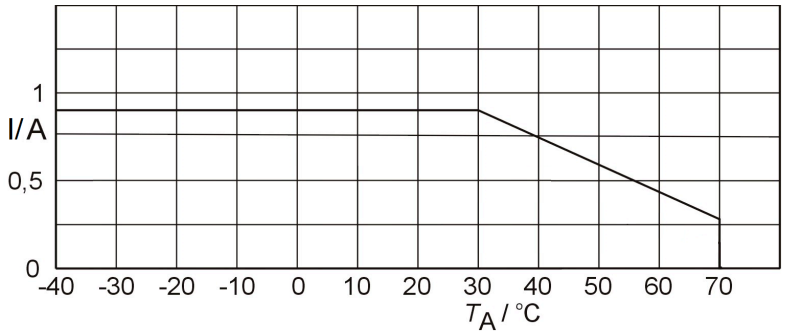
** In the operational temperature range -25 °C…+75 °C the switch-on voltage is 16 VDC maximum and the switch-off voltage is 10 VDC minimum.*

Delcon Oy
Veikkointie 4
FI-03100 NUMMELA
Finland

www.delcon.fi
sales@delcon.fi
Tel. +358 9 777 1180

Deratings

Allowed load is derated to 1/2 linearly from +30 ºC to +75 ºC ambient temperature.



Derating curve for SLO 24COA:

Derating when switching inductive loads

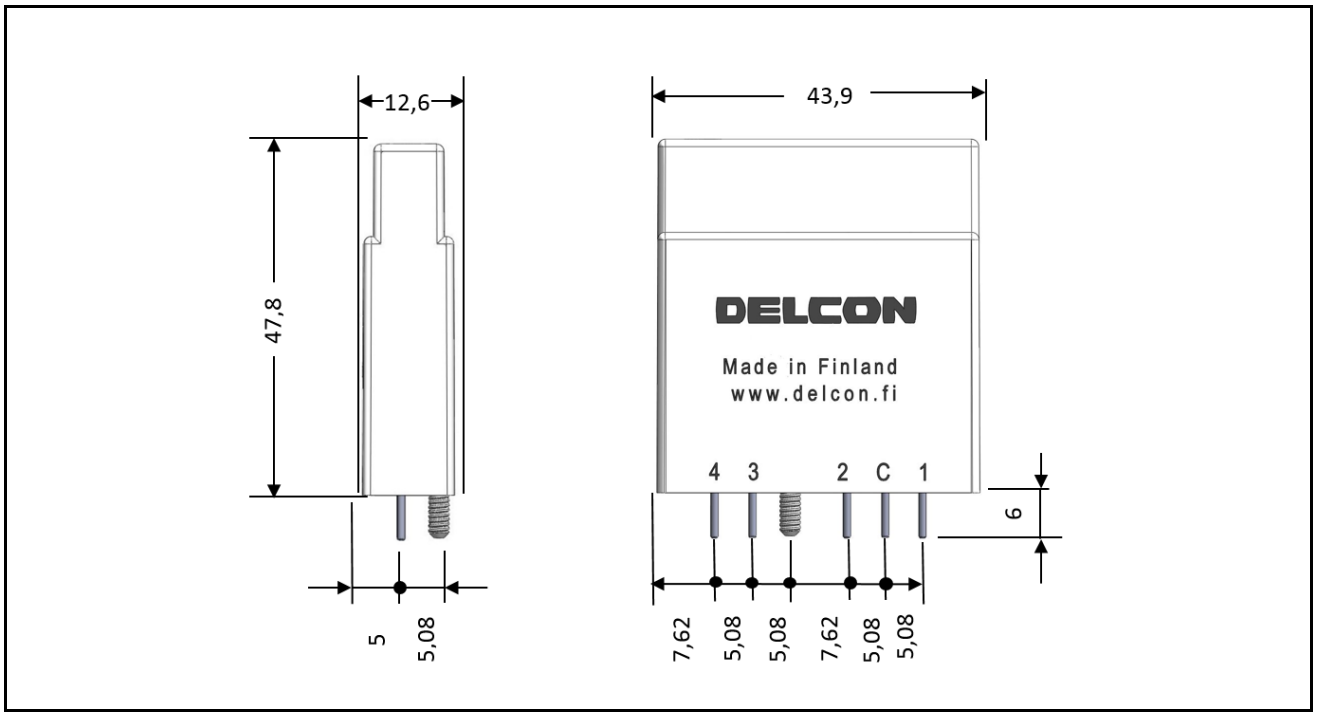
This relay is meant for resistive and inductive loads. The surge current is not allowed to exceed the specification. For reasons of heat dissipation, when the load will be switched frequently, the average current over a reasonable time should not exceed the specification for continuous operation.

Maximum inductances (L/R values) and switching frequency at L/R value. If the L/R value is for instance 0,1 x L/R max, allowed switching frequency is 10 Hz.

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.

Mechanical dimensions

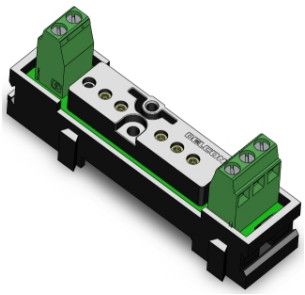


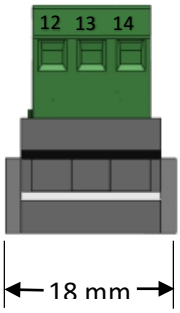
SLO 24COA-relay (plug-in), dimensions in mm, nominal.

Assembly & wiring

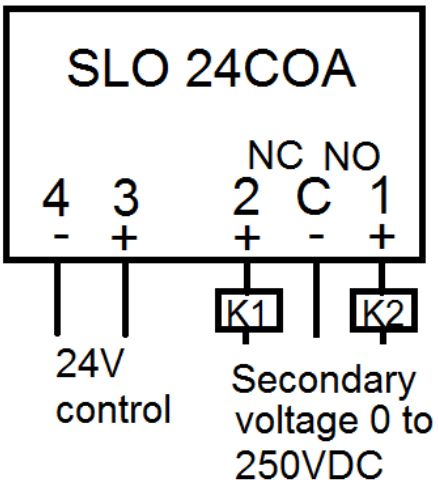
DIN-rail socket for single relay

MOS 1CO screw terminals





Wiring example (SLO 24COA)



Approvals

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.