

Digital Coupling Module KBD-2/L

For activation of lights



Switching on lights can lead to very high inrush current peaks.

A closing contact can bounce 3 to 7 times until it has closed completely. This creates a light arc which can melt the contact surface. Micro-welding can take place when the contact cools down (contact sticks).

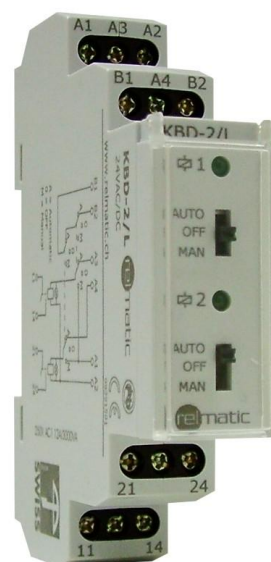
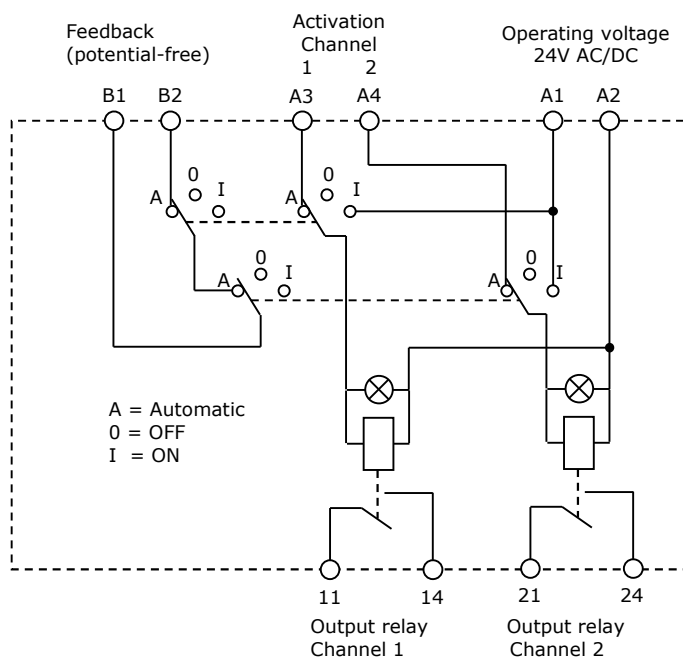
To prevent sticking of the contact, relays with a preceding tungsten contact are used.

Inrush current peaks for filament lamps of 165 A / max. 20 ms, or for fluorescent lamps of 800 A / max. 200 µs can be switched with these.

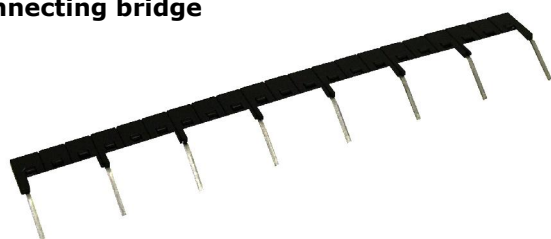
An 8-pin connecting bridge is available for wiring the A1 - A2 feed faster

- **2 independent circuits with 12 A**
Each separately activatable switching circuit is able to switch a capacity of 12 A / 250 V AC and inrush current peaks of 165 A / 20 ms or 800 A / 200 µs.
- **AUTO-OFF-ON with feedback**
Each of the two switching circuits can switch separately to automatic or manual mode. In automatic mode the contact with feedback is closed; therefore a logic 1 results on the controller. Multiple feedbacks can be connected in series.
- **DIN 45 mm housing**
The standardised housing enables the coupling module to be installed by means of a 45 mm cut-out behind the covering; it only requires a width of 17.5 mm (8.75 mm per channel) for this. The switching status indicators (LED) are clearly visible and the AUTO-OFF-ON switches accessible, with the connections located in a protected position behind the cover panel.

Block diagram



Connecting bridge



Technical data

Input side

Rated voltage Un A1 - A2	24 V AC/DC
Power consumption	480 mW
Tolerance	-15%; +10%

Input side

Switching voltage	250 V AC
Switching current / contact material	12 A / AC1 / preceding tungsten contact and AgSnO ₂
Max. peak current	Filament Lamps: 165 A / <20 ms, fluorescent lamps: 800 A / <200 µs
Switching capacity	3000 VA / AC1

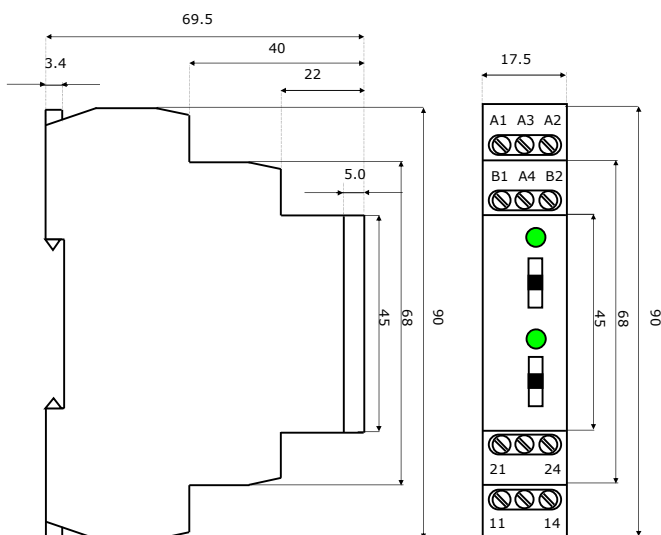
Switch for feedback

Max. switching capacity	100 mA / 30 V
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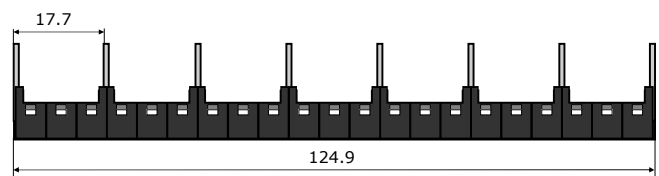
General data

Mechanical life	5 x 10 ⁶
Ambient temperature	-20°C ... +55°C
Storage temperature	-30°C ... +70°C
Test voltage coil / contact	2.5 kV
Mounting position	any
Fixing DIN rail	EN 50022-35
Protection for front	IP 40
Voltage limitation class	III
Degree of contamination	2
Connection cross section	2.5 mm ²
Weight	82 g
Standards	EN 61810-1, EN 618-10-1 + 2

Dimensional drawing



Connecting bridge



Device		Bestell-Nr.
Coupling module	2 working contacts, 2 activations, AUTO-OFF-ON with feedback	KBD-2/L
Connecting bridge	8-pin	AK-17-8