

Analogue Coupling Module KBA-1 / KBAi-1



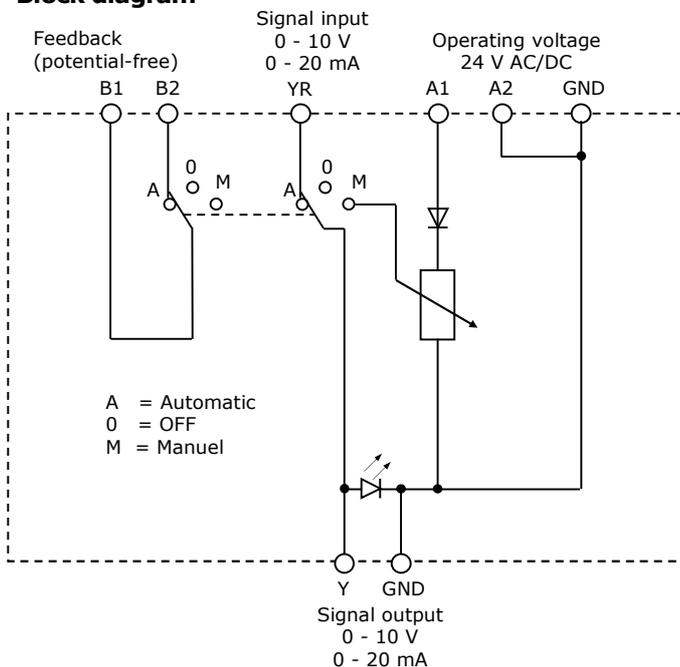
In building automation as well as in process control, it is very practical to switch an analogue signal of 0 - 10 V or 0 - 20 mA on and off without a controller with an analogue value transmitter or a manipulated variable transmitter during commissioning and servicing. This means, for example operating a valve, mixer flap and temperature values, etc. in manual mode. The switch informs the controller whether the coupling module is in automatic or manual mode.

The KBA-1/KBAi-1 coupling module contains a 0 - 10 V/0 - 20 mA signal input and a 0 - 10 V/0 - 20 mA signal output which is controlled by automatic mode or in manual mode the manipulated variable is set by the potentiometer on the front.

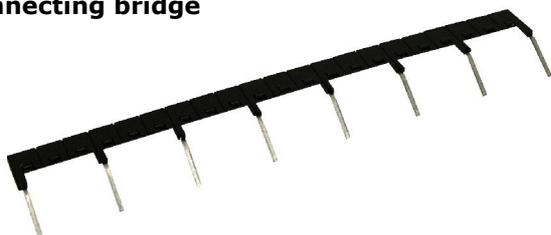
The 17.5 mm narrow DIN housing saves space in the switch cabinet and, thanks to its size, can also be installed in sub-distributors.

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

Block diagram



Connecting bridge



• Analogue manual mode

The coupling module can be switched over to manual mode. This allows an analogue signal of 0 - 10 V or 0 - 20 mA to be generated independently of a controller.

• AUTO-OFF-ON with feedback

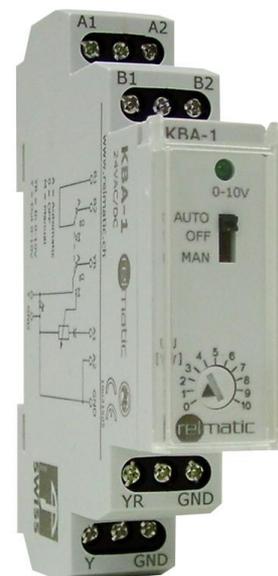
The coupling mode can switch to automatic or manual mode. In automatic mode the contact with feedback is closed, therefore a logic 1 results on the controller. Multiple feedbacks can be connected in series.

• DIN 45 mm housing

The standardised housing enables the coupling module to be installed by means of a 45 mm cutout behind the covering, it only requires a width of 17.5 mm for this. The switching status indicators (LED) are clearly visible and the AUTO-OFF-ON switches and the setting potentiometer accessible, with the connections located in a protected position behind the cover panel.

• Extremely compact design

It only requires a width of 17.5 mm in the switching cabinet.



Technical data

Input side

Rated voltage Un A1 - A2	24 V AC/DC
Tolerance	-15%; +10%
Current consumption at 24 V AC / 24 V DC	27 mA / 24 mA
Input signal YR	0 - 10 V / 0 - 20 mA

Output side

Output signal Y	0 - 10 V DC / 0 - 20 mA
Output current in manual switch position	1 mA (at 10V)
Output status indicator	Green LED (brightness proportional to the output signal)

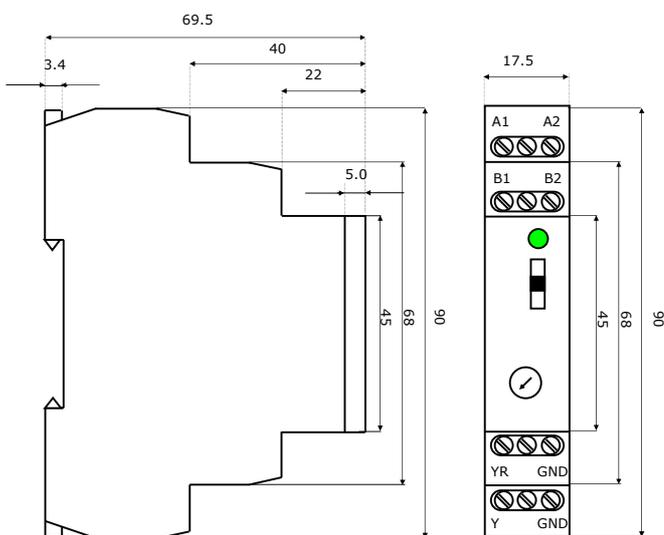
Switch for feedback

Max. switching capacity	100 mA / 30 V
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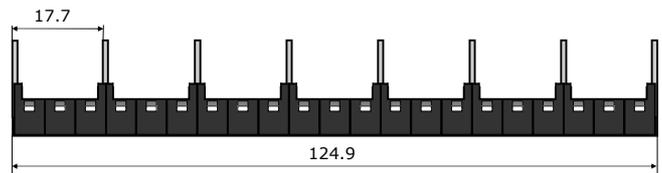
General data

Relative turn-on-time	100%
Switching AUTO / MAN	Short-circuit-proof
Ambient temperature	-20°C ... +55°C
Storage temperature	-30°C ... +70°C
Mounting position	Any
Fixing DIN rail	EN 50022-35
Protection class of front	IP 40
Voltage limitation class	III
Degree of contamination	2
Connection cross section	2.5 mm ²
Weight	52 g
Standards	EN 61000-6-3, EN 60730-1

Dimensional drawing



Connecting bridge



Device		Order No.
Coupling module	Analogue signal 0 - 10 V, AUTO-OFF-MAN with feedback	KBA-1
Coupling module	Analogue signal 0 - 20 mA, AUTO-OFF-MAN with feedback	KBAi-1
Connecting bridge	8-pin	AK-17-8