

Range controller, suitable for modulating actuators LM24A-SR, NM24A-SR, SF24A-SR, SM24A-SR and GM24A-SR



Technical data		
Electrical data	Nominal voltage	AC 24 V, 50/60 Hz
	Nominal voltage range	AC 21.6 27.6 V
	Power consumption	1 W + connected actuators
	For wire sizing	1.5 VA + connected actuators
	Connection	Terminals
Functional data	Control signal Y	Y1: DC 0 10 V
		Y2: 0 20 V phasecut
	Input impedance	$Y_1$ : 100 k $\Omega$ (0,1 mA)
		Y <sub>2</sub> : 8 kΩ (50 mW)
	Operating range	Y1: DC 2 10 V
		Y2: 2 10 V phasecut
	Direction of rotation	Reversible (direct / reverse acting)
	Positioning range	Adjustable Max. = $0.2 \dots 1 (\sim 20 \dots 90^{\circ} \text{ rotation } \triangleleft)$ Min. = $0 \dots 80\%$ of Max.
	Override control	<ul><li> <b>⊥</b> to terminal 6 = position 0 (closed)             <b>∼</b> to terminal 6 = position 1 (open)         </li></ul>
	Measuring voltage U	DC 2 10 V (max. 0.5 mA) for position 0 1
	Output actuator	Terminal 3: DC 2 10 V (max. 0.5 mA)
Safety	Protection class	III Safety extra-low voltage
	Degree of protection	IP40
	EMC	CE according to 89/336/EWG
	Mode of operation	Type 1 (to EN 60730-1)
	Ambient temperature	−20 +50°C
	Humidity test	To EN 60730-1
	Maintenance	Maintenance free
Dimensions / Weight	Dimensions	See «Dimensions» on page 2
	Weight	Approx. 400 g

## Safety notes



- The range controller is not allowed to be used outside the specified field of application, especially not in aircraft or any other form of air transport.
- Assembly must be carried out by trained personnel. Any legal regulations or regulations issued by authorities must be observed during assembly.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The device contains electrical and electronic components and is not allowed to be disposed
  of as household refuse. All locally valid regulations and requirements must be observed.



## **Product features**

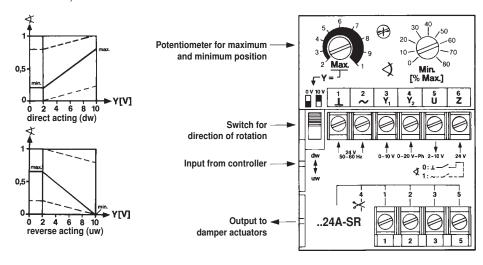
#### Application

In central air handling units and other

ducted systems, multiblade-dampers are mainly used as control and mixing dampers. The control characteristics of dampers, however, depend upon many factors. Even with correctly sized dampers and fans it is only possible to adjust the air volume with a universal adjustment kit. With the range controller SBG24, this is easily achieved, since the working range (|) of the dampers can be defined by the Min.-Max. setting potentiometer.

The SBG24 is usually installed close to the damper actuator (and at the same time used as connection box).

#### **Device description**

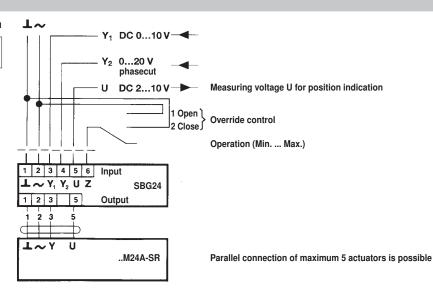


## **Electrical installation**

### Wiring diagram

Note

Connection via safety isolating transformer.



# **Dimensions [mm]**

### **Dimensional drawings**

