



MODEL	CONTROL	POWER SUPPLY	DESCRIPTION	TORQUE
MDB26	On/Off or floating	85-265 Vac	Damper actuators	15 Nm
MDB46		24 Vac/dc		
MDB56	Proportional 2-10 V			
MDB26M	On/Off or floating	85-265 Vac	Damper actuators with microswitches	
MDB46M		24 Vac/dc		



## APPLICATION AND USE

MDB26/46/56 are damper actuators operating air control dampers in ventilation and air-conditioning systems in building services installations for air dampers up to approx. 3 m<sup>2</sup>.

## TECHNICAL CHARACTERISTICS

<b>Control</b>	On/Off + floating (MDB26/26M/46/46M) Proportional (MDB56)
<b>Damper shaft</b>	∅ 8...15 mm / ∅ 8...20 mm
<b>Power supply</b>	85-265 Vac (MDB26/26M) 24 Vac/dc (MDB46/46M/56)
<b>Consumption</b>	2W / 4,5VA (MDB26/26M) 2W / 3,5 VA (MDB46/46M/56)
<b>Connection cable</b>	Supplied 1000 mm cable 3 x 0,75 mm <sup>2</sup> (MDB26/26M/46/46M) 4 x 0,75 mm <sup>2</sup> (MDB56)
<b>Torque</b>	15 Nm with nominal voltage
<b>Stroke</b>	60...120 s @90° (MDB26M/46M) < 150 s @90° (MDB26/46/56)
<b>Auxiliary switch</b>	n° 1 adjustable from the outside (MDB26M/46M)
<b>Auxiliary internal power supply</b>	250 Vac / 5 (2,5)A, 1 x SPDT(Ag) (MDB26M/46M) Supplied connection cable 1000 mm / 3 x 0,75 mm <sup>2</sup>
<b>Protection degree</b>	IP54 (downwards cable)
<b>Maintenance</b>	Free
<b>Temperature</b>	operating -30T50 °C storage -30T80 °C
<b>Ambient humidity</b>	5...95% r.H. (not condensing)

### MDB56 only

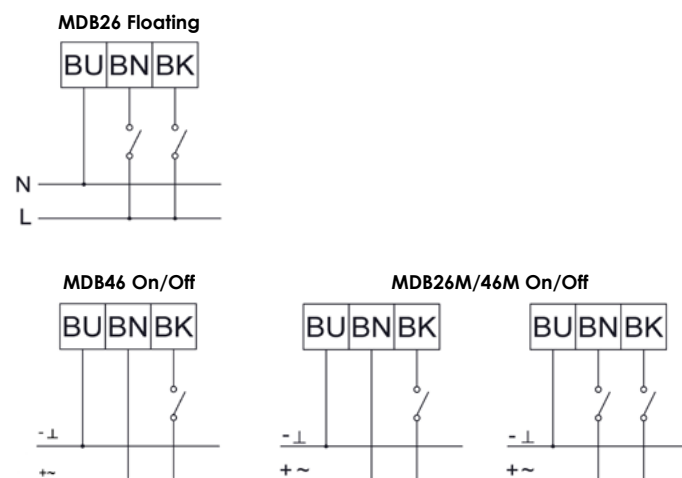
<b>Control signal Y</b>	0...10 Vdc o 2...10 Vdc (standard)
<b>Control signal U</b>	2...10 Vdc

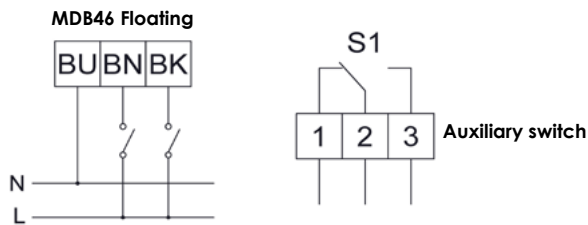
Directive compliance	MDB26/26M/46/46M/56
EMC	CE (2014/30/EU)
LVD	CE (2014/35/EU)
RoHS	CE (2011/65/EU)
Operation mode	Typ 1 (EN60730-1)
Nominal pulse voltage	0,8 Kv (EN60730-1)
Pollution	3 (EN60730-1)

## INSTALLATION AND MOUNTING

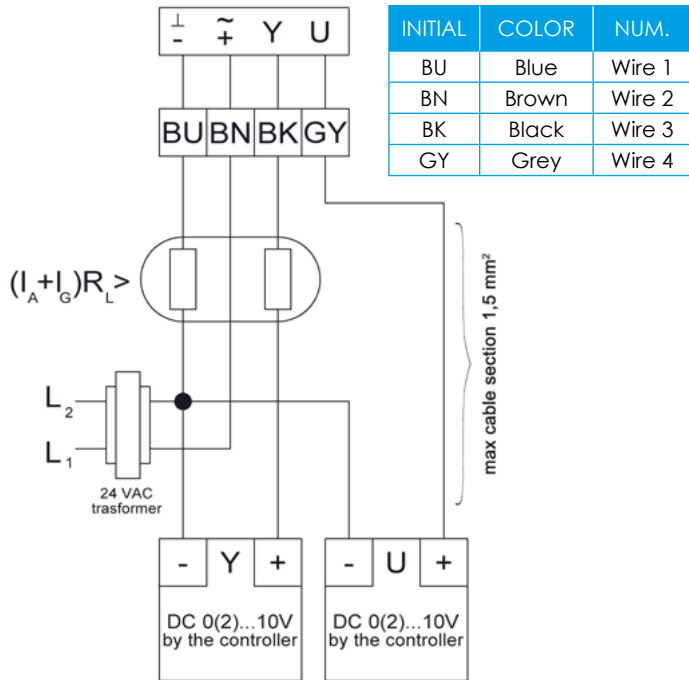
For actuation and control of dampers in ventilation and air-conditioning applications, the actuators should be mounted in dry environment, absolutely free from acrid fumes. In case of outdoor installation, the actuator has to be protected against climatic influences.

## WIRING DIAGRAMS





### MDB56



For MDB26x, MDB46x models use a cable with a section of at least 1.5 mm<sup>2</sup>.

## OPERATION

### Indication of the rotation angle (Fig. 1)

The damper position is indicated on a scale of 0°...90°.

### Damper shaft locking (Fig. 1)

It is carried out through the clamp for the dimensions:

∅ 8...12 mm and ∅ 8...16 mm.

For diameters ∅ 13...15 mm and ∅ 16...20 mm remove the clamp reduction.

clamp reduction

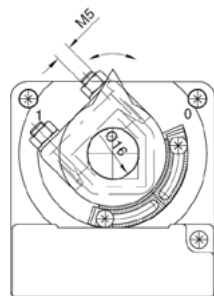


FIG. 1

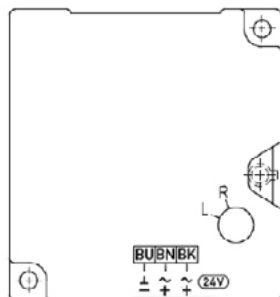


FIG. 2

### Setting of auxiliary switches MDB26-46 (Fig. 2)

The switching cams are not factory set. The auxiliary contacts can be set by the customer according to their needs within the 0°...10° or 80°...90° fields.

### Setting the direction of rotation MDB46 (Fig. 3)

The actuator is factory set to "R" (clockwise). To change the direction of rotation, turn the knob to "L".

### MDB56 setting

Mode switch with five positions at the housing:

1. Rotary direction right 2-10 Vdc;
2. Rotary direction right 0-10Vdc;
3. Adaption;
4. Rotary direction left 0-10 Vdc;
5. Rotary direction left 2-10 Vdc.

### Adaption drive:

- Actuator power off;
- Setting the mechanical end stops;
- Actuator power on;
- Adaption to enable;
- Actuator drive to position 0;
- Actuator drive to position 1;
- Adaption to disable if desired reached angular range or drive to endstop;
- "Y" refers to the measured angular range.

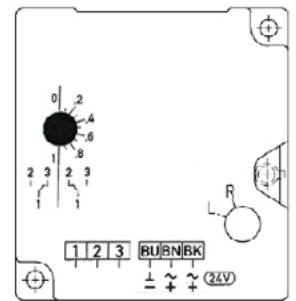
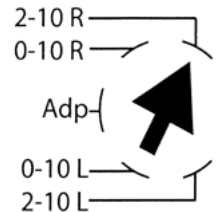
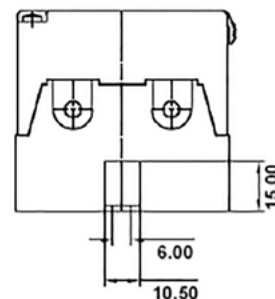
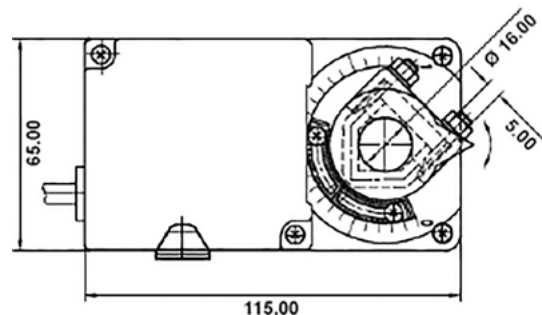
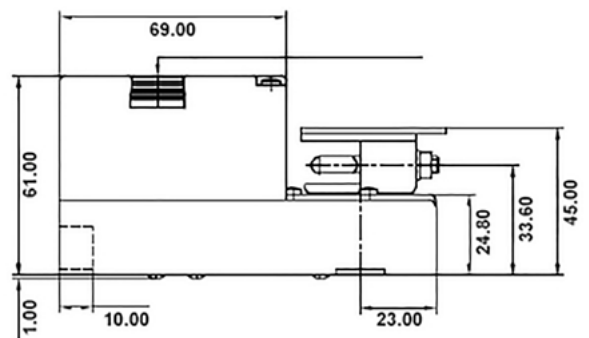


FIG. 3



## DIMENSIONS [mm]



The performances stated in this sheet can be modified without any prior notice