

Actuators for Dampers

MODEL	CONTROL	POWER SUPPLY	DESCRIPTION	TORQUE
MDB26	On/Off or floating	85-265 V AC	Damper actuators	15 Nm
MDB46		24 V AC/DC		
MDB56	Proportional 2-10 V	24 V AC/DC		
MDB26M	On/Off or floating	85-265 V AC	Damper actuators with microswitches	
MDB46M		24 V AC/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 m².

TECHNICAL CHARACTERISTICS

DESCRIPTION	MDB26-46-56
Control	On/Off + floating (MDB26/26M/46/46M) Proportional (MDB56)
Damper shaft	∅ 8...15 mm / ∅ 8...20 mm
Power supply	85-265 V AC (MDB26/26M) 24 V AC/DC (MDB46/46M/56)
Consumption	2 W/4,5 VA (MDB26/26M) 2 W/3,5 VA (MDB46/46M/56)
Connection cable	Supplied 1000 mm cable 3 x 0,75 mm ² (MDB26/26M/46/46M) 4 x 0,75 mm ² (MDB56)
Torque	15 Nm with nominal voltage
Stroke	60-120 s @90° (MDB26M/46M) < 150 s @90° (MDB26/46/56)
Auxiliary switch	N° 1 adjustable from the outside (MDB26M/46M)
Auxiliary internal power supply	250 V AC / 5 (2,5) A, 1 x SPDT(Ag) (MDB26M/46M) Supplied connection cable 1000 mm / 3 x 0,75 mm ²
Protection degree	IP54 (downwards cable)
Maintenance	Free
Temperature	Operating -30°C to 50°C Storage -30°C to 80°C
Ambient humidity	5-95% r.H. (not condensing)

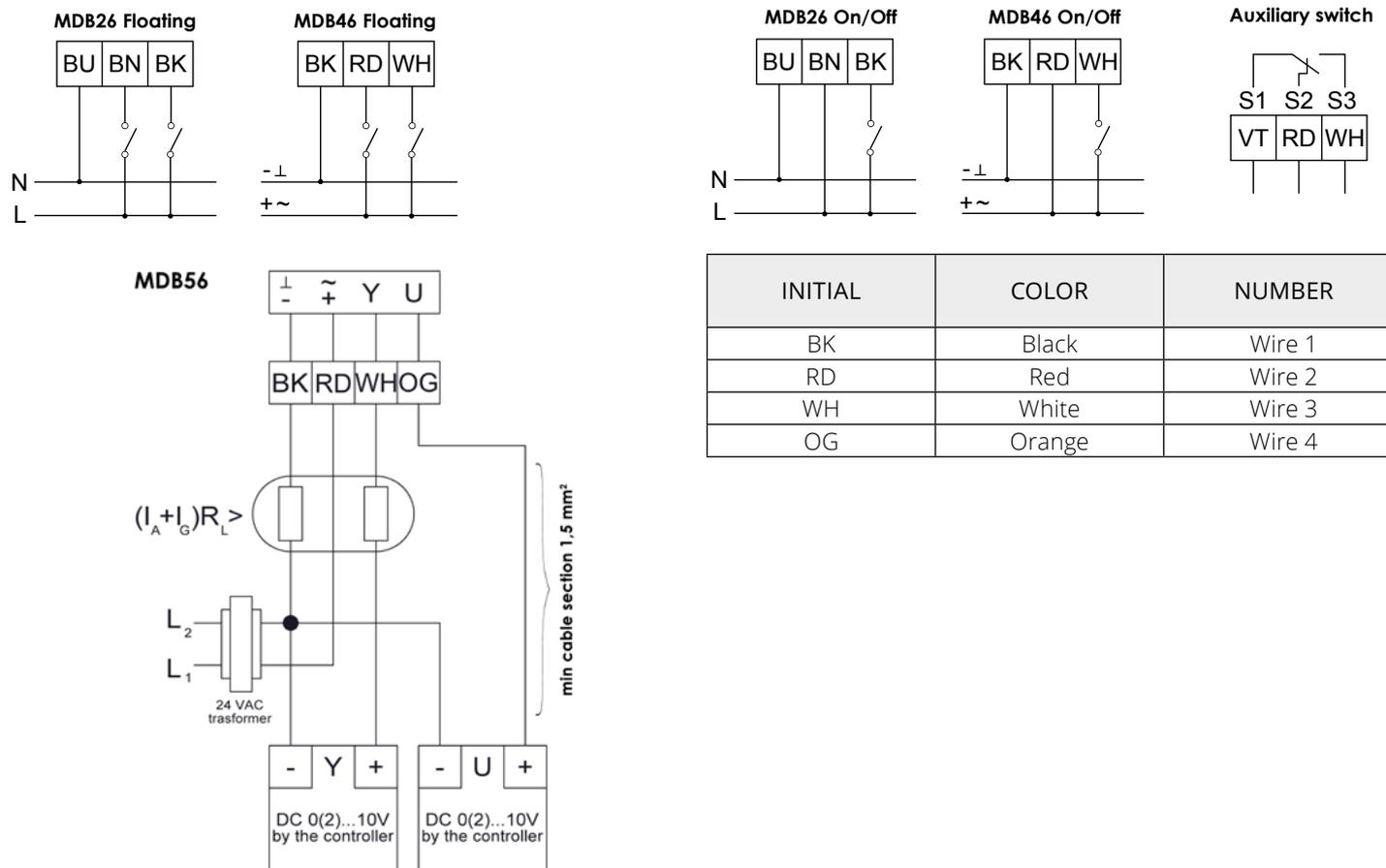
The performances stated in this sheet can be modified without any prior notice.

MDB56 ONLY	
Control signal Y	0-10 V DC or 2-10 V DC (standard)
Control signal U	2-10 V DC
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



For MDB26x, MDB46x models use a cable with a section of at least 1.5 mm².

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 Ø 8...16 mm.

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

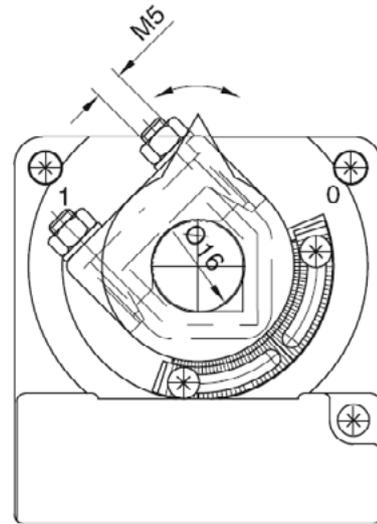


Fig.1

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..

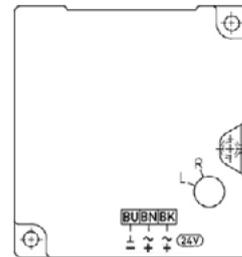


Fig.2

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".

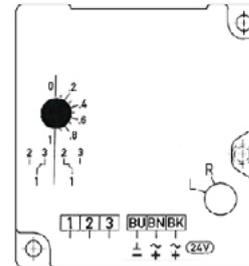


Fig. 3

MDB56 Setting

Mode switch with five positions at the housing:

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

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.

