

Model	Description	Control signal	Torque	Power supply
MDB28	Damper actuator	On/Off -3P	20Nm	230Vac/dc
MDB28M	Damper actuator with micro auxiliary switches	On/Off -3P		
MDB48	Damper actuator	On/Off -3P	20Nm	24Vac/dc
MDB48M	Damper actuator with micro auxiliary switches	On/Off -3P		
MDB58	Damper actuator	0..10V		



APPLICATION AND USE

MDB28/48/58 are damper actuators operating air control dampers in ventilation and air-conditioning systems in building services installations for air dampers up to approx. 4 m².

TECHNICAL CHARACTERISTICS

Control: On/Off+floating (MDB28/28M/48/48M)
Proportional (MDB58)

Power supply:
MDB28/28M: 230Vac (50-60Hz)
MDB48/48M/58: 24Vac (50-60Hz)

Consumption:
MDB28/28M: 3W / 7VA
MDB48/48M/58: 3W / 4,5VA

Connection cable: 1000 mm / 0,75 mm²

Angle of rotation: 0°...max 95°

Torque: 20 Nm

Running time: <150 s / 90°

Room temperature: -30T+50°C

Auxiliary switches
MDB28M/48M only: 2x SPDT - 250Vac, 5 (2,5) A

Protection degree: IP54

Weight: 1,7 Kg

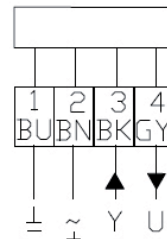
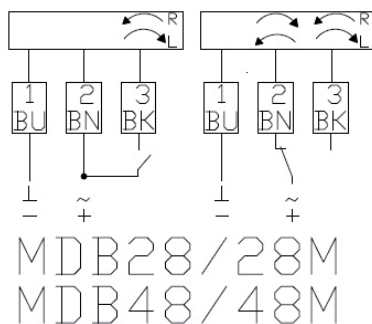
Dimensions: look at the picture on page 2

MDB58 only:
control signal (Y): 0(2)...10Vdc or 4...20mA *
position feedback (U): 0(2)..10 Vdc, max 5mA *

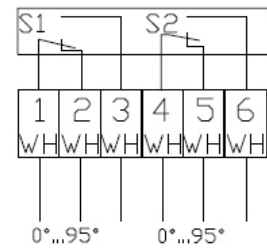
* (selectable by dip switch 4)

Directives:
EMC CE (2004/108/EG)
LVD CE (2006/95/EG)
EN 60730-1

WIRING DIAGRAMS



MDB58



Auxiliary switches

Legend

Code	Colour	Num.
BU	Blue	cabl 1
BN	Brown	cabl 2
BK	Black	cabl 3
GY	Grey	cabl 4

OPERATION

On/Off

Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position "R", the actuator moves to position 1. If also BK (1+2+3) is connected to the power supply the actuator is moving to position 0.

3- point.

Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position "R" the actuator moves to position 1. If the power supply is interrupted the actuator maintains its current position. If also BU+BK (1+3) are connected to the power supply the actuator is moving in direction 0. The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Manual override

Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch

R/CW= clockwise

L / CCW= counter clockwise



L / CCW

R / CW

ASSEMBLING

Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Damper shaft locking (Fig. 1)

By the locking clamp to the damper shaft:

- ◇ 9...18 mm
- Ø 9...26 mm

MDB58 only

Through connecting the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 0(2)...10VDC, the actuator moves to its specified position. Position feedback 0..100% is available through the feedback signal U (2..10Vdc).

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

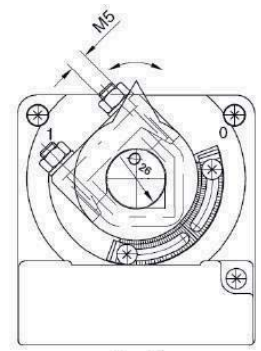
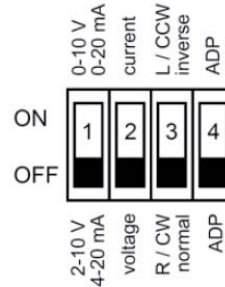


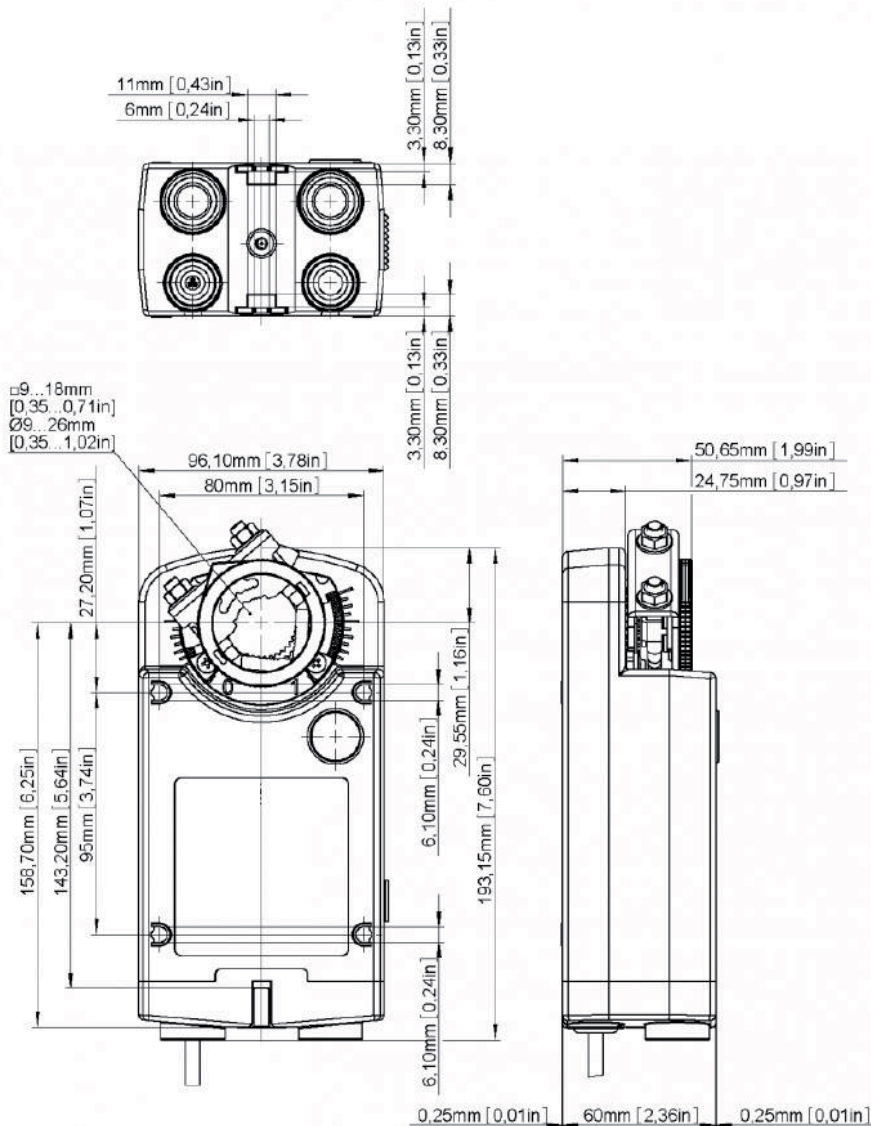
Fig. 1

Different angular range setting

- power-off the actuator
- Set the mechanical end stops
- Connect the actuator to the power supply
- Put Dip 4 to “ON”
- Actuator gains the new angular range
- now “Y” refers to the new angular range



DIMENSIONS (mm)



The performances stated in this sheet can be modified without any prior notice due to design improvements