MDB28-48-58

MODEL	CONTROL	POWER SUPPLY	DESCRIPTION	TORQUE
MDB28	On/Off - 3P	85-265 Vac	Damper actuators	20 Nm
MDB48		24 Vac/dc		
MDB58	0..10V			
MDB28M	On/Off - 3P	85-265 Vac	Damper actuator with micro auxiliary switches	
MDB48M		24 Vac/dc		

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)
Damper shaft	◊ 9...18 mm / Ø 9...26 mm
Power supply	85-265 Vac (MDB28/28M) 24 Vac/dc (MDB48/48M/58)
Consumption	3W / 7 VA (MDB28/28M) 3W / 4,5 VA (MDB48/48M/58)
Connection cable	Supplied 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
Storage temperature	-30T+80°C
Auxiliary switches	2 x SPDT - 250Vac, 5 (2,5)A (MDB28M/48M only)
Protection degree	IP54 (downwards cable)
Weight	1,7 Kg
Dimensions	Look at the picture on page 2

MDB58 only

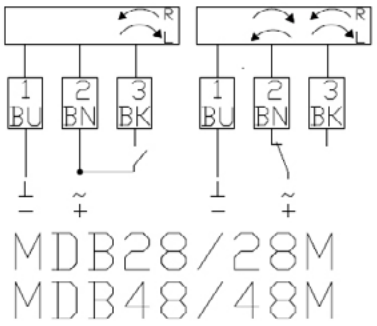
Control signal (Y)	0(2)...10 Vdc or 4...20 mA*
Position feedback (U)	0(2)...10 Vdc, max 5 mA*

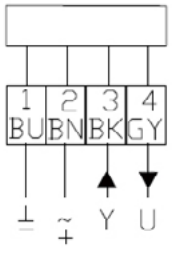
* (selectable by dip switch 4)

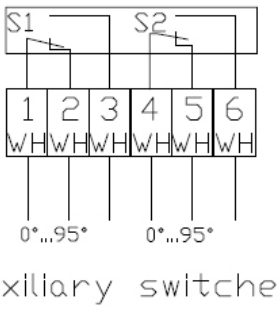
Directive compliance

EMC CE (2014/108/EG)
LVD - CE (2006/95/EG)
EN 60730-1

WIRING DIAGRAM







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

For MDB28x, MDB48x models use a cable with a section of at least 1,5 mm².

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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

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.

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

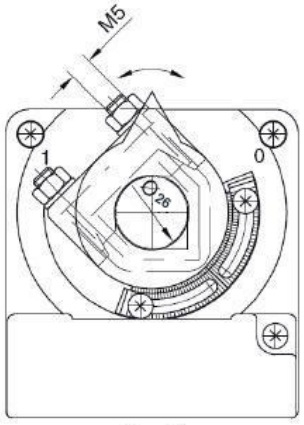
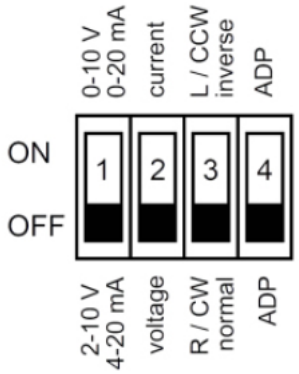


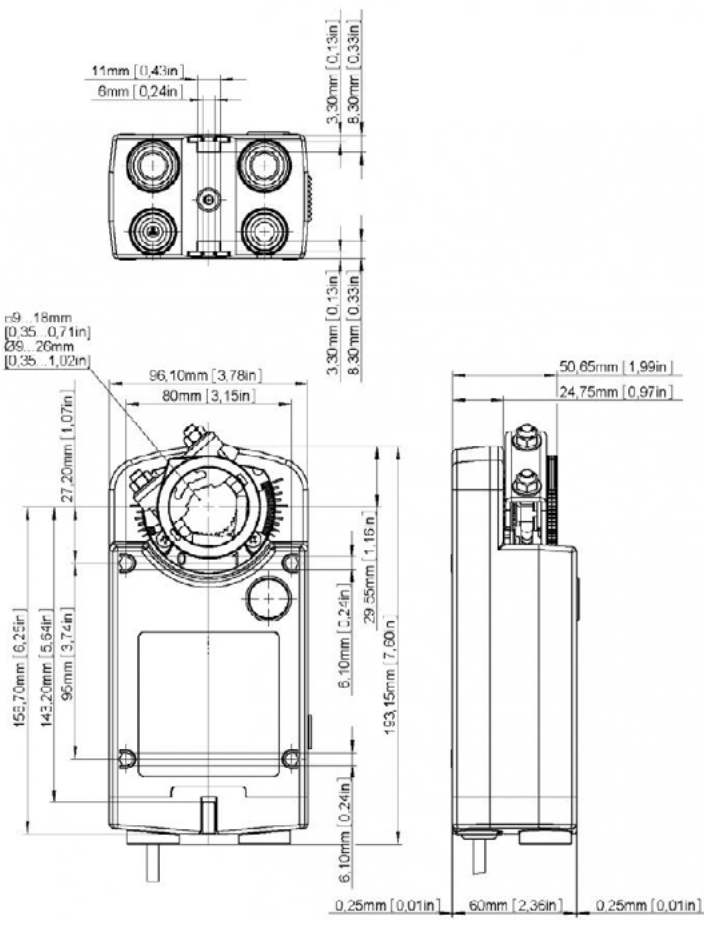
Fig. 1

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.

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 gaines 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