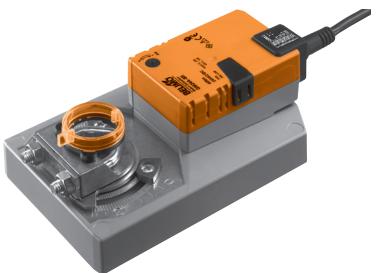


Modulating damper actuator for operating air control dampers in ventilation and air-conditioning systems for building services installations

- For air control dampers up to approx. 8 m<sup>2</sup>
- Torque 40 Nm
- · Nominal voltage AC/DC 24 V
- Control: modulating DC 0 ... 10 V, position feedback DC 2 ... 10 V



Technical data			
Electrical data	Nominal voltage		AC 24 V, 50/60 Hz DC 24 V
	Nominal voltage range		AC/DC 19.2 28.8 V
	Power consumption	In operation	4.5 W @ nominal torque
		At rest	2 W
		For wire sizing	6.5 VA
	Connection		Cable 1 m, 4 x 0.75 mm <sup>2</sup>
Functional data	Torque (nominal torque)		Min. 40 Nm @ nominal voltage
	Control	Control signal Y Operating range	DC 0 10 V, typical input impedance 100 k $\Omega$ DC 2 10 V
	Position feedback (Measuring voltage U)		DC 2 10 V, max. 1 mA
	Posotion accuracy		±5%
	Direction of rotation		Reversible with switch 0 / 1
	Direction of rotation a	at $Y = 0 V$	bei Schalterstellung 0 ₹ or 1 →
	Manual override		Gearing latch disengaged with pushbutton, detentable
	Angle of rotation		Max. 95°
			by means of adjustable, mechanical end stops
	Running time		150 s / 90°⊲
	Sound power level		Max. 45 dB (A)
	Position indication		Mechanical, pluggable
Safety	Protection class  Degree of protection		III Safety extra-low voltage
			IP54 in any mounting position
	EMC		CE according to 89/336/EEC
	Mode of operation		Type 1 (EN 60730-1)
	Rated impulse voltage		0.8 kV (EN 60730-1)
	Control pollution degree		3 (EN 60730-1)
	Ambient temperature	range	−30 +50°C
	Non-operating temperating	erature	−40 +80°C
	Ambient humidity range		95% r.H., non-condensating (EN 60730-1)
	Maintenance		Maintenance-free
Dimensions / Weight	Dimensions		See «Dimensions» on page 2
	Weight		Approx. 1'700 g

# Safety notes



- The damper actuator is not allowed to be used outside the specified field of application, especially 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 cable must not be removed from the device.
- When calculating the required torque, the specifications supplied by the damper manufacturers (cross section, design, installation site), and the air flow conditions must be observed.



## Safety notes

## (Continue)

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**

Mode of operation

The actuator is controlled by means of a standard control signal DC 0 ... 10 V. It opens to the position dictated by this signal. The measuring voltage U allows the damper position (0 ... 100%) to be electrically indicated and serves as a follow-up control signal for other actuators.

Simple direct mounting

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

Manual override

Manual operation is possible with the pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed or detented).

Adjustable angle of rotation

Adjustable angle of rotation with mechanical end stops.

High functional reliability

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

## **Accessories**

	Description	Data sheet
Electrical accessories	Auxiliary switch, type SA	T2 - SA
	Feedback potentiometer, type PA	T2 - PA
	Range controller, type SBG24	T2 - SBG24
	Positioner, type SG24	T2 - SG24
	Digital position indication, type ZAD24	T2 - ZAD24
Wechnical accessories Various accessories (Damper and actuator crank arms, anti-rotation strap etc.)		T2 - 7-GM Δ

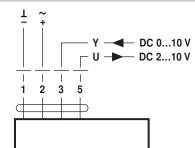
# **Electrical installation**

#### Notes

Connection via safety isolating transformer.

Other actuators can be connected in parallel.

Please note the performance data.



### Cable colours:

1 = black

2 = red

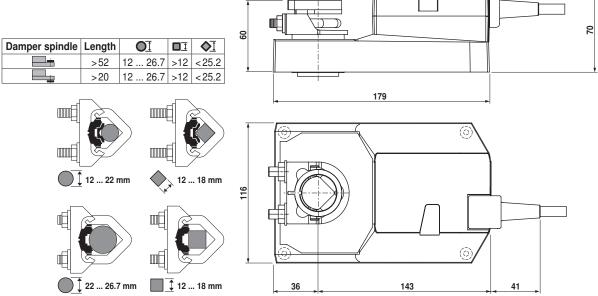
3 = white

5 = orange

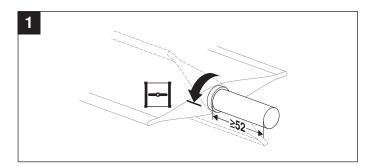
## **Dimensions [mm]**

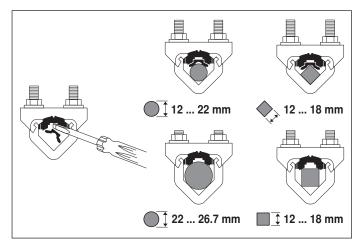
## Dimensional drawings

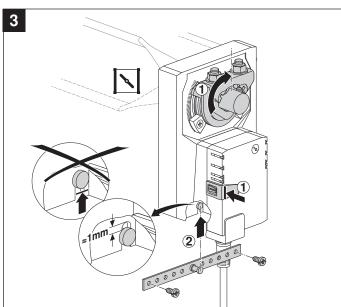
Wiring diagram

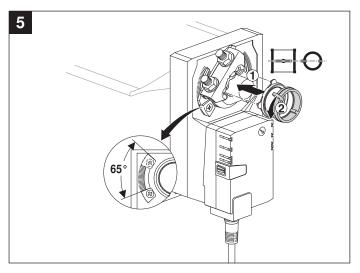


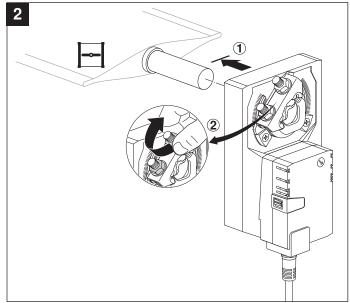


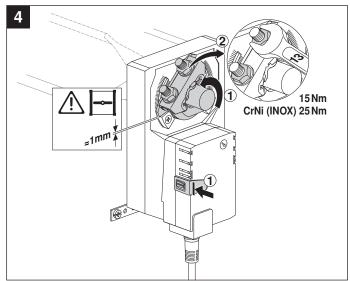


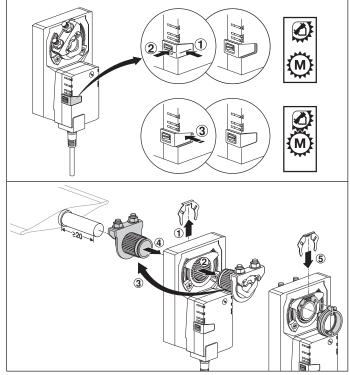






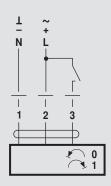


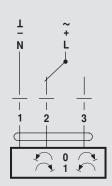






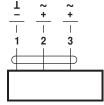






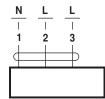


AC 24 V / DC 24 V



GM24A..

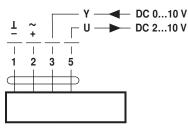
AC 100 ... 240 V



GM230A..



AC 24 V / DC 24 V



GM24A-SR.. GM24A-MF..

