

Modulating damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 1 m<sup>2</sup>
- Torque motor 5 Nm
- Nominal voltage AC/DC 24 V
- Control modulating 2...10 V
- Position feedback 2...10 V
- · with connecting terminals



Technical data		
Electrical data	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.228.8 V / DC 19.228.8 V
	Power consumption in operation	1 W
	Power consumption in rest position	0.4 W
	Power consumption for wire sizing	2 VA
	Connection supply / control	Terminals 4 mm <sup>2</sup> (cable Ø410 mm, 4-wire)
	Parallel operation	Yes (note the performance data)
Functional data	Torque motor	5 Nm
	Operating range Y	210 V
	Input Impedance	100 kΩ
	Position feedback U	210 V
	Position feedback U note	Max. 1 mA
	Position accuracy	±5%
	Direction of motion motor	selectable with switch 0/1
	Direction of motion note	Y = 0 V: At switch position 0 (ccw rotation) /
	Manualanasa	1 (cw rotation)
	Manual override	with push-button, can be locked
	Angle of rotation	Max. 95°
	Angle of rotation note	can be limited on both sides with adjustable mechanical end stops
	Running time motor	150 s / 90°
	Sound power level, motor	35 dB(A)
	Mechanical interface	Universal shaft clamp 620 mm
	Position indication	Mechanically, pluggable
Safety	Protection class IEC/EN	III Safety Extra-Low Voltage (SELV)
	Protection class UL	UL Class 2 Supply
	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	EMC	CE according to 2014/30/EU
	Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
	Certification UL	cULus according to UL60730-1A, UL60730-2- 14 and CAN/CSA E60730-1:02
	Certification UL note	The UL marking on the actuator depends on the production site, the device is UL-compliant in
	Mode of operation	any case Type 1
	Rated impulse voltage supply / control	0.8 kV
	Control pollution degree	3
	Ambient temperature	-3050°C
	Storage temperature	-3030 °C
	Ambient humidity	Max. 95% r.H., non-condensing
	Servicing	maintenance-free

0.40 kg

Weight

Weight



## Safety notes



- The device must not be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea) water, snow, ice, insolation
  or aggressive gases interfere directly with the actuator and that is ensured that the
  ambient conditions remain at any time within the thresholds according to the data
  sheet.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- 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.
- To calculate the torque required, the specifications supplied by the damper manufacturers concerning the cross-section, the design, the installation site and the ventilation conditions must be observed.
- The device contains electrical and electronic components and must not be disposed
  of as household refuse. All locally valid regulations and requirements must be
  observed.

#### **Product features**

Mode of operation

The actuator is connected with a standard modulating signal of 0...10 V and drives to the position defined by the positioning signal. Measuring voltage U serves for the electrical display of the damper position 0.5...100% and as slave control signal for other actuators.

Simple direct mounting

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

Manual override

Manual override with push-button possible (the gear is disengaged for as long as the button is pressed or remains locked).

Adjustable angle of rotation

High functional reliability

Adjustable angle of rotation with mechanical end stops.

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

#### **Accessories**

	Description	Туре
Electrical accessories	Auxiliary switch 1 x SPDT add-on	S1A
	Auxiliary switch 2 x SPDT add-on	S2A
	Auxiliary switch 2 x SPDT add-on, grau	S2A/300 GR
	Auxiliary switch 2 x SPDT add-on, grau	S2A/500 GR
	Feedback potentiometer 140 $\Omega$ add-on	P140A
	Feedback potentiometer 140 $\Omega$ add-on, grau	P140A GR
	Feedback potentiometer 200 $\Omega$ add-on	P200A
	Feedback potentiometer 500 $\Omega$ add-on	P500A
	Feedback potentiometer 500 $\Omega$ add-on, grau	P500A GR
	Feedback potentiometer 1 k $\Omega$ add-on	P1000A
	Feedback potentiometer 1 k $\Omega$ add-on, grau	P1000A GR
	Feedback potentiometer 2.8 kΩ add-on	P2800A
	Feedback potentiometer 2.8 kΩ add-on, grau	P2800A GR
	Feedback potentiometer 5 k $\Omega$ add-on	P5000A
	Feedback potentiometer 5 k $\Omega$ add-on, grau	P5000A GR
	Feedback potentiometer 10 kΩ add-on	P10000A
	Feedback potentiometer 10 kΩ add-on, grau	P10000A GR
	Signal converter voltage/current 100 kΩ Supply AC/DC 24 V	Z-UIC
	Range controller for wall mounting	SBG24
	Positioner for wall mounting	SGA24
	Positioner for built-in mounting	SGE24
	Positioner for front-panel mounting	SGF24
	Positioner for wall mounting	CRP24-B1



# Accessories

#### Mechanical accessories

Description	Туре
Shaft extension 170 mm Ø10 mm for damper shaft Ø 616 mm	AV6-20
Shaft clamp one-sided, clamping range Ø620 mm	K-ELA
Shaft clamp one-sided, clamping range Ø610 mm	K-ELA10
Shaft clamp one-sided, clamping range Ø613 mm	K-ELA13
Shaft clamp one-sided, clamping range Ø616 mm	K-ELA16
Anti-rotation mechanism 180 mm	Z-ARS180
Form fit insert 8x8 mm	ZF8-LMA
Form fit insert 10x10 mm	ZF10-LMA
Form fit insert 12x12 mm	ZF12-LMA
Form fit insert 8x8 mm, with angle of rotation limiter and position indication	ZFRL8-LMA
Form fit insert 10x10 mm, with angle of rotation limiter and position indication	ZFRL10-LMA
Form fit insert 12x12 mm, with angle of rotation limiter and position indication	ZFRL12-LMA
Position indicator	Z-PI
Terminal protection IP54	Z-TP

## **Electrical installation**

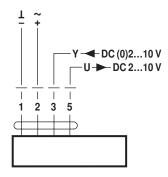


## **Notes**

- · Connection via safety isolating transformer.
- Parallel connection of other actuators possible. Observe the performance data.

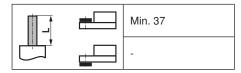
## Wiring diagrams

AC/DC 24 V, modulating



# Dimensions [mm]

## Spindle length



## Clamping range

<u>OI</u>	<b></b>	♦1
620	≥6	≤20

## **Dimensional drawings**

