Modulating damper actuator for adjusting dampers in technical building installations

- Air damper size up to approx. 8 m²
- Torque motor 40 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	4.5 W		
	Power consumption in rest position	2 W		
	Power consumption for wire sizing	6.5 VA		
	Connection supply / control	Terminals 4 mm ² (cable Ø410 mm, 4-wire)		
	Parallel operation	Yes (note the performance data)		
Functional data	Torque motor	40 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) /		
		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	45 dB(A)		
	Mechanical interface	Universal shaft clamp reversible 1226.7 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		
		any case		
	Mode of operation	Type 1		
	Rated impulse voltage supply / control	0.8 kV		
	Control pollution degree	3		
	Ambient temperature	-3050°C		
	Storage temperature	-4080°C		
	Ambient humidity	Max. 95% r.H., non-condensing		
	Servicing	maintenance-free		

1.8 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

Adjustable angle of rotation with mechanical end stops.

High functional reliability

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 Ω add-on	P140A
	Feedback potentiometer 140 Ω add-on, grau	P140A GR
	Feedback potentiometer 200 Ω add-on	P200A
	Feedback potentiometer 500 Ω add-on	P500A
	Feedback potentiometer 500 Ω add-on, grau	P500A GR
	Feedback potentiometer 1 kΩ add-on	P1000A
	Feedback potentiometer 1 kΩ 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 Ω add-on	P5000A
	Feedback potentiometer 5 k Ω 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



Z-TP

Accessories

Description Type Mechanical accessories AH-GMA Actuator arm for standard shaft clamp Ball joint suitable for damper crank arm KH8 / KH10 KG10A Damper crank arm Slot width 8.2 mm, clamping range Ø14...25 mm KH10 Anti-rotation mechanism 230 mm, Multipack 20 pcs. Z-ARS230 Mounting kit for linkage operation for flat installation ZG-GMA Base plate extension for GM..A to GM.., Multipack 20 pcs. Z-GMA Position indicator, Multipack 20 pcs. Z-PI

Electrical installation



Notes

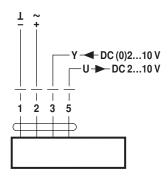
· Connection via safety isolating transformer.

Terminal protection IP54, Multipack 20 pcs.

• Parallel connection of other actuators possible. Observe the performance data.

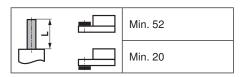
Wiring diagrams

AC/DC 24 V, modulating

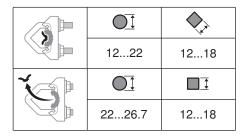


Dimensions [mm]

Spindle length



Clamping range



Dimensional drawings

