

Damper actuator in the IP66 protective housing for adjusting air dampers in industrial plants and in technical building installations

- For air dampers up to approx. 8 m<sup>2</sup>
- Torque 40 Nm
- Nominal voltage AC 100 ... 240 V
- Control: Open-close

Optimum weather protection for outdoor applications



Technical data			
Electrical data	Nominal voltage	AC 100 240 V, 50/60 Hz	
	Nominal voltage range	AC 85 265 V	
	Power consumption In operation	5 W @ nominal torque	
	At rest	2.5 W	
	For wire sizing	9 VA	
	Connection	Terminals 4 mm <sup>2</sup> (cable Ø 4 10 mm)	
Functional data	Torque (nominal torque)	Min. 40 Nm @ nominal voltage	
	Direction of rotation	Reversible with switch 0 🗸 or 1 🤼, respectively	
	Manual override Gearing latch disengaged with pushbu		
	Angle of votation	can be locked  Max. 95°	
	Angle of rotation	adjustable mechanical end stops	
	Running time	150 s / 90°  150 s / 90°  150 s / 90°  150 s / 90°	
	Sound power level	Max. 45 dB (A)	
	Position indication	Mechanical, pluggable	
Safety	Protection class	II Totally insulated □	
	Degree of protection	IP66	
	-9 P	NEMA 4, UL Enclosure Type 4	
	EMC	CE according to 2004/108/EC	
	Low-voltage directive	CE according to 2006/95/EC	
	Certification	Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14	
		cULus according to UL 60730-1 and UL 60730-2-14	
		and CAN/CSA E60730-1:02	
	Mode of operation	Type 1	
	Rated impulse voltage	2.5 kV	
	Control pollution degree	4	
	Ambient temperature	−30 +50°C	
	Non-operating temperature	−40 +80°C	
	Ambient humidity	100% r.h.	
	Maintenance	Maintenance-free	
Dimensions / Weight	Dimensions	See «Dimensions» on page 3	
	Weight	Approx. 4.7 kg	



### Safety notes



- The actuator is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- · Caution: Power supply voltage!
- It may only be installed by suitably trained personnel. Any legal regulations or regulations issued by authorities must be observed during installation.
- The cover of the protective housing may be opened for adjustment and servicing. When it is closed afterwards, the housing must seal tight (see installation instructions).
- The device on the inside may only be opened up in the factory. It does not contain any parts that can be replaced or repaired by the user.
- 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.
- 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.
- The actuator is not designed for applications where chemical influences (gases, fluids) are present or for utilisation in corrosive environments in general.
- The materials used may be subjected to external influences (temperature, pressure, constructional fixture), that cannot be simulated in laboratory test or field trials.
   In case of doubt, we definitely recommend that you carry out a test. This information does not imply any legal entitlement. Belimo will not be held liable and will provide no warranty.
- If cables which are not authorised for UL (NEMA) Type 4 applications are guided out of the unit, then flexible metallic cable conduits or threaded cable conduits of equal value are to be used.
- The actuator may not be used in plenum applications (e.g. suspended ceilings or raised floors).

#### **Product features**

#### Fields of application

The actuator is particularly suitable for utilisation in outdoor applications and is protected against the following weather conditions:

- UV radiation
- rain / snow
- dirt / dust
- humidity
- Changing atmosphere / frequent and severe temperature fluctuations (recommendation: use the actuator with integrated factory-installed heating which can be ordered separately to prevent internal condensation \*)

#### 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 override with pushbutton 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. Standard setting 0 ... 90° ⋖. The housing cover must be removed to set the angle of rotation.

High functional reliability

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

\* in development

### Accessories

### **Electrical accessories**

Data sheet
T2 - SA
T2 - PA

<sup>\*</sup> in development

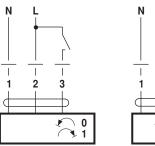


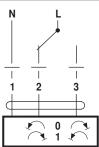
## **Electrical installation**

## Wiring diagrams

### Notes

- Caution: Power supply voltage !
- Other actuators can be connected in parallel. Please note the performance data!



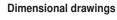


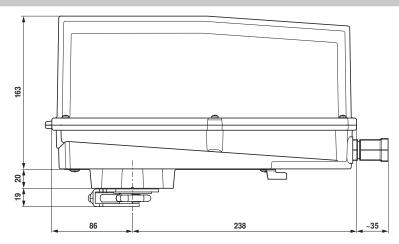
### **Direction of rotation**





# Dimensions [mm]





Damper spindle	Length	<u>OĪ</u>		$\overline{\square}$	
	16 75	14 26.7	≥12	≤25.5	

