

## **Technical data sheet**

Actuator for smoke extraction dampers 90° *⊲* in fire smoke extraction systems

- Torque 15 Nm
- Nominal voltage AC 230 V
- Control: Open/close
- Damper rotation: 12 mm form-fit



## **Technical data**

Electrical data	Nominal voltage	AC 230 V, 50/60 Hz
	Power supply range	AC 198 264 V
	Switching thresholds Min. ON voltage	AC 198 V
	Max. OFF voltage	AC 100 V
	Power consumption Operation	7 W @ nominal torque
	End position	0.5 W
	Rating	14 VA / Imax. 8.2 A at 5 ms
	Auxiliary switch	2 x 1 PDT
	Contact rating (silver contact) (gold-plated silver contact)	6 (3) A, AC 250 V □ 1 mA 6 A, DC 5 V AC 250 V □
	Switching points	3°∢ / 87°∢ (referring to 0 90°∢)
	Tolerance	±2°⊲
	Connection Motor	Cable 1 m, 3 x 2 mm <sup>2</sup> (halogen-free)
	Auxiliary switch	Cable 1 m, 6 x 2 mm <sup>2</sup> (halogen-free)
Functional data	Torque (nominal torque)	Min. 15 Nm at nominal voltage
	Inhibiting torque Dynamic	15 Nm
	Static	18 Nm
	Direction of rotation	Can be selected by mounting L / R
	Angle of rotation	Max. 95°∢ (incl. 5°∢ mechanical overrun)
	Running time	<30 s for 90°∢
	Sound power level	Max. 60 dB (A)
	Damper rotation	12 mm form-fit
	Position indication	Mechanical with pointer
	Service life	Min. 10 000 cycles
Safety	Protection class	II totally insulated
	Degree of protection	IP54 in all mounting positions
	EMC	CE acc. to 2004/108/EC
	low-voltage directive	CE according to 2006/95/EC
	Mode of operation	Type 1.C (EN 60730-1)
	Rated impulse voltage	4 kV
	Control pollution degree	3
	Ambient temp. range Standard operation	-30 +50°C
	Safety function	See «Safety function»
	Non-operating temperature range	-40 +80°C
	Ambient humidity range	According to EN 60730-1
	Maintenance	Maintenance-free
Dimensions / weight	Dimensions	See «Dimensions» on page 3
	Weight	Approx. 2 700 g

#### 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!
- The actuator is adapted and mounted to the fire and smoke damper by the damper manufacturer. For this reason, the actuator is only supplied direct to safety damper manufacturers. The manufacturer then bears full responsibility for the proper functioning of the damper.
- 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.

BR230	Actuator for smoke extraction dampers 90° ⊲	BELIMO
Safety notes	(continued)	
	The device contains electronic and electrical components and may the household waste. Observe local regulations and valid laws.	not be disposed of with
Product features		
Mode of operation	2-wire open-close control. The actuator is overload-proof and can thus the end stops.	remain energised even at
Signalling	Two microswitches with fixed settings are installed in the actuator for in positions. The position of the damper blade can be read off on a mechanical position of the damper blade can be read off on a mechanical position of the damper blade can be read off on a mechanical position.	
Manual operation	The hand crank supplied with the actuator can be used for manual ope The damper function can thus be tested easily.	ration.
Standards / regulations	<ul> <li>Draft DIN 18232, Part 6, September 1992 <ul> <li>Fire protection in industrial buildings</li> <li>Smoke and heat extraction systems</li> </ul> </li> <li>Preliminary standard ÖNORM H 6029, May 1997 <ul> <li>Ventilation systems</li> <li>Fire smoke extraction systems</li> </ul> </li> <li>Excerpts from: <ul> <li>CEN/TC191, 1996</li> <li>NA BAU, 1997</li> </ul> </li> </ul>	
Safety function	The safety function is guaranteed within the temperature range shown in the diagram, which is based on ÖNORM H 6029 and DIN 18232.	actuator
Accessories		
	Description	Туре
Electrical accessories	Auxiliary switch, 1 x PDT 6 A (2.5 A), AC 250 V	SN1
	Auxiliary switch, 2 x PDT 6 A (2.5 A), AC 250 V	SN2
Mechanical accessories	Adapter with clamp for rotary axes up to 20 mm for BF. and BLF.	ZK-BF
	Adapter with DM18 rotary axis, L = 33 mm, for BF and BLF Bracket for SN1 and SN2 auxiliary switches for BF	ZA18-BF ZSN-BF
Electrical installation		
Wiring diagram Note • Caution: Main power supply voltage !	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	



# Dimensions [mm]

## Dimensional diagrams

