

Technical data sheet

BLF230-T

FAIL-SAFE SOLUTIONS E

Spring-return actuator, combined with thermoelectric tripping device (72°C), for fire and smoke dampers 90° in ventilation and air-conditioning systems

- Nominal torque 6 Nm / 4 Nm
- Nominal voltage AC 230 V
- Control open-close
- Damper rotation form fit 12 mm (10 mm with enclosed adapter)



Technical data

Electrical data	Nominal voltage	AC 230 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 198 V 264 V
	Power consumption in operation	6 W
	Power consumption at rest	3 W
	Power consumption for wire sizing	7 VA
	Power consumption for wire sizing note	Imax 150 mA @ 10 ms
	Auxiliary switch	2 x SPDT
	Switching capacity auxiliary switch	Contact gold-plated silver: 1 mA 3 (0.5) A, DC 5 V AC 250 V (II Totally insulated)
	Switching points auxiliary switch	5° / 80°
	Connection supply	Cable 1 m, 2 x 0.75 mm ² (halogen-free)
	Connection auxiliary switch	Cable 1 m, 6 x 0.75 mm ² (halogen-free)
	Cable length thermoelectric tripping device	1 m
Functional data	Torque motor	Min. 6 Nm
	Torque spring-return	Min. 4 Nm
	Direction of rotation motor	Can be selected by mounting L / R
	Angle of rotation	Max. 95° (incl. 5° initial spring tension)
	Running time motor	40 75 s / (0 6 Nm) / 90°
	Running time spring-return	~20 s @ –20 50°C / max. 60 s @ –30°C
	Sound power level motor max.	45 dB (A)
	Sound power level spring-return max.	63 dB (A)
	Damper rotation	Form fit 12 mm (10 mm with enclosed adapter)
	Position indication	Mechanically, with pointer
	Service life	Min. 60,000 safety positions
Safety	Response temperature thermal fuse	Tf1: Duct outside temperature 72°C Tf2 and Tf3: Duct inside temperature 72°C
	Protection class IEC/EN	II Totally insulated
	Degree of protection IEC/EN	IP54 in all mounting positions
	EMC	CE according to 2004/108/EC
	Low-voltage directive	CE according to 2006/95/EC
	Certification IEC/EN	Certified according to IEC/EN 60730-1 and IEC/EN 60730-2-14
	Mode of operation	Type 1.AA.B
	Rated impulse voltage supply / control	4 kV
	Control pollution degree	3
	Ambient temperature normal duty	-30°C 50°C
	Ambient temperature safety duty	The safety position will be attained up to max. 75°C when triggered by a thermal fuse
	Non-operating temperature	-40°C 50°C
	Ambient humidity	95% r.h., non-condensing
	Maintenance	Maintenance-free
Weight	Weight approx.	1.73 kg



Safety notes				
	 The actuator is not allowed to be used outside the specified field 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 damp manufacturer. For this reason, the actuator is only supplied direct manufacturers. The manufacturer then bears full responsibility for functioning of the damper. The device may only be opened at the manufacturer's site. It does parts that can be replaced or repaired by the user. The device contains electrical and electronic components and is disposed of as household refuse. All locally valid regulations and be observed. 	er by the damper to safety damper r the proper es not contain any not allowed to be		
Product features				
Mode of operation	The actuator moves the damper to the operating position at the sar tensioning the return spring. The damper is turned back to the safe energy when the supply voltage is interrupted.			
Thermoelectric tripping device Signalling	If the ambient temperature of 72°C is exceeded, the thermal fuse Tf1 responds. If the duct inside temperature of 72°C is exceeded, the exchangeable thermal fuse Tf2/Tf3 will respond. When the thermal fuses Tf1, Tf2 or Tf3 respond, the supply voltage is interrupted permanently and irreversibly. The LED is lit when - there is a supply voltage, - the temperature fuses are OK and - the test switch is not pressed. The function of the thermal fuse and the test button is only warranted if the actuator is connected to the power supply and has reached its operating position (LED on). Two microswitches with fixed settings are installed in the actuator for indicating the damper end positions. The position of the damper blade can be read off on a mechanical position indicator.			
Manual operation	Without power supply, the damper can be operated manually and fi position. It can be unlocked manually or automatically by applying t	xed in any required		
Accessories				
Electrical accessories	Description Auxiliary switch, 2 x SPDT, 6 A (2.5 A), AC 250 V Blanking cover (has no duct sensor function) Spare thermoelectric tripping device, duct inside temperature 72°C	Data sheet name SN2-C7 ZBAE0 ZBAE72		

ZBAE95

ZK-BF

ZA18-BF

ZA8-BF

ZA11-BF

ZSN-BLF

Spare thermoelectric tripping device, duct inside temperature 95°C,

Adapter with clamp for rotary axes up to 20 mm for BF.. and BLF..

Bracket for SN1 and SN2 auxiliary switches, For BLF.. actuators

Adapter with DM18 rotary axis, L = 33 mm, for BF.. and BLF..

colour green

Adapter 12/8 mm for BF.. and BLF..

Adapter 12/11 mm for BF.. and BLF..

Mechanical accessories

Spring-return actuator 90 $^\circ,$ AC 230 V, 6 Nm / 4 Nm, with BAE..



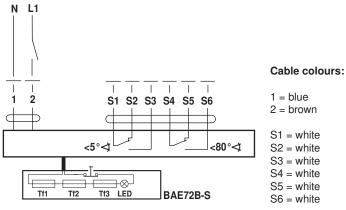
Electrical installation

 Notes
 • Caution: Power supply voltage!

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

Wiring diagrams

AC 230 V, open-close



Dimensions [mm]

Dimensional drawings

