

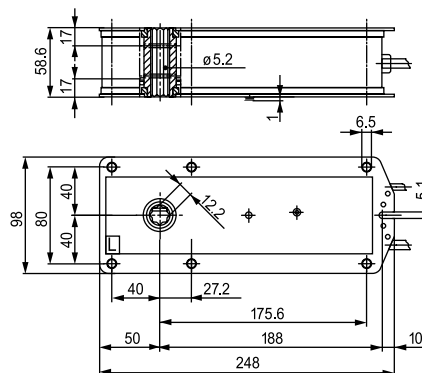
- For control of Fire and Smoke Dampers in HVAC systems
- Torque: 18Nm/12Nm
- Nominal voltage: AC/DC 24V
- Control: Open/Close
- Manual override function



## Technical data

<b>Electrical data</b>	Nominal voltage		AC 24V 50/60Hz, DC 24V	
	Nominal voltage range		AC 19.2...28.8V / DC 21.6...28.8V	
	Power consumption		7W @ running / 2W @ holding	
	For transformer sizing		10VA (Imax 8.3mA @ 5ms)	
	Auxiliary switch		2 SPDT, 1mA...6(3)A, DC 5V...AC 250V <input type="checkbox"/>	
	-Switching points		fixed at 5°↙, 80°↙	
	Connection		-Motor: 1m, 2 x 0.75mm <sup>2</sup> (halogen-free) -Auxiliary Switch: 1m, 6 x 0.75mm <sup>2</sup> (halogen-free) (...ST with plug connectors, suitable for BKN230-24)	
	<b>Functional data</b>	Torque		-Motor: 18Nm @ nominal voltage -Spring Return: 12Nm
		Thermal trip		BF24-T: Tf1: duct outside temperature 72°C BAE72B-S: Tf2/Tf3: duct inside temperature 72°C *(Art. Nr. ZBAE72)
		Direction of rotation		Selectable by L/R installation
Angle of rotation		Max. 95°↙ (include 5°↙ spring pretensioning)		
Running time		-Motor: 120s -Spring Return: ~16s (@ tamb=20°C)		
Sound power level		Motor max. 45dB(A) / spring return 63dB(A)		
Position indication		Mechanical with pointer		
Service life		>60,000 cycles		
<b>Safety</b>		Protection class		III (safety extra-low voltage)
		Degree of protection		IP54
	EMC		CE according to 2004/108/EC	
	Mode of operation		Type 1.AA.B	
	Ambient temperature		-Normal Duty: -30...+50°C -Safety Duty: Safe position will be attained up to max. 75°C when triggered by a thermal trip	
	Storage temperature		-40...+50°C (-40...+80°C without thermal trip)	
	Humidity test		95% RH, non-condensing	
	Maintenance		Maintenance-free	
	<b>Dimensions / weight</b>	Dimensions (L x M x H)		248 x 98 x 58.6mm
		Shaft diameter		Form-fit 12 x 12mm (10mm adapter supplied)
Weight		BF24: Approx. 2.7kg BF24-T: Approx. 2.8kg		

## Dimensions [mm]



# Fire and Smoke Spring Return Actuator BF24-SR(-T)



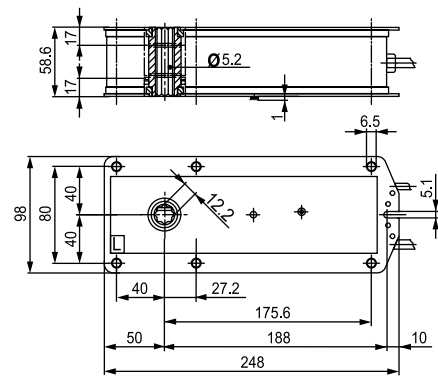
- For control of Fire and Smoke Dampers in HVAC systems
- Torque: 18Nm/12Nm
- Nominal voltage: AC/DC 24V
- Control signal: DC (0)2...10V
- Position feedback: DC 2...10V
- Manual override function



## Technical data

<b>Electrical data</b>	Nominal voltage	AC 24V 50/60Hz, DC 24V
	Nominal voltage range	AC 19.2...28.8V / DC 21.6...28.8V
	Power consumption	7W @ running / 2W @ holding
	For transformer sizing	10VA (Imax 8.3mA @ 5ms)
	Auxiliary switch	2 SPDT, 1mA...6(3)A, DC 5V...AC 250V <input type="checkbox"/>
	-Switching points	fixed at 5°↙, 80°↘
<b>Functional data</b>	Connection	-Motor -Auxiliary Switch
		1m, 4 x 0.75mm <sup>2</sup> (halogen-free) 1m, 6 x 0.75mm <sup>2</sup> (halogen-free) (.-ST with plug connectors, suitable for BKN230-24)
	Torque	-Motor -Spring Return
		18Nm @ nominal voltage 12Nm
	Thermal trip	BF24-SR-T: BAE72B-S
		Tf1: duct outside temperature 72°C Tf2/Tf3: duct inside temperature 72°C *(Art. Nr. ZBAE72)
	Control signal Y	DC (0)2...10V @ (input impedance 100kΩ)
	Feedback signal U	DC 2...10V
	Direction of rotation	Selectable by L/R installation
	Angle of rotation	Max. 95°
	Running time	-Motor -Spring Return
		120s ~16s (@ tamb=20°C)
<b>Safety</b>	Sound power level	Motor max. 45dB(A) / spring return 63dB(A)
	Position indication	Mechanical with pointer
	Service life	>60,000 cycles
	Protection class	III (safety extra-low voltage)
	Degree of protection	IP54
	EMC	CE according to 2004/108/EC
	Mode of operation	Type 1.AA.B
	Ambient temperature	-Normal Duty -Safety Duty
		-30...+50°C -30...+75°C
	Storage temperature	-40...+50°C
<b>Dimensions / weight</b>	Humidity test	95% RH, non-condensing
	Maintenance	Maintenance-free
	Dimensions (L x M x H)	248 x 98 x 58.6mm
	Shaft diameter	Form-fit 12 x 12mm (10mm adapter supplied)
	Weight	BF24-SR BF24-SR-T
	Approx. 2.7kg Approx. 2.8kg	

## Dimensions [mm]



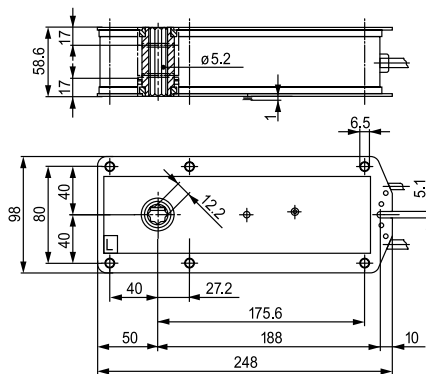
- For control of Fire and Smoke Dampers in HVAC systems
- Torque: 18Nm/12Nm
- Nominal voltage: AC 230V
- Control: Open/Close
- Manual override function



### Technical data

<b>Electrical data</b>	Nominal voltage	AC 230V 50/60Hz	
	Nominal voltage range	AC 198...264V	
	Power consumption	8.5W @ running / 3W @ holding	
	For transformer sizing	11VA (I <sub>max</sub> 0.5mA @ 5ms)	
	Auxiliary switch	2 SPDT, 1mA...6(3)A, DC 5V...AC 250V <input type="checkbox"/>	
	-Switching points	fixed at 5°↙, 80°↙	
<b>Functional data</b>	Connection	-Motor 1m, 2 x 0.75mm <sup>2</sup> (halogen-free) -Auxiliary Switch 1m, 6 x 0.75mm <sup>2</sup> (halogen-free)	
	Torque	-Motor 18Nm @ nominal voltage -Spring Return 12Nm	
	Thermal trip	BLF230-T: Tf1: duct outside temperature 72°C BAE72B-S: Tf2/Tf3: duct inside temperature 72°C *(Art. Nr. ZBAE72)	
	Direction of rotation	Selectable by L/R installation	
	Angle of rotation	Max. 95°↙ (include 5°↙ spring pretensioning)	
	Running time	-Motor 120s -Spring Return ~16s (@ t <sub>amb</sub> =20°C)	
	Sound power level	Motor max. 45dB(A) / spring return 63dB(A)	
	Position indication	Mechanical with pointer	
	Service life	>60,000 cycles	
	<b>Safety</b>	Protection class	II (Totally insulated) <input type="checkbox"/>
		Degree of protection	IP54
		EMC	CE according to 2004/108/EC CE according to 2006/95/EC
		Mode of operation	Type 1.AA.B
		Ambient temperature	-Normal Duty -30...+50°C -Safety Duty Safe position will be attained up to max. 75°C when triggered by a thermal trip
Storage temperature		-40...+50°C (-40...+80°C without thermal trip)	
Humidity test		95% RH, non-condensing	
Maintenance		Maintenance-free	
<b>Dimensions / weight</b>		Dimensions (L x M x H)	248 x 98 x 58.6mm
		Shaft diameter	Form-fit 12 x 12mm (10mm adapter supplied)
	Weight	BLF230 Approx. 3.1kg BLF230-T Approx. 3.2kg	

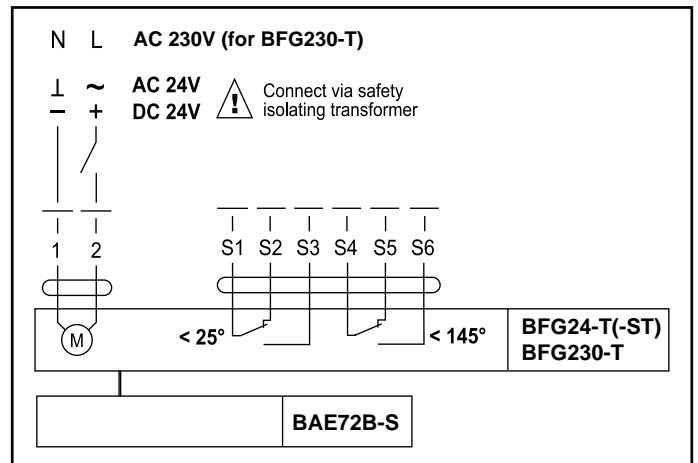
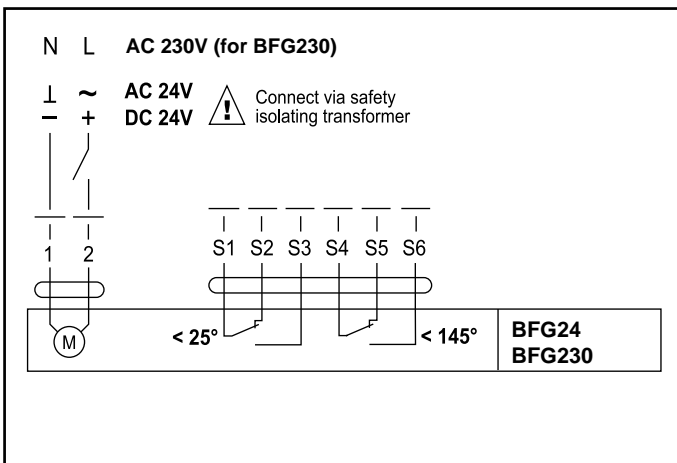
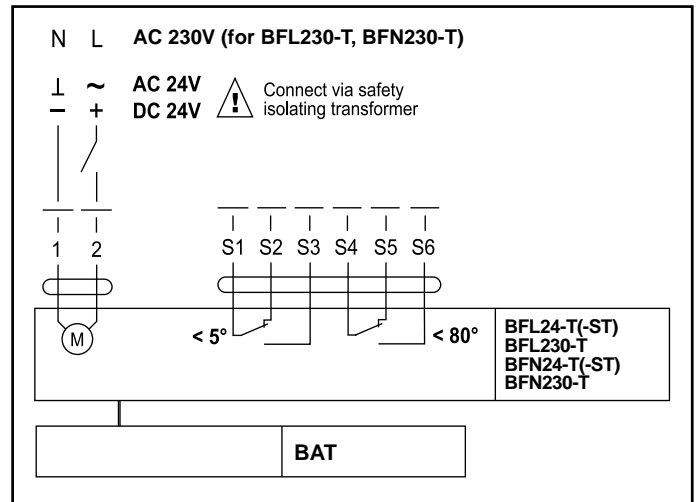
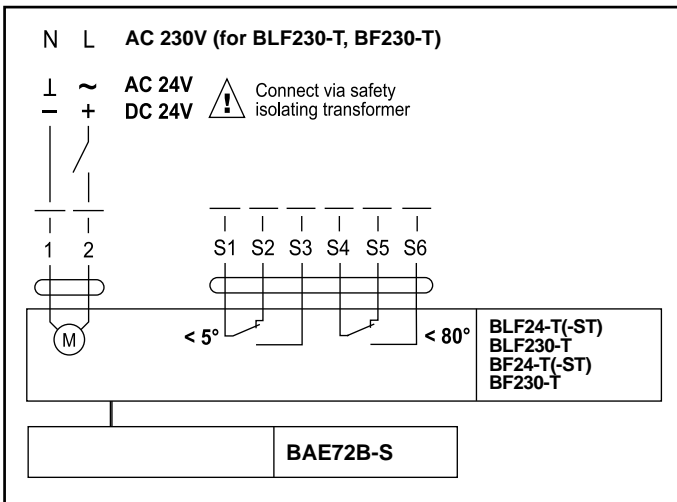
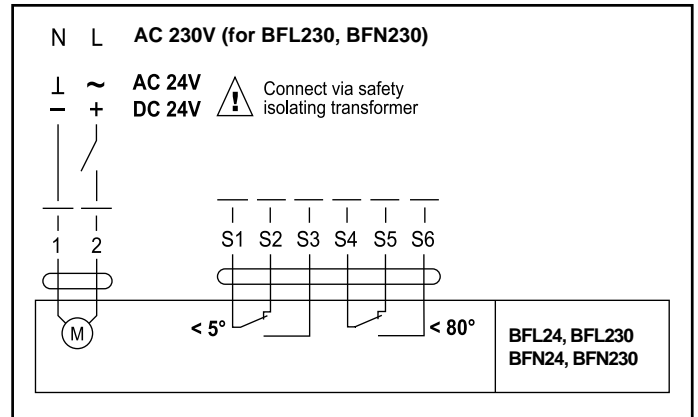
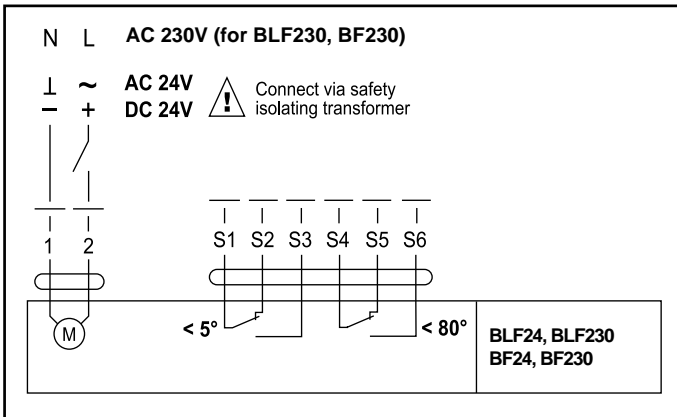
### Dimensions [mm]



**Wiring diagram: B..F.. series Fail-Safe Open/Close Actuators**

**Notes:**

- Parallel connection of several actuators is possible.
- Power consumption must be observed.



Wiring diagram: B..F.. series Fail-Safe Modulating(-SR) Actuators

- Notes:**
- Parallel connection of several actuators is possible.
  - Power consumption must be observed.

