

Spring return actuator with ETR (Electro Thermal Release)

60 second reset
24V AC/DC and 230V AC

Application

The spring-return actuator is intended for the operation of Actionair Smoke/Shield PTCT™ dampers.

Mode of operation

The actuator motors the damper to the reset position whilst simultaneously tensioning the return spring. If the power supply is interrupted, the energy stored in the spring, moves the damper back to the released position to give fail-safe operation.

The ETR incorporates a safety feature that ensures the fail-safe status of the damper if the ETR is not fitted to the ductwork.

The ETR probe has a replaceable 72°C Thermal trip

An LED on the ETR housing indicates:

- ✓ Unit receiving power
- ✓ ETR correctly fitted
- ✓ Thermal fuse intact.

NOTE: thermal fuse (Tf1) in the ETR housing will operate (permanently) at 71°C.

Signalling

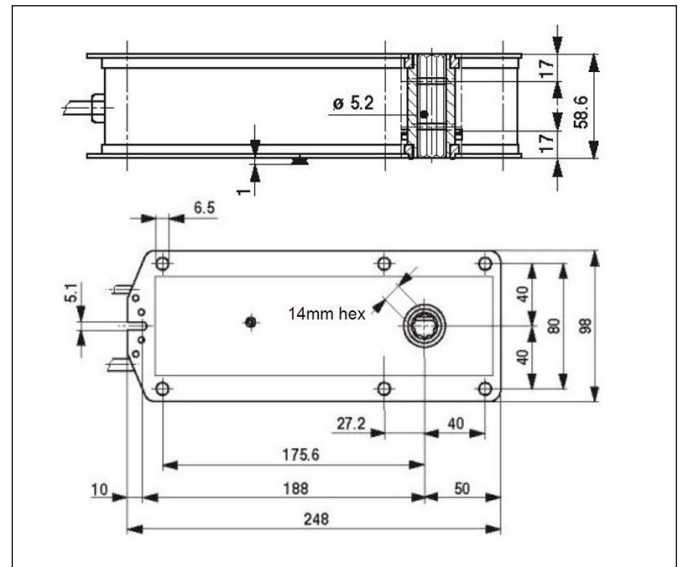
There are two fixed internal microswitches for indicating the end-positions of the damper. Intermediate positions of the damper blade are visible by the use of a mechanical pointer.

Manual operation

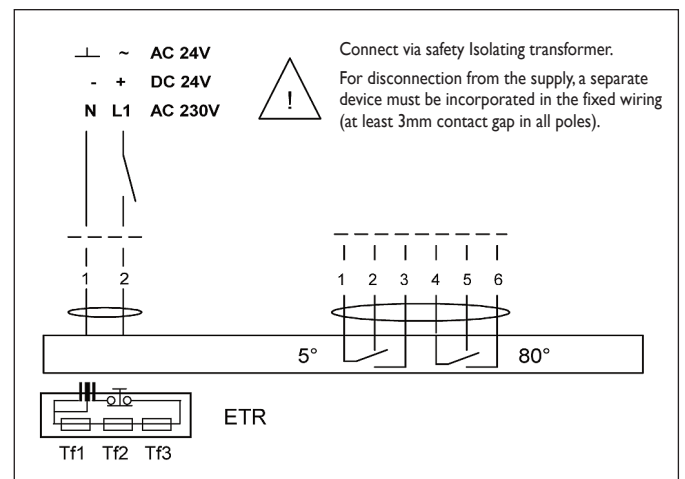
The damper can be operated manually using the key provided and fixed in any required position. Release of the locking mechanism can be achieved manually or overridden by applying the supply voltage.

Testing

A test switch is incorporated in the ETR.



Wiring Diagram





Technical Data	SGS 24 - T	SGS 230 - T
Nominal Voltage	AC 24V 50/60 Hz	AC 230V 50/60 Hz
Nominal voltage range	AC 19,2...28.8V	AC 198...264V
For wire sizing	12.5 VA (I _{max} 8,3A @ 5ms)	14 VA (0,5 A @ 5ms)
Power consumption		
- motoring	10 W	12 W
- holding	2 W	4 W
Connecting cable (LSF quality)		
- Motor	1 m 2 x 0.75 mm ²	1 m 6 x 0.75 mm ²
- Aux. switch	1 m 2 x 0.75 mm ²	1 m 6 x 0.75 mm ²
Auxiliary switches	2 x SPDT 6(3)A, AC 250V	
- Switching points	5° / 80°	
Torque		
- Motor	Min. 20 Nm	
- Spring	Min. 20 Nm	
Angle of rotation	95°	
Output drive coupling	Form-fit 14 mm double hexagon	
Direction of rotation	Selected by mounting L/R	
Running time		
- Motor	<60s	
- Spring	~24s (@ t _{amb} = 20°C)	
Sound power level		
- Motor	max. 45 dB(A)	
- Spring	~ 62 dB(A)	
Position indication	mechanical with pointer	
Protection class	III II	
Degree of protection	IP 54	
Ambient temperature range		
- Normal duty	-30...+ 50° C	
- Safety duty	-30...+ 60° C (24h)	
- Non-operating temperature	-40...+ 60 °C	
Humidity test	To EN60335-1	
EMC	CE according 89/336/EEC and 92/31/EEC, 93/68/EEC	
Low voltage directive	CE according 73/23/EEC	
Service life	25,000 cycles	
Weight	approx. 2,800g	approx. 3,100g

CE Complies with European standards

WARNING: The responsible body shall be made aware that, if the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

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