

Spring return actuator with emergency function for adjusting air dampers in ventilation and air conditioning systems in buildings

- Torque 10Nm
- Nominal voltage AC 24...240V / DC 24...125V
- Control: Open-close



Technical data

Electrical data	Nominal voltage	AC 24...240V, 50/60Hz / DC 24...125V	
	Nominal voltage range	AC 19.2...264V / DC 21.6...137.5V	
	Power consumption	In operation 6W @ nominal torque At rest 2.5W For wire sizing 9.5VA	
	Connection	Cable 1m, 2 x 0.75mm ²	
Functional data	Torque	Motor Min. 10Nm @ nominal voltage Spring return Min. 10Nm	
	Direction of rotation	Can be selected by mounting L / R	
	Manual override	With hand crank and interlocking switch	
	Angle of rotation	Max. 95°↔, can be limited with adjustable mechanical end stop	
	Running time	Motor ≤75s (0...10Nm) Spring return 20s @ -20...50°C / max. 60s @ -30°C	
	Sound power level	Motor ≤45dB(A) Spring return ≤62dB(A)	
	Service life	Min. 60,000 emergency positions	
	Position indication	Mechanical	
	Safety	Protection class	II Totally insulated <input checked="" type="checkbox"/>
		Degree of protection	IP54 NEMA2, UL Enclosure Type 2
EMC	Low-voltage directive	CE according to 2004/108/EC CE according to 2006/95/EC	
	Certification	Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02	
Dimensions / Weight	Mode of operation	Type 1.AA	
	Rated impulse voltage	4kV	
	Control pollution degree	3	
	Ambient temperature	-30...+50°C	
	Non-operating temperature	-40...+80°C	
	Ambient humidity	95% r.h., non-condensating	
	Maintenance	Maintenance-free	
	Dimensions	See «Dimensions»	
	Weight	Approx. 2.1kg	

Dimensions [mm]

Dimensional drawings

Variant 1a:
3/4"-spindle clamp (with insertion part) EU Standard

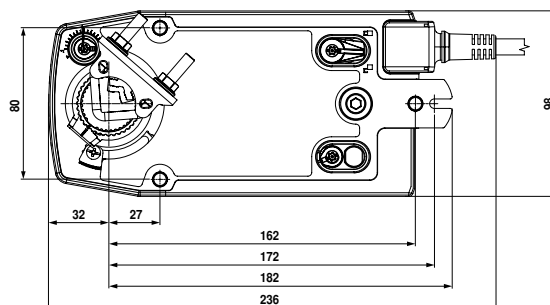
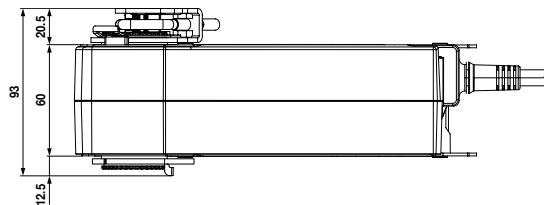
Damper spindle	Length			
	≥85	10...22	10	14...25.4
	≥15			

Variant 1b:
1"-spindle clamp (without insertion part) EU Standard

Damper spindle	Length		
	≥85	19...25.4 (26.7)	12...18
	≥15		

Variant 2:
1/2"-spindle clamp (optional via configuration)

Damper spindle	Length		
	≥85	10...19	14...20
	≥15		



Spring return actuator with emergency function for adjusting air dampers in ventilation and air conditioning systems in buildings

- Torque 10Nm
- Nominal voltage AC 24...240V / DC 24...125V
- Control: Open-close
- Two integrated auxiliary switches



Technical data

Electrical data	Nominal voltage	AC 24...240V, 50/60Hz / DC 24...125V		
	Nominal voltage range	AC 19.2...264V / DC 21.6...137.5V		
	Power consumption	In operation	6W @ nominal torque	
		At rest	2.5W	
		For wire sizing	9.5VA	
	Auxiliary switch	2 x SPDT, 1 x 10% / 1 x 11...90%		
	Connection	Motor	Cable 1m, 2 x 0.75mm ²	
		Auxiliary switch	Cable 1m, 6 x 0.75mm ²	
	Functional data	Torque	Motor	Min. 10Nm @ nominal voltage
			Spring return	Min. 10Nm
Direction of rotation		Can be selected by mounting L / R		
Manual override		With hand crank and interlocking switch		
Angle of rotation		Max. 95°↔, can be limited with adjustable mechanical end stop		
Running time		Motor	≤75s (0...10Nm)	
		Spring return	20s @ -20...50°C / max. 60s @ -30°C	
Sound power level		Motor	≤45dB(A)	
		Spring return	≤62dB(A)	
Service life		Min. 60,000 emergency positions		
Position indication	Mechanical			
Safety	Protection class	II Totally insulated ☐		
	Degree of protection	IP54		
		NEMA2, UL Enclosure Type 2		
	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 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02		
	Mode of operation	Type 1.AA.B		
	Rated impulse voltage	Actuator	4kV	
		Auxiliary switch	2.5kV	
	Control pollution degree	3		
Ambient temperature	-30...+50°C			
Non-operating temperature	-40...+80°C			
Ambient humidity	95% r.h., non-condensating			
Maintenance	Maintenance-free			
Dimensions / Weight	Dimensions	See «Dimensions»		
	Weight	Approx. 2.3kg		

Dimensions [mm]

Dimensional drawings

Variant 1a:

3/4"-spindle clamp (with insertion part) EU Standard

Damper spindle	Length	● I	■ I	◆ I
	≥85	10 ... 22	10	14 ... 25.4
	≥15			

Variant 1b:

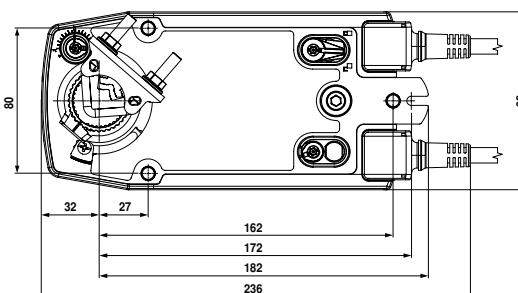
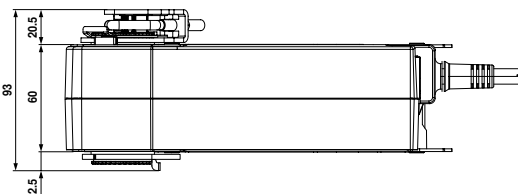
1"-spindle clamp (without insertion part) EU Standard

Damper spindle	Length	● I	■ I
	≥85	19 ... 25.4	12 ... 18
	≥15	(26.7)	

Variant 2:

1/2"-spindle clamp (optional via configuration)

Damper spindle	Length	● I	◆ I
	≥85	10 ... 19	14 ... 20
	≥15		



Modulating spring return actuator with emergency function for adjusting air dampers in ventilation and air conditioning systems in buildings

- Torque 10Nm
- Nominal voltage AC/DC 24V
- Control: modulating DC 0...10V
- Position feedback DC 2...10V



Type overview

Electrical data	Nominal voltage	AC 24V, 50/60Hz / DC 24V
	Nominal voltage range	AC 19.2...28.8V / DC 21.6...28.8V
	Power consumption	In operation 3.5W @ nominal torque At rest 2.5W For wire sizing 5.5VA
	Connection	Cable 1m, 4 x 0.75mm ²
Functional data	Torque	Motor Min. 10Nm @ nominal voltage Spring return Min. 10Nm
	Control	Control signal Y DC 0...10V, input impedance 100kΩ Operating range DC 2...10V
	Position feedback (measuring voltage U)	DC 2...10V, max. 0.5mA
	Position accuracy	±5%
	Direction of rotation	Motor Reversible with switch ↻ / ↻ Spring return Can be selected by mounting L / R
	Manual override	With hand crank and interlocking switch
	Angle of rotation	Max. 95°↔, can be limited with adjustable mechanical end stop
	Running time	Motor ≤150s (0...10Nm) Spring return ≤20s @ -20...50°C / max. 60s @ -30°C
	Sound power level	Motor ≤40dB(A) @ 150s running time Spring return ≤62dB(A)
	Service life	Min. 60,000 emergency positions
	Position indication	Mechanical
	Safety	Protection class
Degree of protection		IP54 NEMA2, UL Enclosure Type 2
EMC		CE according to 2004/108/EC
Certification		Certified to IEC/EN 60730-1 and IEC/EN 60730-2-14 cULus according to UL 60730-1A and UL 60730-2-14 and CAN/CSA E60730-1:02
Mode of operation		Type 1.AA
Rated impulse voltage		0.8kV
Control pollution degree		3
Ambient temperature		-30...+50°C
Non-operating temperature		-40...+80°C
Ambient humidity		95% r.h., non-condensating
Maintenance	Maintenance-free	
Dimensions / Weight	Dimensions	See «Dimensions»
	Weight	Approx. 2.1kg

Dimensions [mm]

Dimensional drawings

Variant 1a:
3/4"-spindle clamp (with insertion part) EU Standard

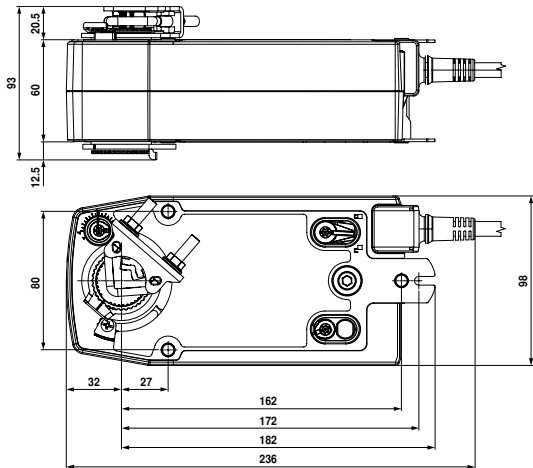
Damper spindle	Length	● I	■ I	◆ I
	≥85	10...22	10	14...25.4
	≥15			

Variant 1b:
1"-spindle clamp (without insertion part) EU Standard

Damper spindle	Length	● I	■ I
	≥85	19...25.4	12...18
	≥15	(26.7)	

Variant 2:
1/2"-spindle clamp (optional via configuration)

Damper spindle	Length	● I	◆ I
	≥85	10...19	14...20
	≥15		

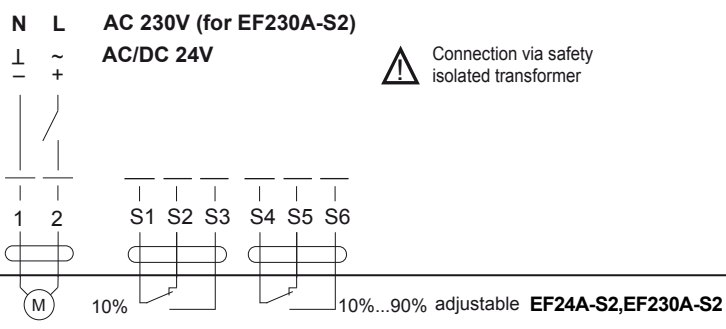
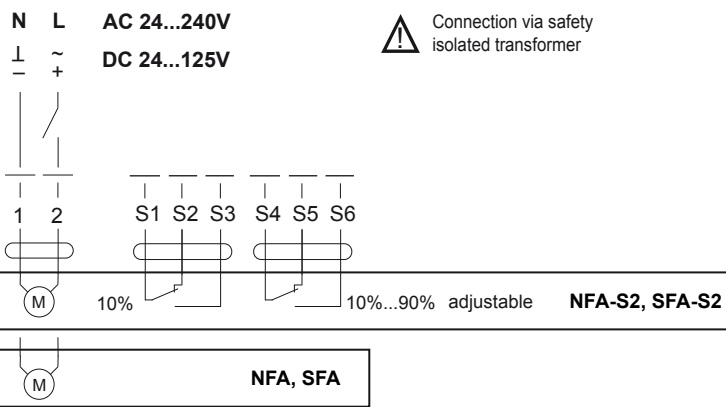
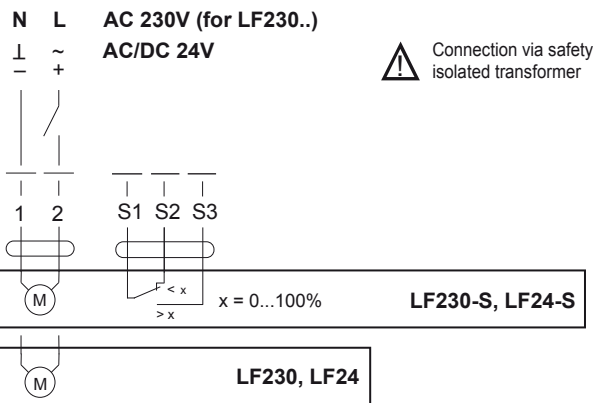
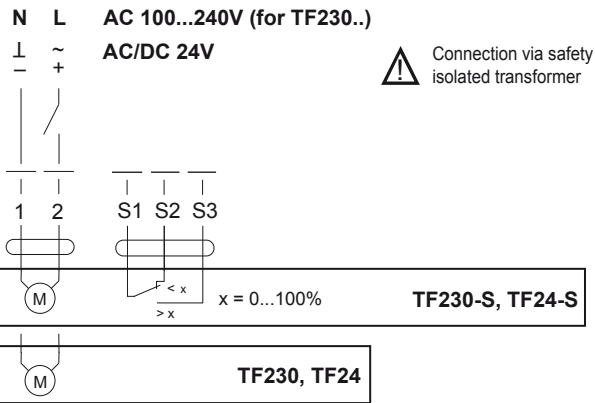


UL marked actuators is optional, please contact your local Sales Representative for details.

Wiring diagrams: Open/Close actuators

Notes:

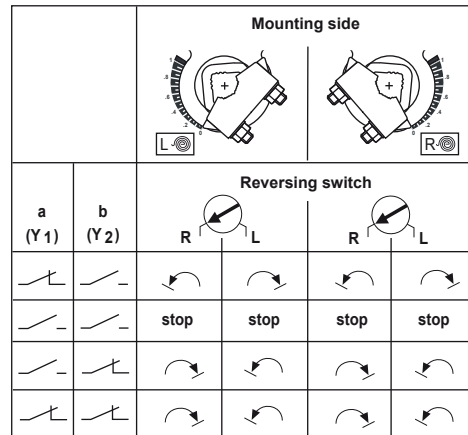
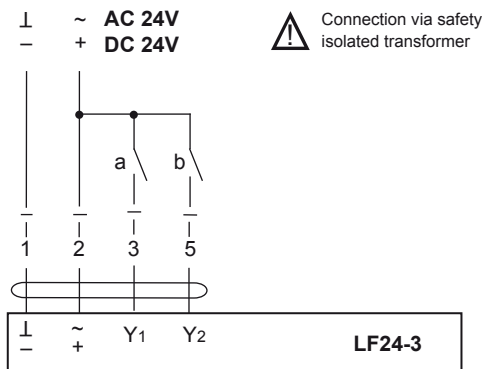
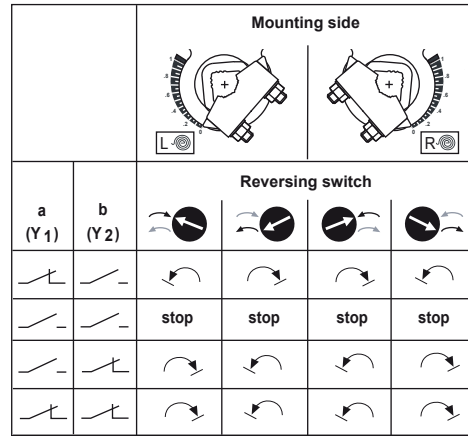
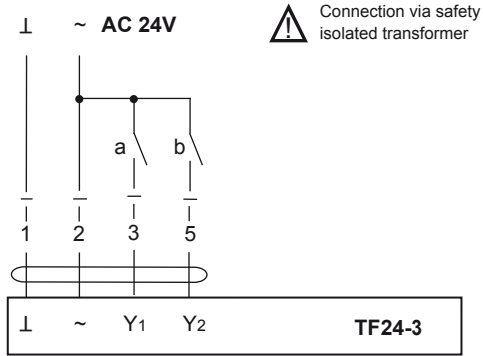
- Parallel connection of several actuators is possible.
- Power consumption must be observed.



Wiring diagrams: 3-point actuators

Notes:

- Connection via safety isolating transformer.
- Parallel connection of several actuators is possible.
- Power consumption must be observed.



Wiring diagrams: modulating actuators

Notes:

- Connection via safety isolating transformer.
- Parallel connection of several actuators is possible.
- Power consumption must be observed.

