Series
BELIMO
LF24/LF230

■ Application

The LF series actuators with actuating torque 4 Nm are designed for controlling air dampers with cross section up to 0.8 m² installed in various ventilation and air conditioning systems and performing protection functions, as freezing protection, smoke detection, etc.
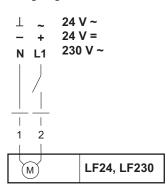
■ Design

The actuator moves the damper to its operating position while tensioning the return spring at the same time. In case of power supply cut-off, the damper moves back to its safe position by the spring energy.
The actuator is installed directly on the damper axis and locked with a special spindle clamp to prevent its turning-through. The actuator overload protection stops the actuator once it reaches the end positions. The turning angle may be adjusted by a mechanical end stop.

Technical data

	LF24	LF230
Voltage	24 AC 50/60 Hz, 24 DC	230 AC 50/60 Hz
Nominal voltage range [V]	19.2...28.8 AC 21.6…28.8 DC	198...264 AC
Rated power [VA]	7 (max. I 5.8 A at t = 5 ms)	7 (max. I 150 mA at t = 10 ms)
Power consumption in operation/at rest [W]	5/2.5	5/ 3
Connecting cable	1 m long, 2 x 0.75 mm²	
Rotation direction	determined by L/R positioning	
Torque (motor/spring) [Nm]	4 (at nominal voltage)/4	
Rotation angle:	max. 95°, adjustable 37…100 % with a mechanical end stop	
Running time (motor/spring) [s]	40…75 (0…4 Nm) /~20 at -20…50 °C	
Service life	60 000 switching operations	
Ingress protection	IP54 (installation with cable downwards)	
Electrical protection class	III low voltage II totally insulated	
Operation temperature [°C]	-30…+50	
Storage temperature [°C]	-40…+80	
Ambient humidity	95 %, no condensation	
Noise level (motor/ spring) [dBA]	50 /~62	
Maintenance	not required	
Weight [kg]	1.4	1.55

Wiring diagram

⊥	~	**24 V ~**
−	+	**24 V =**
N	L1	**230 V ~**

1　2

(M)　**LF24, LF230**

Warning!

For **LF24**: connection via a power transformer

For **LF230**: after disconnection from power supply the contacts opening gap must be within 3 mm.

Several wires may be parallel connected with respect to the power

Overall dimensions [mm]

18.5　82　57　6.5　8...16

181　155　25　6.5　12.6　80　49　98　18　93　125

ELECTRIC ACTUATORS

TF24/TF230 LF24/LF230