Control systems Electric actuators

> TI-P321-02 CTLS Issue 4



EL5060 and EL5061 Series **Electric Actuators (Spring Reserve)**

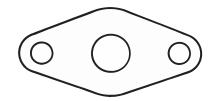
Description

The EL5060 and EL5061 series actuators are reversible actuators having a linear output with power fail, spindle extend. These actuators are suitable for either two position or modulating control dependent on the controller or other switching device providing the input signal. These actuators can be used with the following valves:

KE31, KE33, KE43, KE71, KE73 and R63, RB33, RB43, RB63, RB73 2-port

3-port Q33, Q43, Q73, QB33, QB43 and QB73

Note: Fixing kit EL3806 is required when using DN15 to DN50 KE type valves.



EL3806 fixing kit

(For use with with DN15 to DN50 KE valves)

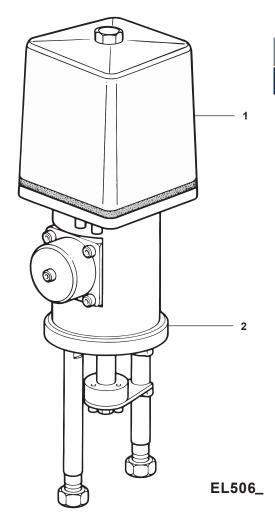
Available types

Actuator operation	Actuator type
Spring reserve 220/240 Vac	EL5060
Spring reserve 24 Vac	EL5061

110 V version available on request.

Technical data

Model	EL506_				
Supply voltage	220/240 Vac + 20% - 10% or 24Vac ± 10%				
Supply frequency	50 Hz				
Power consumption	6.8 W (run) 15 W (hold)				
Enclosure rating	IP54				
Actuator speed (mm/s)	0.29 Under power				
Ambient limits	0-50 °C				
Reseat time	8.5	30 mm stroke			
at no voltage (seconds)	5.5	20 mm stroke			
Motor	Split phase capacitor reversing				
Terminations (accept)	1 x 4 mm² cable				
Transfer switching	5 A, 250 Vac (2 switches)				
Conduit entries	4 x Pg11 connections with plastic covers				



Materials

No.	Part	Material				
1	Case	Polycarbonate				
2	Housing	Steel				

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Available accessories

EL5804 - Anti-condense heater.

EL5806 - 2 switch pack.

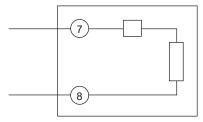
EL5807 - Auxiliary feedback potentiometer and gear. **EL5808** - Auxiliary feedback potentiometer without gear.

Technical data

Accessory type	Specification					
EL5804	4 watt					
EL5806	15 A resistive at 250 Vac					
EL5807 and EL5808	1000 ohms, 4 watt					

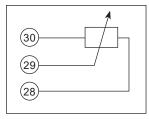
Wiring diagrams

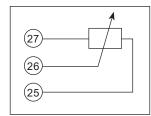
EL5804 anti-condense heater



Anti-condense heater

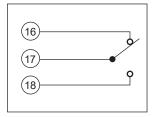
EL5807 and EL5808 auxiliary potentiometers

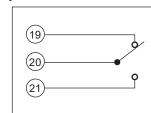




1000 Ω feedback potentiometers

EL5806 auxiliary switches





Adjustable travel switches

How to order

Example: 1 off EL5807 auxiliary feedback potentiometer and gear train.

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How to select

EL5000 Series	and PN rating ac/50 Hz mm/s Size D			Valve sizes and differential pressures (Δ p) bar										
		Size DN	15	20	25	32	40	50	65	80	100			
					Stroke mm			20		,			30	
					K _{vs} value	0.4 1.0 1.6 4.0	h 3	10	16	25†	36	63	100	160
Spring return		CI PN16												
EL5060	2-port	CS PN40 SS PN40	220/240	0.29										
EL5061			24			18.0	18.0	10.3	7.4	3.6	2.0	1.2	0.5	0.3
EL5060	3-port CI PN16 CS PN40	CI PN16	220/240											
EL5061		24	1											

† Note: K_{vs} value of 6.3, 10 and 16 available on demand for DN40 valves.

Selection example

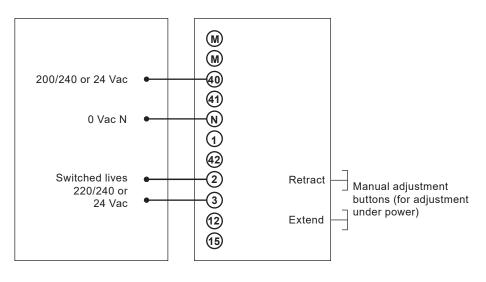
Control valve:	DN20 KE43 2-port valve
Max ∆p:	12 bar
Electrical supply:	240 Vac
Actuator selected:	EL5060
EL3806 linkage	

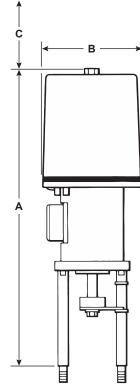
Dimensions/weights (approximate) in mm and kg

Model Weight 445 EL506_ 162 170 8.7

Wiring diagram

for power fail return actuators: EL5060 and EL5061





Installation and wiring

The actuator should preferably be mounted above the valve, but in any case should not be mounted below it. Ensure the actuator is coupled to the valve before power is applied and wiring meets local regulations.

How to order

Example: 1 off Spirax Sarco EL5060 spring reserve electric actuator.