



## ELECTROTHERMAL ACTUATORS 100N / 140N

SEI

### APPLICATION

Electrothermal actuator SEI is used to control zone and fan-coil valves in HVAC systems. SEI is suitable to drive VFX valve bodies series.

When actuators is not energized the valves are normally closed on direct way. Two action types are available: On-Off and modulating 0...10 Vdc.

The sensing element inside the capsule spreads out causing

the movement of the shaft. So the stem valve connected to the shaft moves and opens the valve.

When actuator is powered off, the shaft goes up and the valve moves to the closed position by a spring return. The assembly actuator/valve body is done directly by a metal ring nut easy, no tool is necessary.

The actuator is fitted with position valve indication.

TYPE	FORCE N	STROKE mm	POWER SUPPLY Vac 50/60 HZ	ACTION	POWER CONSUMPTION VA
SEIT24	100	2.5	24	On/Off	3.0
SEIT230	100	2.5	230	On/Off	3.0
SEIT24S	100	2.5	24	On/Off	3.0
SEIT230S	100	2.5	230	On/Off	3.0
SEITP24	140	2.5	24	On/Off	3.0
SEITP230	140	2.5	230	On/Off	3.0
SEITP24S	140	2.5	24	On/Off	3.0
SEITP230S	140	2.5	230	On/Off	3.0
SEIM24	100	2.5	24	modulating 0...10 Vdc	3.5
SEIM24	140	2.5	24	modulating 0...10 Vdc	3.5

#### Optional:

S with 1 auxiliary microswitch, only for models SEIT and SEITP (On-Off)

### TECHNICAL FEATURES

#### Power supply:

SEIM24, SEIMP24 24 Vac ± 10% 50/60 Hz

SEIT24, SEITP24 24 Vac ± 10% 50/60 Hz

SEIT230, SEITP230 230 Vac ± 10% 50/60 Hz

#### Peak current:

SEIM24, SEIMP24 < 0.25 A

SEIT24, SEITP24 < 0.25 A

SEIT230, SEITP230 < 0.70 A

Aux. switch rating: 250 Vac 3 A

Sensing element: special wax

#### Timing:

SEIT230, SEITP230 3.5 min (2.5 mm at 20 °C)

SEIT24, SEITP24 4.5 min (2.5 mm at 20 °C)

Working temp.: 0...50 °C

Working humidity: 10...90 % r.h. (without condensing)

Storage temp.: -20...70°C

Cable: PVC, section 2 x 0,50 mm<sup>2</sup>, length 2 m

Connection: metal ring M30 x 1.5

Housing: transparent

Protection class: IP40, IP44 if mounted vertically

class II (SEIT230, SEITP230),

class III (SEIT24, SEITP24, SEIM24, SEIMP24)

Self extinguishing: V0 - V1 according to UL94

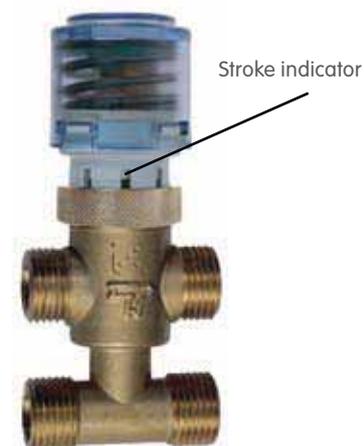
Dimensions: see next page

Weight: 200 g

### INSTALLATIONS

Mount the thermal actuator on the valve body and tighten the metal ring nut on the thread of bonnet valve body. This operation must be done when the actuator is cold (not powered on). Perform the electrical connections as per electrical wiring diagrams. Pay attention that the power supply value corresponds to the value of actuator indicated on label stuck on the unit.

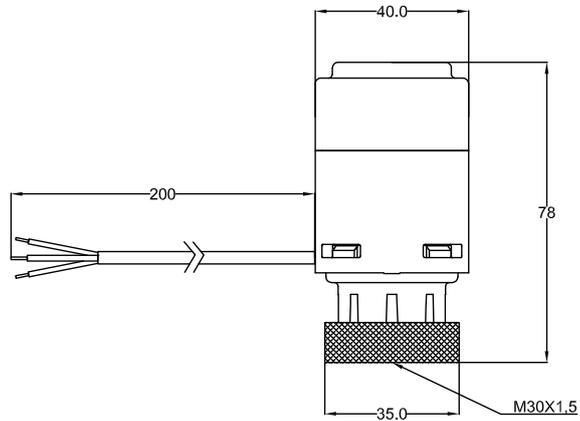
fig.1



WIRING DIAGRAM AND DIMENSIONS (mm)

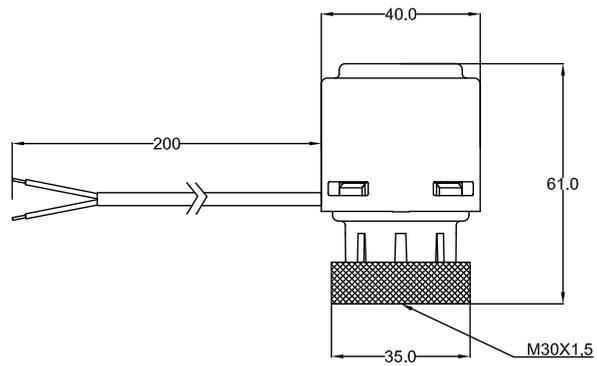
SE1M24, SE1MP24

COM	Blue
IN. (V) 0...10 V	Black
24 Vac	Brown

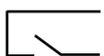


SE1T24, SE1TP24 / SE1T230, SE1TP230

COM	Blue
24/230 Vac SE1T24, SE1TP24/ SE1T230, SE1TP230	Brown



SE1T24S, SE1TP24S / SE1T230S, SE1TP230S

COM	Blue
24/230 Vca SE1T24S, SE1TP24S/ SE1T230S, SE1TP230S	Brown
Aux. contact	 Grey
	Black

Closed valve A-AB way, contact open  
Open valve A-AB way, contact closed

