Tender specification:

Oventrop electromotive actuators for steady control, as three point actuator with connection thread M 30 x 1.5 and manual setting. As for the 24 V model, the mode of operation is adjustable via the DIP switch.

Models:	**Item no.:**
"Aktor M 3P L", 24 V, three point actuator	1012708
"Aktor M 3P H", 230 V, three point actuator	1012709

Technical data:

Operating current:	24 V AC/DC ±10 %; 50/60 Hz 230 V AC ±10 %; 50/60 Hz
Power consumption:	2.5 VA for AC 0.8 W for DC
Drive:	Three point control
Max. piston stroke:	4 mm
Operating power:	> 90 N
Floating time:	15 s / mm
Protection:	IP 40 according to EN 60529
Protective system:	24 V: III/230 V: II according to EN 60730
Max. fluid temperature:	100 °C
Ambient temperature:	0 up to 50 °C (not condensing)
Storage temperature:	0 up to 50 °C (not condensing)
Connecting cable:	3 x 0.34 mm², 1.5 m long

Installation and fitting:

Electrical connections must be carried out in accordance with the requirements of the local Electricity Board.

The connecting cable must not come into contact with hot pipes or similar as excessive heat will accelerate the ageing of the cable insulation.

Oventrop electromotive actuators can be installed in any position, except for vertical downward position.

Application:

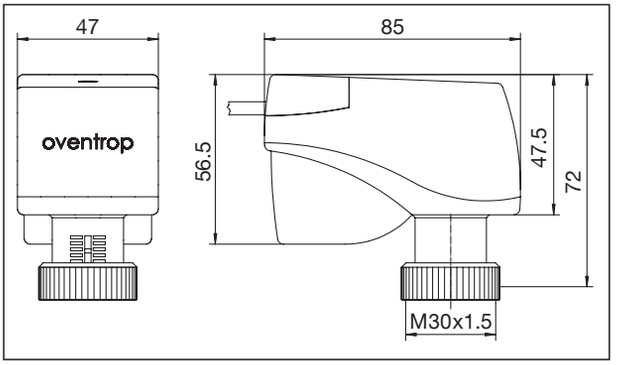
The Oventrop electromotive actuators "Aktor M 3P" are used for heating, ventilation and air conditioning. In combination with conventional radiators, radiators with integrated distributor, distributors/collectors for surface heating, radiant ceiling panels, chilled ceiling systems and induction air systems, the electromotive actuators allow for an individual room temperature control.

In combination with temperature controllers with three point output 230 V (e.g. boiler regulations) and, for instance, Oventrop three-way valves, they allow for an individual flow temperature control of heating systems.

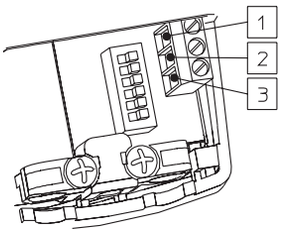
The actuators can be combined with the following Oventrop valves with connection thread M 30 x 1.5:

– Regulating valves "Cocon 2TZ"
– Pressure independent control valves "Cocon QTZ"
– All thermostatic radiator valves (except for valves "ADV 9/ ADV 6" and "KTB")
– Three-way diverting and mixing valves
– Regulating valves "Hycocon ETZ/HTZ"
– Distributors/collectors for surface heating systems (please observe ambient temperature within the cabinet)

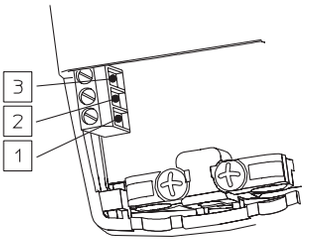
"Aktor M 3P"



Dimensions



Item no. 1012708		
1	0 V AC/DC	white WH
2	24 V AC/DC	brown BN (▼)
3	24 V AC/DC	green GN (▲)



Item no. 1012709		
1	0 V AC	white WH
2	230 V AC	brown BN (▼)
3	230 V AC	green GN (▲)

Cable assignment of the terminals

Function:

In combination with Oventrop valves and a central controller in the centralised building control system, the Oventrop electromotive actuators with three point control allow for precise individual room temperature control or flow temperature control. When installing the pipework correspondingly, several terminal units (zones) may be controlled with one valve only.

The mode of operation of the 24 V model can be reversed via the DIP switch S3 without changing the wiring.

With the appropriate activation, the 24 V model can also be used for two point operation.

The actuators are silent in operation with low power consumption. The stroke lift of the actuator is clearly visible via the position indicator.

The facility for emergency setting allows for a manual operation of the actuator in idle position by use of a 4 mm Allen key. The integrated slip clutch protects the gear against excessive operating forces.

In addition to the cable connected at works, the integrated terminals allow for the direct connection to the installation cable laid on site without additional clamping device.

LED display:

The operating status of the actuator is displayed on the LED display which is located under the cover.

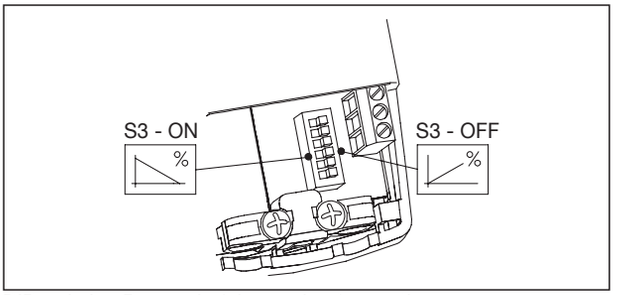
☼	On	Drive stem closes down (opening)
◑	Flashes	Drive stem opens up (closing), the LED remains switched on after having reached the lower lift position
•	Off	No operating current

DIP switch settings:

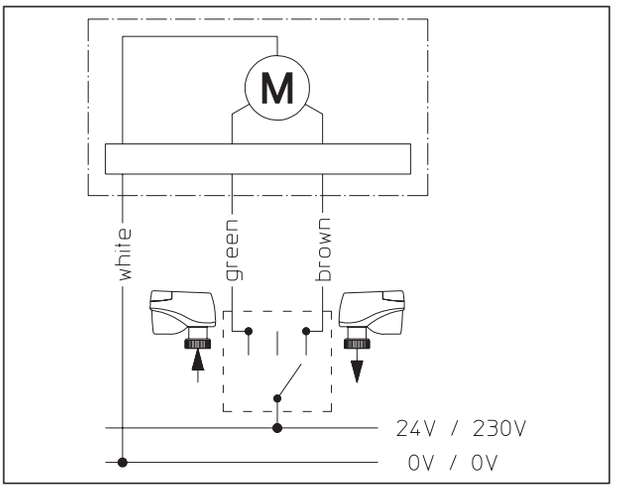
The DIP switches are located under the cover which is secured with a Torx screw.

Actuator, item no. 1012708

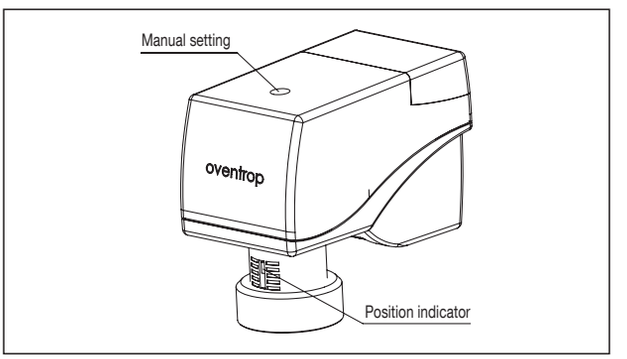
– S3: Reversal of the mode of operation
– S4: S1, S2, S4 up to S6: Without function



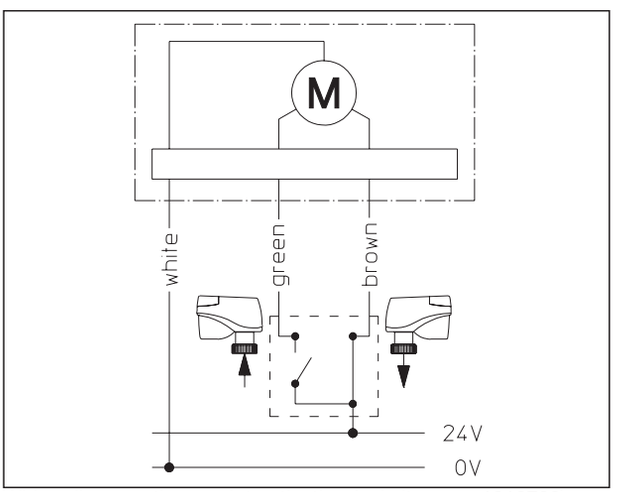
DIP switch – Reversal of the mode of operation



Wiring diagram, three point activation



Manual setting and position indicator



Wiring diagram, three point activation (only item no. 1012708)

Subject to technical modifications without notice.

Product range 1
ti 329-EN/10/MW
Edition 2017