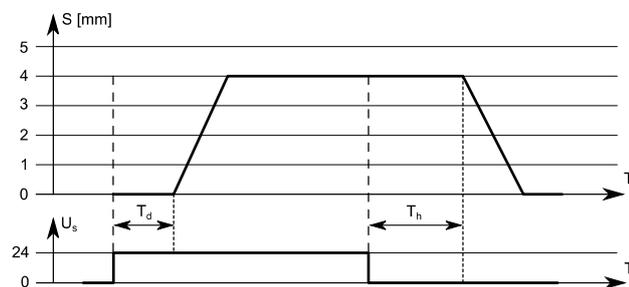


THERMAL ACTUATORS A 40405 AND A 41405

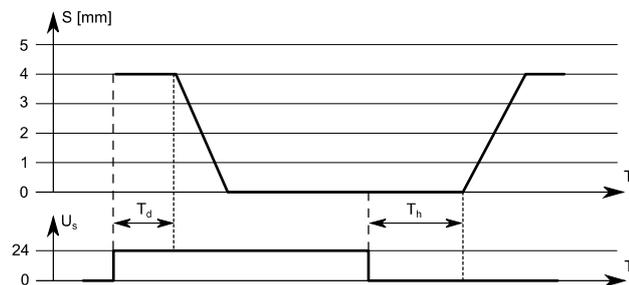
A 40405 and A 41405 thermal actuators are designed for controlling control valves in HVAC automation systems. The thermal actuator can be controlled by 24 Vac on/off control signal or PWM signal. A 40405 is normally closed and A 41405 is normally open.

The following figures illustrate the function principles of the thermal actuators.

A 40405:



A 41405:



S = stroke
U_s = supply voltage
T = time
T_d = dead time
T_h = hold time

NOTE: Do not use ammoniac materials or glues near the thermal actuators.

Thermal actuators are mounted to the NV2 control valves by using a VA 80 adapter ring. Special adapter rings are also available for other valve manufacturers' valves.

A 40405 thermal actuators are delivered in "First open" status which leaves the valve a bit open after actuator assembly. This allows the system filling and flushing even if the control system is not yet functioning. The actuator set to normal operation after the actuator is connected to the supply voltage for at least 6 minutes. You cannot activate the "First open" function again.



Technical data:

Supply	24 Vac/Vdc (22...28 V)
Power consumption	1,0 W
Operating current	42 mA
Start-up current	< 300 mA (max. 2 min.)
Force	95...105 N
Stroke	4 mm
Running time	approx. 3,5 min (close / open)
De-energized position	
A 40405	closed (NC), actuator in lower position
A 41405	open (NO), actuator in upper position
Mounting	by using an adapter ring (sold separately)
Fluid temperature	0...100 °C
Ambient temperature	0...60 °C
Housing	IP54, polyamide

Wiring:

Blue	0 V
Brown	24 V

Ordering guide:

Model	Product number	Description
A 40405-00N00-1S	1210011	thermal actuator 24 V, NC, fixed cable (1 m)
A 40405-00N00-3S	1210012	thermal actuator 24 V, NC, fixed cable (3 m)
A 41405-10N00-1S	1210021	thermal actuator 24 V, NO, fixed cable (1 m)
A 41405-10N00-3S	1210022	thermal actuator 24 V, NO, fixed cable (3 m)