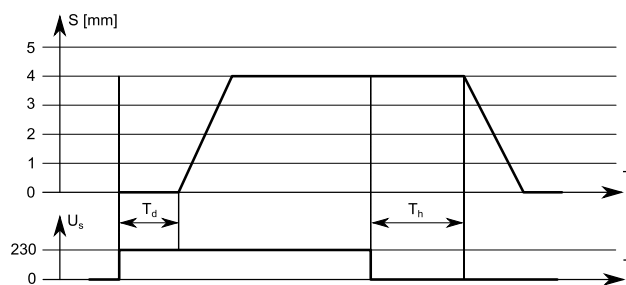


THERMAL ACTUATORS A 20405 AND A 21405

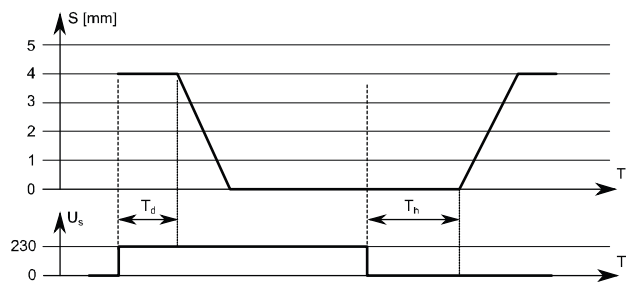
A 20405 and A 21405 thermal actuators are designed for energy-efficient control valve controlling in HVAC automation systems. The thermal actuator can be controlled by 230 Vac on/off control signal or PWM signal. A 20405 is normally closed and A 21405 is normally open.

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

A 20405:



A 21405:



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.

The 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 20405 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	230 Vac (207...253 V)
Power consumption	1,0 W
Operating current	4,3 mA
Start-up current	< 550 mA (max. 100 ms)
Force	95...105 N
Stroke	4 mm
Running time	approx. 3,5 min (close / open)
De-energized position	
A 20405	closed (NC), actuator in lower position
A 21405	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	230 V

Ordering guide:

Model	Product number	Description
A 20405-00N00-1S	1210027	thermal actuator 230 V, NC, fixed cable (1 m)
A 21405-10N00-1S	1210028	thermal actuator 230 V, NO, fixed cable (1 m)