20Nm On/Off or Raise/Lower & Modulating Actuators

Features

- Maintenance-free
- Position indication
- Reversible rotation
- Mechanically set rotation limits

Specification

Power supply:		
	VA-20x-24	19-29Vac/dc (24V nominal)
	VA-20A-230	85-265Vac (230V nominal)
Max. power consumption:		
	Running	3W
	Stopped	1.5W
Connection		Via 1m flying lead (halogen free)
Angle of rotation		0° - 95°
Running time		<150s / 90°
Damper coupling:		
	Square	9-18mm
	Round	9-26mm
Damper size		Up to approx. 4m²
Protection		IP54
Aux. switch rating		SPDT 5(2.5)A @250Vac
Service life		>60000 cycles (0°-95°-0°)
Ambient:		
	Temperature	-30°C to +50°C
	RH	5 to 95% RH
Protection class		
	VA-20x-24	III
	VA-20x-230	II
Conformity		CE
Country of origin		Germany

Product Codes

VA-20A-24S

24Vac/dc 20Nm on/off or Floating actuator with auxiliary switches

VA-20A-230S

230Vac 20Nm on/off or Floating actuator with auxiliary switches

VA-20M-24S

24Vac/dc 15Nm Modulating actuator with auxiliary switches

Technical Overview

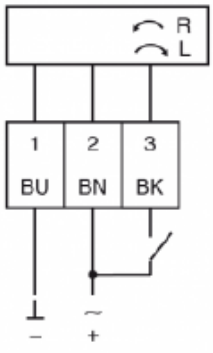
The VA-20 range of actuators require either a 24Vac/dc or 230Vac supply depending on version ordered. They are available to accept either an on/off/floating (raise/lower) or modulating control signal input. They also have an auxiliary switches option.
The direction of rotation can be reversed. By a simple selector switch. The actuator is overload-proof, and requires no limit switches and automatically stops when the end stop is reached.

Installation

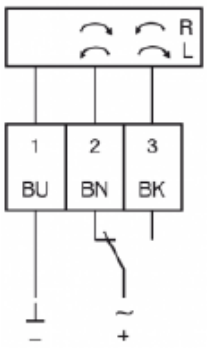
1. Ensure that all power is disconnected before carrying out any work on the damper actuator.
2. Attach the actuator to the damper spindle, finger tighten the nuts on the V-clamp.
3. Fix the anti-rotation strap to the back of the actuator (bend if required).
4. Move the damper to the closed position.
5. Using the manual override push button, turn the clamp until the actuator is in the correct position.
6. Tighten the V-clamp.
7. If the damper has no fixed stops of its own, the angle of rotation / working range can be adjusted mechanically by re-positioning the adjustable stops.
8. Terminate the cores of the flying lead as required (see next column).
9. Ensure that the voltage is within the specified tolerances.

Operating Modes & Connections

2-Point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

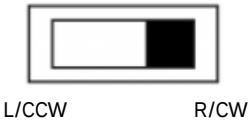


3-point.
Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position “R” moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.



Rotary direction switch

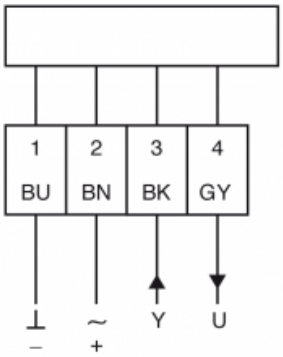
R/CW= clockwise
L/CCW= counter clockwise



Operating Modes & Connections (continued)

Modulating.

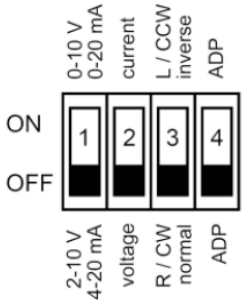
Through connecting the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 0(2)...10Vdc, moves the actuator to its specified position. The actual damper position 0...100% is a feedback signal U for example to share the signal with other actuators.



Mode-switch

Measure on angular range

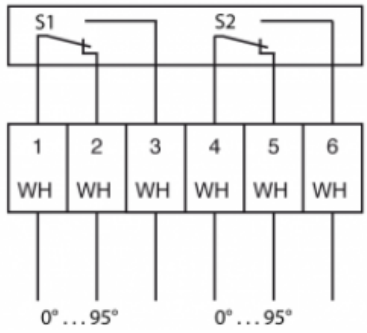
- Actuator power-off
- Setting the mechanical end stops
- Connecting the actuator to the power supply
- -ut Dip 4 to “ON”
- Actuator is measuring on angular range
- “Y” refers to the measured angular range



Manual Override

Manual override is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

End Switches



Dimensions