



### Features and Benefits

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

### 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 auxiliary switch 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.

### Product Codes

<b>VA-20A-24S</b>	24Vac/dc 20Nm on/off or Floating actuator with auxiliary switches
<b>VA-20A-230S</b>	230Vac 20Nm on/off or Floating actuator with auxiliary switches
<b>VA-20M-24S</b>	24Vac/dc 20Nm Modulating actuator with auxiliary switches

### 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. 4m <sup>2</sup>
Protection	IP54
Aux. switch rating	SPDT 5(2.5)A @250Vac
Service life	>60000 cycles (0°-95°-0°)
Ambient:	
Temperature	-30 to +50°C
RH	5 to 95% RH
Protection class	
VA-20x-24	III
VA-20x-230	II
Conformity	CE
Country of origin	Germany
Conformity*	EMC, LVD, CE & UKCA Marked
Conformity	EMC, CE & UKCA Marked

\* Actuators with auxiliary switches only

#### WEEE Directive:



At the end of the products useful life please dispose as per the local regulations. Do not dispose of with normal household waste. Do not burn.



### 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 device to the back of the actuator. This is supplied connected to the back of the housing, to release simply buckle.
4. Move the damper to the closed position. Using the manual override push button, turn the clamp until the actuator is in the correct position and tighten the V-clamp.
5. 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.
6. Terminate the cores of the flying lead as required and ensure that the voltage is within the specified tolerances.

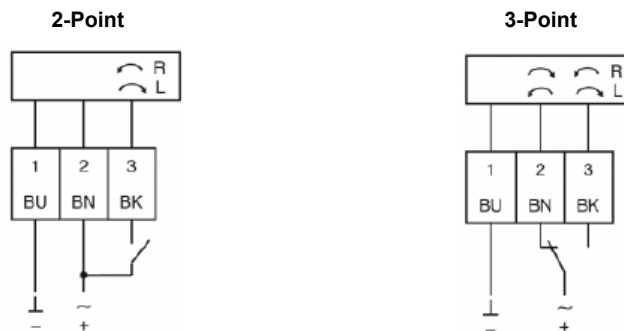
### Operating Modes & Connections

#### 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.

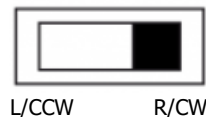
#### 3-point

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



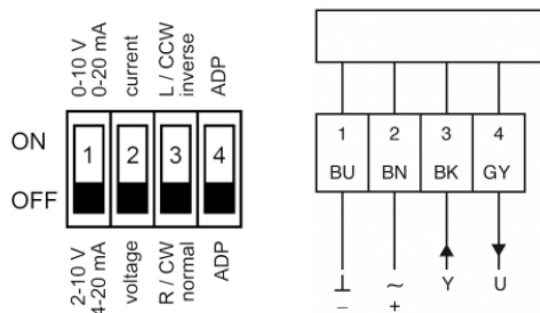
#### Modulating

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

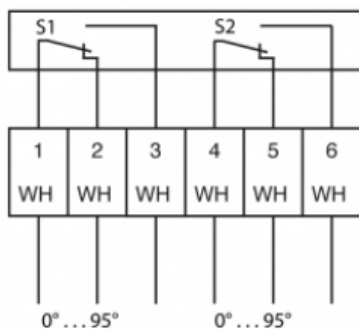
Measure on angular range

- 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

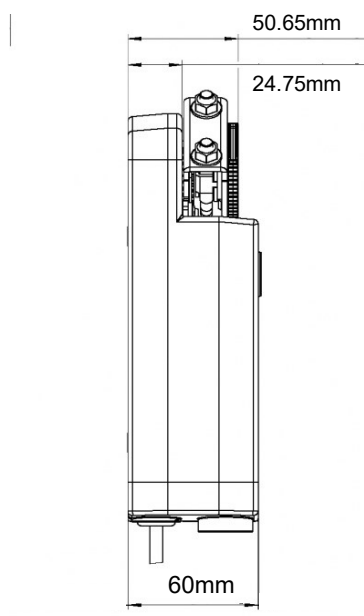
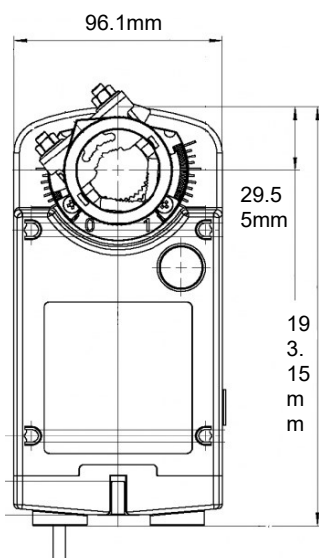


## Operating Modes & Connections (continued)

Adjustment of auxiliary switches



## Dimensions



Whilst every effort has been made to ensure the accuracy of this specification, Sontay cannot accept responsibility for damage, injury, loss or expense resulting from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.