VA115.1 VA115.2

Terminal Unit Actuators Series

Product Bulletin

The VA115xxTerminal Unit Actuators Series provide ON/OFF and DAT control in HAVC application.

The compact design of these actuators make them suitable for installations in confined spaces, such as fan-coil applications.

The VA115xx actuators are designed for field mounting onto KVDN... terminal unit valve, DKV...pressure independent valve and the discontinued series VG6000, V5000, VG4000 and VG5000 (see pertinent product bulletins).

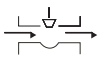
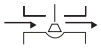
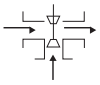
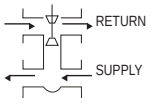
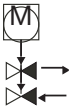
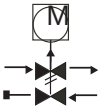
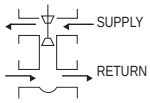
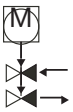
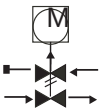
Moreover, thanks to an innovative fixing system, the VA115xx is suitable for almost all the terminal unit valves in the market.

- **Low and line voltage models available**
  Flexible applications
- **Suitable to FRAKTA and almost all of terminal unit valve on the market**
  No limits in valve selection and retrofitting
- **Easy mounting solution**
  Easy to install, no expert required, just one click to snap onto the valve adapter.
- **Compact design**
  Ideal for installation in confined spaces (fan coils, etc.)
- **Can be mounted after valve body is installed** Easier to install. Allows more flexibility in actuator selection
- **Actuator stroke indicator highly visible**
  Actuator stroke visible in any direction, in confined space and in dark environment
- **IP54**
  Installation permitted in any direction

Ordering Codes

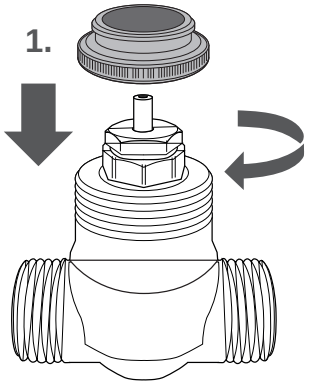
Product Code	Power Supply	Control Type	Factory Setting	Mounting Thread	Auxiliary Switches
VA115.1	24 V AC/DC +20% - 10%	ON/OFF	Normally Closed. Stem retracts when energized.	M30 x 1.5	---
VA115.2	230 V AC ± 10%		Normally Closed. Stem retracts when energized.	M30 x 1.5	

Valve - Actuator operating schematics

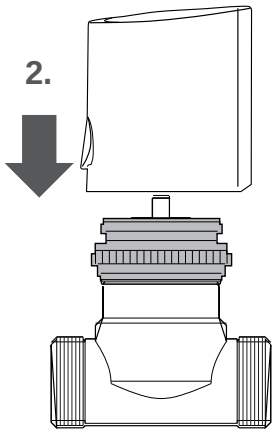
Valve Type		Stem Movement / Flow ▶ = flow ▷ = no flow	
		Actuator Stem Extended	Actuator Stem Retracts
	2-Way PDTC (NO)		
	2-Way PDTO (NC)		
	3-Way MIXING 		
	3-Way DIVERTING 		
	3-Way MIXING + Bypass 		
	3-Way DIVERTING + Bypass 		

Mounting Instructions

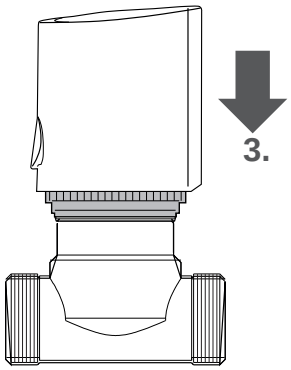
When mounting the actuator on the valve, please follow the instruction below:



Screw the adapter manually onto the valve.

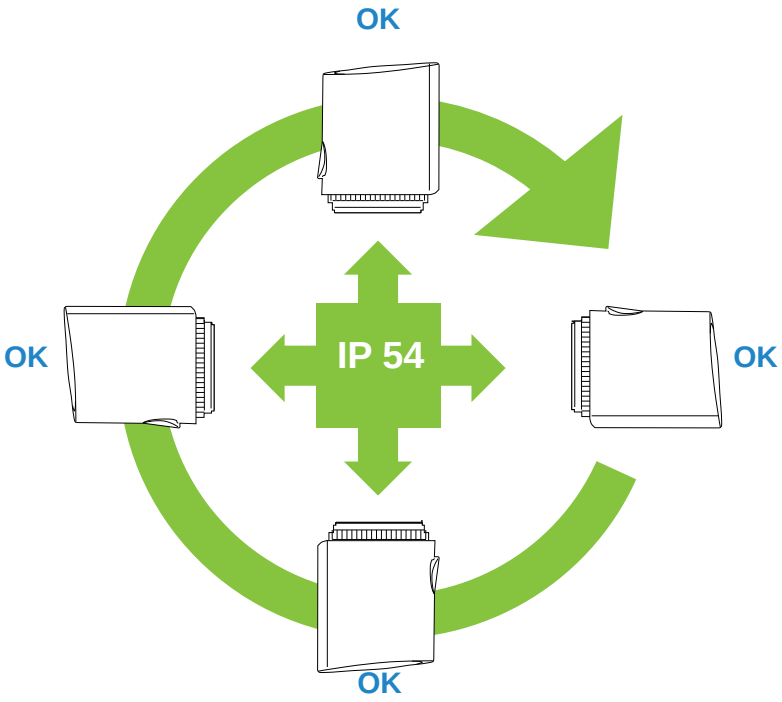


Place the VA115xx vertically on the valve adapter.



Push the VA115xx onto the valve adapter until click.

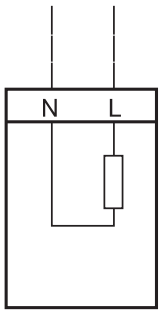
Mounting Position



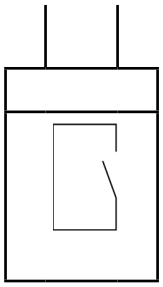
Wiring Instructions

When servicing make sure that:

- the electric supply to the actuator is switched off to avoid possible damage to the equipment, personal injury or shock
- make sure that the line power supply is in accordance with the power supply specified on the actuator
- all wiring should conform to local codes and must be carried out by authorized personnel only
- do not touch or attempt toconnect or disconnect wires when electric power is on
- do not open or attempt to repair, contact your Johnson Controls dealer



Wiring diagram



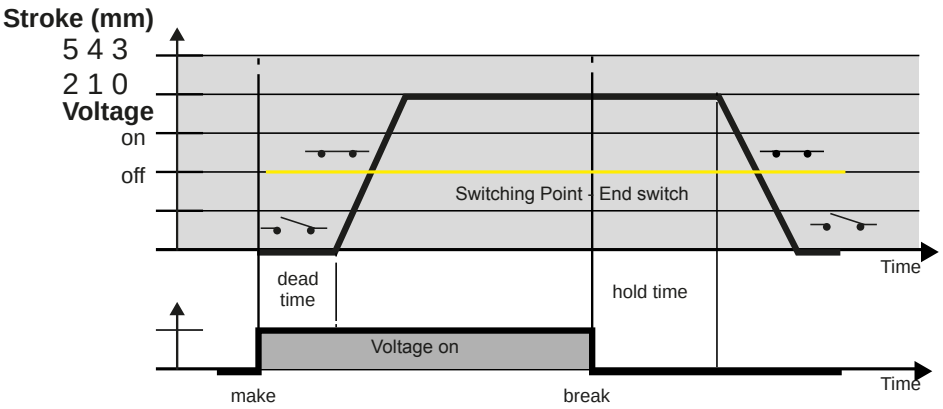
Auxiliary switch wiring diagram

Auxiliary contacts

In case of the normally closed version, the valve is opened steadily by the ram motion upon switching on the operating voltage and after expiry of the dead time. The integrated micro switch is switched with a travel path of approx. 2 mm.

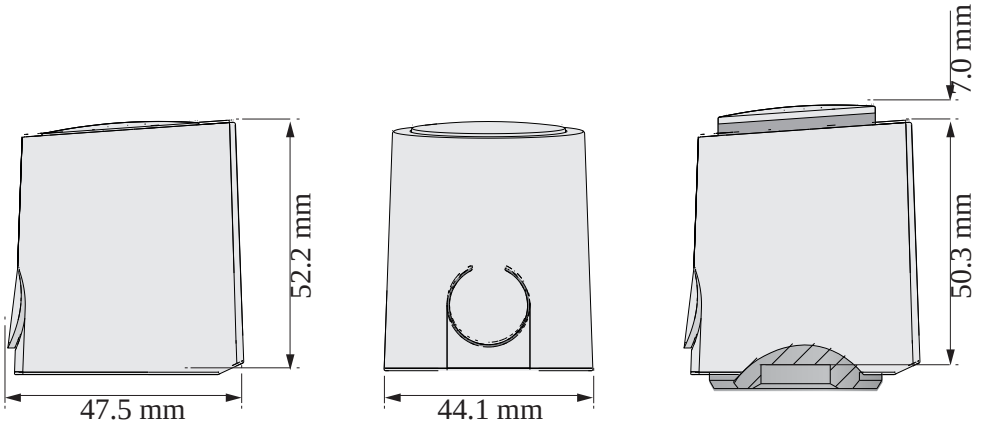
After the operating voltage is cut and after expiry of the hold time the valve is closed evenly by the closing force of the compression spring. The integrated switch is closed after an actuator travel of approx. 2 mm.

The closing force of the compression spring is matched to the closing force of commercially available valves and keeps the valve closed when de-energised.

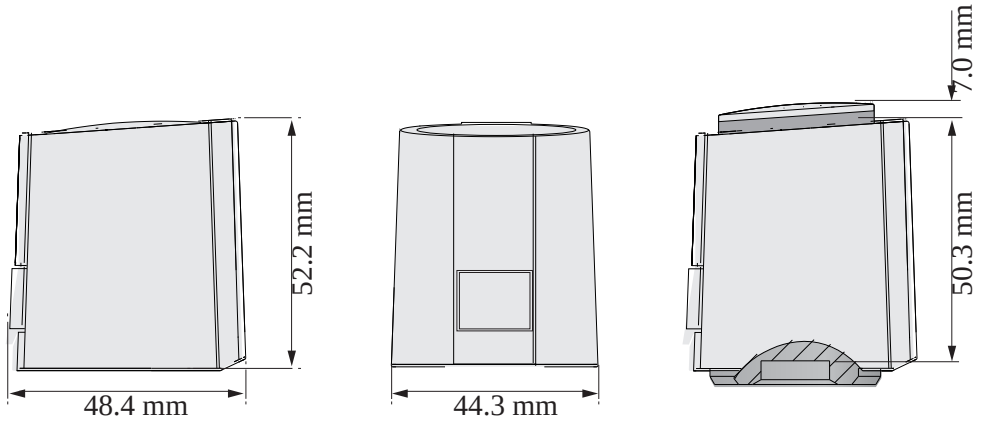


Example with respect to the travel path of 4 mm. The characteristic curves of the travel path of 5 mm result from this.

Dimensions in mm



VA115.1



VA115.2

Technical Specifications

Models	VA115.1	VA115.2
Type of motor	Thermal (“Wax” power element)	
Type of control	ON/OFF or DAT	
Action	Normally closed (stem retracts when energized) Normally open (stem extends when energized)	
Power Consumption	24 VAC/VDC +20%...-10%	230 VAC +10%...-10%
- Continuous	1 W	1 W
- Max inrush current 100 ms. max	<550 mA during	<300 mA during max 2 min.
Switching current for micro switch	5 A resistive load, 1 A inductive load	3 A resistive load, 1 A inductive load
Nominal Stroke	5 mm	
Running Time	~4 min	4.5 min
Electrical connection	1.5 m PVC cable, wire sections 2 x 0.75 mm^2	
Protection class	II	III
Ingress Protection Rating	IP 54 (EN60529)	
Connection to valves	M30 x 1.5 (VA-7088 and VA-7087)	
Max valve operating temperature		
Ambient operating condition		
Ambient storage condition		
Weight, excl. packaging	0.1 Kg	
CE Compliance	Johnson Controls International plc declares that these products are in compliance with the essential requirements and other relevant provisions of:	
	EMC Directive and Low Voltage Directive	**EMC Directive**

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls Internation plc. shall not be liable for damages resulting from misapplication or misuse of its products.