

VAV-Universal, ready-to-connect rotary actuator fail-safe for VAV and CAV units in technical building installations

- Air damper size up to approx. 4 m²
- Torque motor 10 Nm
- Nominal voltage AC/DC 24 V
- Control communicative PP



Technical data

Electrical	data
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Nominal voltage	AC/DC 24 V
Nominal voltage frequency	50/60 Hz
Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V
Power consumption in operation	5 W
Power consumption in rest position	2.5 W
Power consumption for wire sizing	8 VA
Connection supply / control	Cable 0.5 m with VST connector
Parallel operation	No
Torque motor	10 Nm

Functional data

Taraner operation	110
Torque motor	10 Nm
Torque fail-safe	10 Nm
Direction of motion variable	At VRUBAC with Belimo Assistant App
Manual override	by means of hand crank and locking switch
Angle of rotation	Max. 95°
Angle of rotation note	can be limited by adjustable mechanical end stop
Running time motor	120 s / 90°
Running time fail-safe	<20 s @ -2050°C / <60 s @ -30°C
Adaptation setting range variable	Triggering at VRUBAC, by pressing the Adaptation button or with Belimo Assistant App
Sound power level, motor	40 dB(A)
Mechanical interface	Universal shaft clamp 1025.4 mm
Position indication	Mechanical
Service life	Min. 60'000 fail-safe positions
Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
Degree of protection IEC/EN	TP54

Safety data

Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
Degree of protection IEC/EN	IP54
EMC	CE according to 2014/30/EU
Certification IEC/EN	IEC/EN 60730-1 and IEC/EN 60730-2-14
Type of action	Type 1.AA
Rated impulse voltage supply / control	0.8 kV
Pollution degree	3
Ambient humidity	Max. 95% RH, non-condensing
Ambient temperature	-3050°C [-22122°F]
Storage temperature	-4080°C [-40176°F]
Servicing	maintenance-free



Technical data

Weight Weight 1.9 kg

Safety notes



- The device must not be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.
- Outdoor application: only possible in case that no (sea) water, snow, ice, insolation or
 aggressive gases interfere directly with the device and that it is ensured that the ambient
 conditions remain within the thresholds according to the data sheet at any time.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- Cables must not be removed from the device.
- Self adaptation is necessary when the system is commissioned and after each adjustment of the angle of rotation (press the adaptation push-button once).
- To calculate the torque required, the specifications supplied by the damper manufacturers
 concerning the cross-section and the design, as well as the installation situation and the
 ventilation conditions must be observed.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

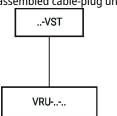
Accessories

Electrical accessories	Description	Туре
	VAV-Universal - Volumetric flow / branch pressure controller	VRU-D3-BAC
	VAV-Universal - Volumetric flow / branch pressure controller	VRU-M1-BAC
	VAV-Universal - room pressure controller	VRU-M1R-BAC

Electrical installation

Wiring diagrams

Plug-in connection with preassembled cable-plug unit

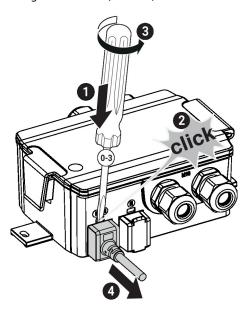




Installation notes

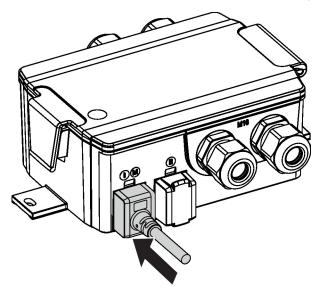
Disconnect actuator

The connecting cable of the VST damper actuator can be removed from the VRU controller using a screwdriver (size 0...3) as shown in the illustration.



Connect actuator

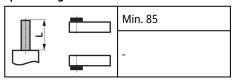
To ensure IP protection and the electrical connection, the VST plug must be fully inserted into the connector socket. For this, a certain amount of force is required.





Dimensions

Spindle length



Clamping range

