



Actuators for three point control AMV 25, AMV 35

Description



AMV electric actuators are used with, VRB, VRG, VF, VL valves with additional adapter (Code No. 065Z0311, not supplied) and VFS 2 valves up to DN 50 diameter.

The actuator automatically adapts its stroke to valve end positions which reduces commissioning time. Optional auxiliary switches, feedback potentiometer and valve stem heater are available.

The actuator has some special features:

- The advanced design incorporates load related 'switch-off' to ensure that actuators and valves are not exposed to overload;
- Digitale feedback end position indication signal for valve end position is available by terminal 4 or 5;
- Low weight and robust;

Main data:

- Nominal voltage: 24 VAC, 50 Hz/60 Hz Control input signal: 3 point
- Force:
- AMV 25 ... 1000 N
- AMV 35 600 N
- Stroke: 15 mm Speed:
- AMV 25... 11 s/mm
- AMV 35.... 3 s/mm
- Max. medium temperature: 150 °C
- **End-position signals**

Actuators				
Туре	Supply voltage	Code No.		
	(VAC)	Code No.		
AMV 25	230	082G3024		
AMV 25	24	082G3023		
AMV 35	230	082G3021		
AMV 35	24	082G3020		

Tipas	Kodas	
Additional switch (2×)	082H7015	
Additional switch (2×) and potentiometer (10 k Ω)	082H7016	
Additional switch (2×) and potentiometer (1 $k\Omega$)	082H7017	
Adapter for VFS 2 valves DN 15-50 (for media temp. over 150 °C)	065Z7548	
Stem heater (for valves DN 15-50)	065B2171	
Adapter for valves VRB/VRG/VF/VL (2009) DN 15-50	065Z0311	
Clutch AMV(E) 25, AMV(E) 35	003G6396	

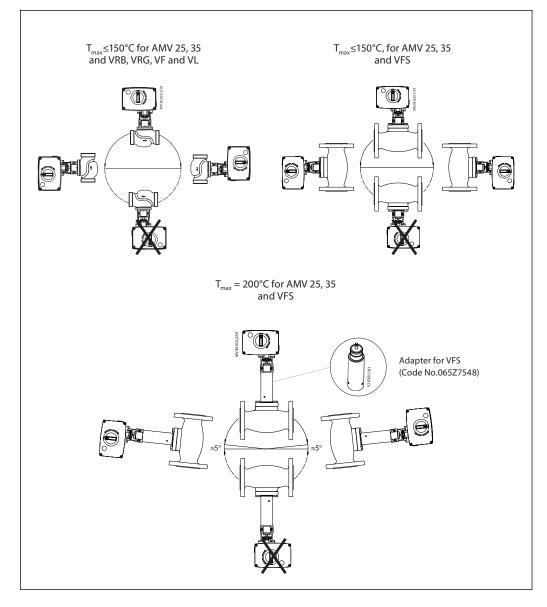
Technical data

Ordering

Туре		AMV 25	AMV 35	
Power supply	V	24 AC, 230 AC; +10 to -15 %		
Power consumption	VA	2	7	
Frequency	Hz	50/60		
Control input	·	3-point		
Closing force	N	1000	600	
Max. stroke	mm	15		
Speed by 50 Hz (60 Hz)	s/mm	11 (8.8)	3 (2.4)	
Max. medium temperature	1	150 (200 - with adapter o	r mounted horizontally)	
Ambient temperature	°C	0 55		
Storage and transport temperature	1	-40 70		
Grade of enclosure		IP 54		
Weight	kg	1.55		
CE - marking in accordance with standards		Low Voltage Directive 73/23/EEC, EMC-Directive 2006/95/EEC: EN 60730-1, EN 60730-2-14		

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Installation



Mechanical

Use 4 mm Allan key (not part of actuator delivery) to mount actuator on the valve. Installation of the valve with the actuator is allowed in horizontal position or upwards. Installation downwards is not allowed.

The actuator must not be installed in an explosive atmosphere, at ambient temperature lower than 0 °C or at ambient temperature higher than 55 °C. It must not be subject to steam jets, water jets or dripping liquid as well.

Note: the actuator may be rotated up to 360° with respect to the valve stem by loosening the retaining fixture. Once the actuator is placed, retighten the fixture.

Electrical

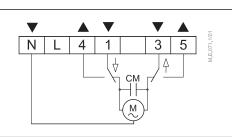
Electrical connections can be accessed by removing the actuator cover. Two cable gland entries with thread (M20 x 1.5 and M16 x 1.5) are prepared for cable glands.

Note: Cable and cable gland used must not compromise the actuator's IP rating, and must ensure the connectors are fully strain relieved. Please observe local rules and regulations as well.

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Wiring





Terminals 1, 3:

Control voltage input from the controller. Power supply 24 V~, 230 V~ (dependent on type)

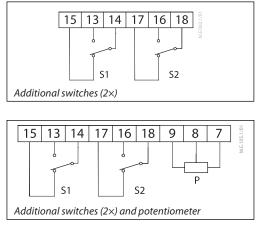
Terminals 4, 5:

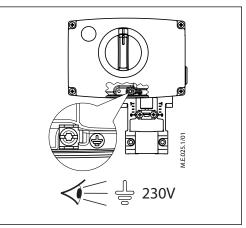
Output used for position indication or monitoring.

Ν

Neutral/Common (0 V)

Accessories





Commissioning

Complete the mechanical and electrical installation and perform the necessary checks and tests:

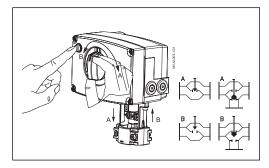
- Turn on the power.
- Set the appropriate control signal and check that the valve stem direction is correct for the application.

The unit is now fully commissioned.

Manual override

The manual override is achieved by turning the manual knob to the required position. Observe the direction of rotation symbol.

- Disconnect control signals
- Press rubber button
- Adjust valve position using the control knob
- Set valve to closed position
- Restore control signals

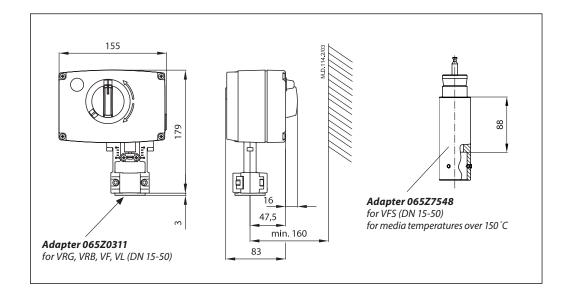




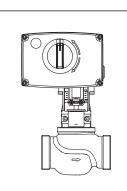


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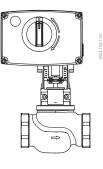
Dimensions



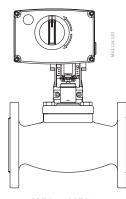
Actuator - valve combinations



AMV 25, AMV 35 + Adapter (**065Z0311**) VRB 2, VRB 3 ext. thread (DN 15-50) VRG 2, VRG 3 ext. thread (DN 15-50)



AMV 25, AMV 35 + Adapter (065Z0311) VRB 2, VRB 3 Int. thread (DN 15-50)



AMV 25, AMV 35 + VFS 2 (DN 15-50)

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AMV 25, AMV 35 +

Adapter (065Z0311)

VF 2, VF 3 (DN 15-50)

VL 2, VL 3 (DN 15-50)