

Data sheet

Actuators for three point control AMV 85, AMV 86

Description



The actuators AMV 85 and AMV 86 are used with VFM 2 (DN 150-250), VFS 2 (DN 65-100), VF2/3 (DN 125, 150) and AFQM (DN150-250) valves.

Features:

- “Self stroking” function
- Load related “Switch off” function that prevents overloading
- Manual operation
- Diagnostic LED

Main data:

- Nominal voltage:
- 24 VAC, 230 VAC, 50 Hz/60 Hz
- Control input signal: 3-point
- Force: 5000 N
- Stroke: 40 mm
- Speed: 8 s/mm (AMV 85), 3 s/mm (AMV 86)
- Max. medium temperature: 200 °C
- Manual operation

Ordering

Actuator


Type	Power supply (V~)	Speed (s/mm)	Code No.
AMV 85	24	8	082G1450
	230		082G1451
AMV 86	24	3	082G1460
	230		082G1461

Accessories

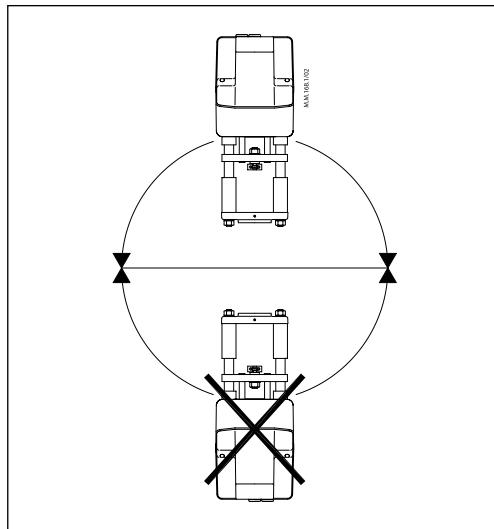
Type	for actuators	Code No.
Additional switches (2x)	AMV 86/3/24	082H7050
	AMV 86/3/230	082H7051
	AMV 85/8/24	082H7072
	AMV 85/8/230	082H7071
Additional switches (2x) and potentiometer (10 kΩ)	AMV 86/3/24	082H7081
	AMV 86/3/230	082H7080
	AMV 85/8/24	082H7083
	AMV 85/8/230	082H7082
Stem heater		065Z7021
AM-PBU 25 - Power backup unit ¹⁾		082H7090

¹⁾ only for 24V version

Technical data

Type		AMV 85	AMV 86
Power supply	V~	24 AC, 230 AC ; +10 to -15%	
Power consumption	VA	10.5	23
Frequency	Hz	50 / 60	
Control input		3-point	
CI force	N	5000	
Max. stroke	mm	40	
Speed	s/mm	8	3
Max. medium temperature		200	
Ambient temperature	°C	0 ... 55	
Storage and transport temperature		-40 ... +70	
Protection Class		I (230 V); III (24 V)	
Grade of enclosure		IP 54	
Weight	kg	9.80	10.0
 - marking in accordance with the standards		Low Voltage Directive 73/23/EEC and 93/68/EEC, EN 60730/2/14	
		EMC Directive 89/336/EEC, 92/31/EEC, 93/68/EEC, EN 50081-1 and EN 50082-1	

Installation



Mechanical

The actuator should be mounted with the valve stem in either horizontal position or pointing upwards. Use the 57 mm castellated nut (supplied) to fit the actuator to the valve body. While the actuator is being fitted, a 8 mm Allen key can be used to tighten the pinch screw in the valve body ring to stop the valve turning.

Allow for necessary clearance for maintenance purposes.

Electrical

Electrical connections can be accessed by removing the cover. Two M16 x 1.5 cable entries are provided. Both entries are provided with a rubber grommet for use with flexible cable. Note that in order to maintain the enclosure IP rating, appropriate cable glands must be used.

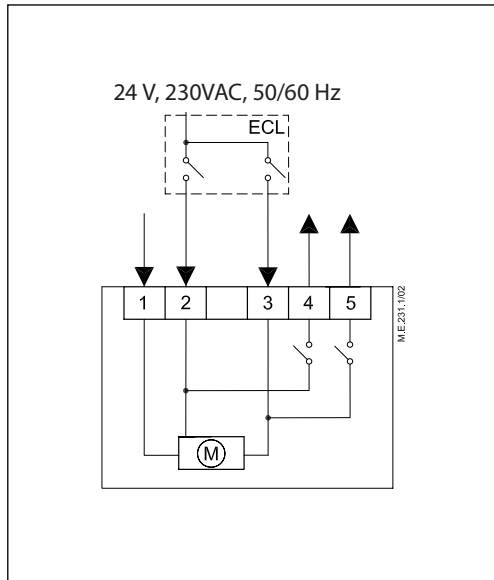
Wiring



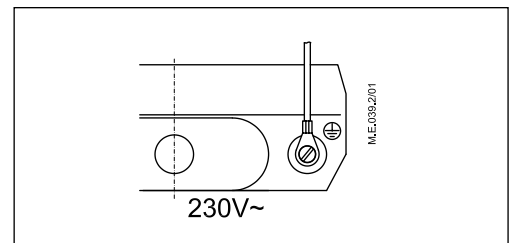
230 VAC version:

Do not touch anything on the PCB!

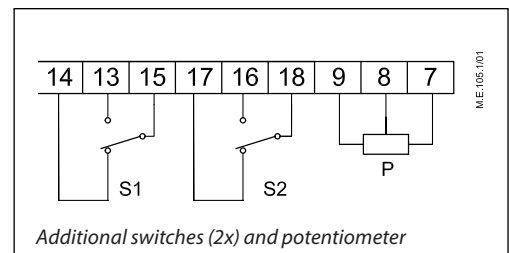
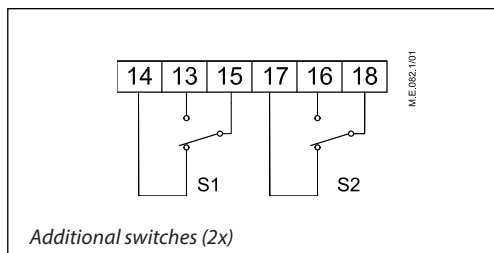
Do not remove the cover before the power supply is fully switched off.



1	0 V	Neutral
2	24 VAC 230 VAC	Input power supply
3		
4		Output
5		



Accessories



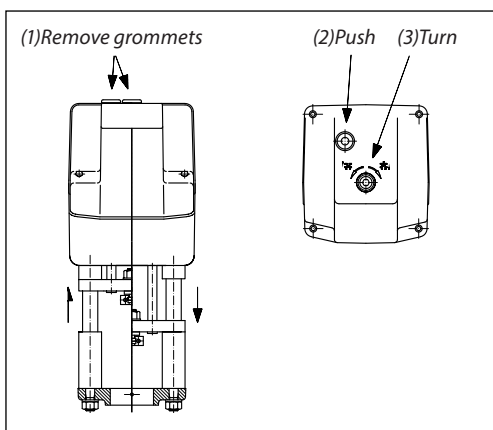
Commissioning

The following mechanical and electrical installation and the necessary checks and tests are to be completed in order to commission the unit:

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

The unit is now fully commissioned.

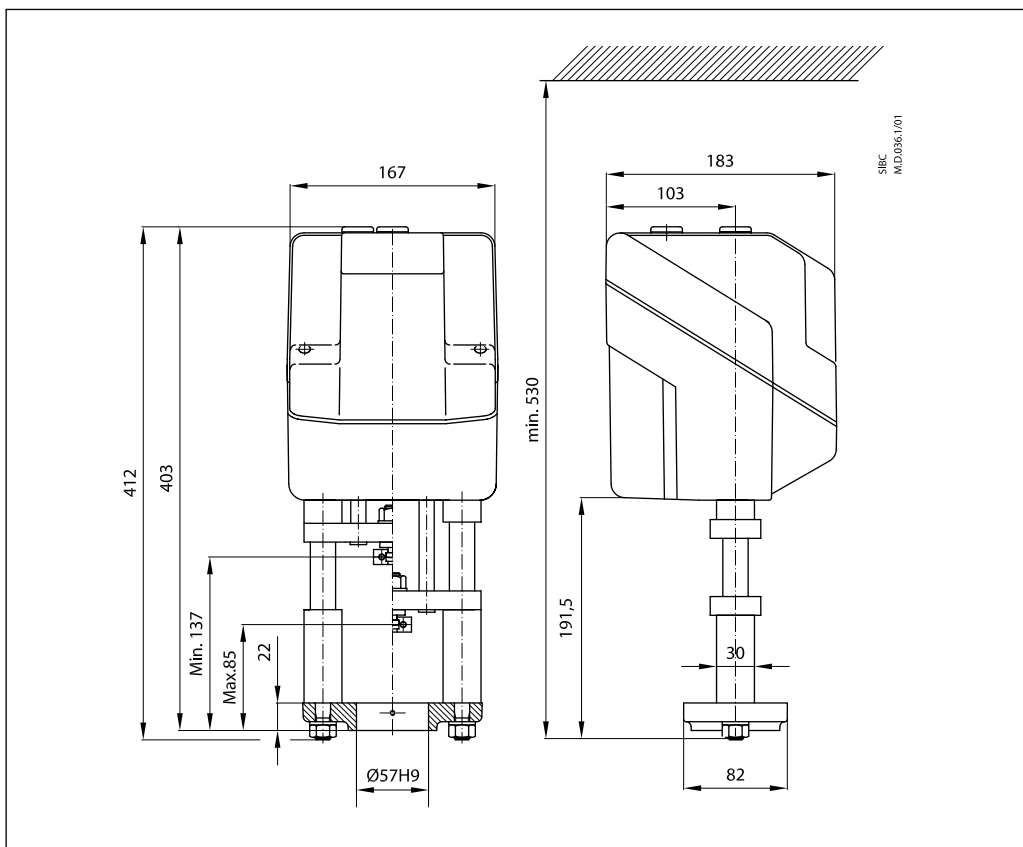
Manual override



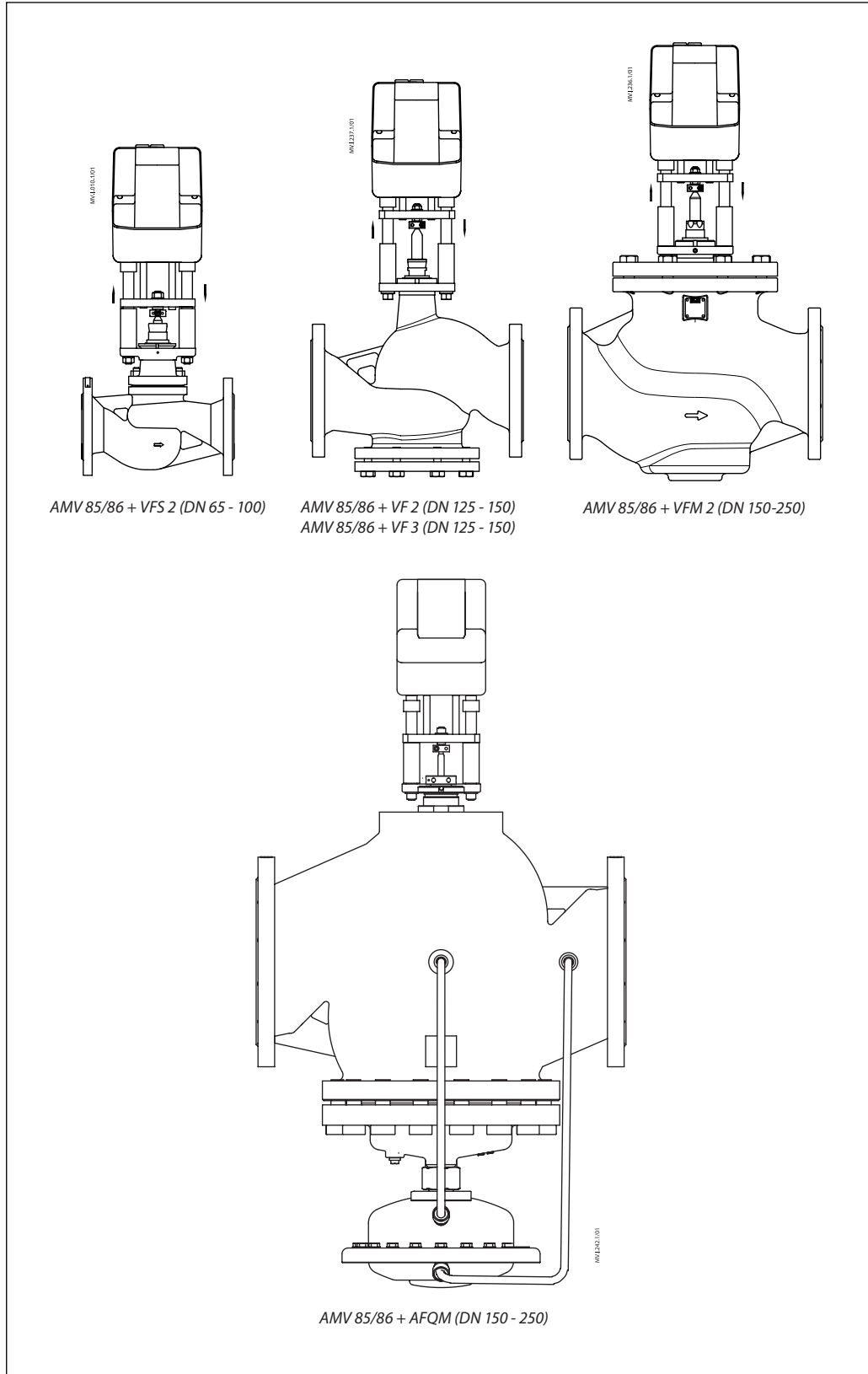
The manual override is applied by rotating the 8 mm Allen key (not supplied) to the required position. Observe the direction of the rotation symbol.

- Disconnect control signals
- Remove grommets and push the button
- Adjust valve position using an 8 mm Allen key
- Set valve to closed position
- Restore control signals

Dimensions



Actuator - valves combinations



AMV 85/86 + VFS 2 (DN 65 - 100)

AMV 85/86 + VF 2 (DN 125 - 150)
AMV 85/86 + VF 3 (DN 125 - 150)

AMV 85/86 + VFM 2 (DN 150-250)

AMV 85/86 + AFQM (DN 150 - 250)

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