

Data sheet

Actuators for three point control AMV 85, AMV 86

Description



The actuators AMV 85 and AMV 86 are used with VFS 2 valves from DN 65 up to DN 100 diameter or with VF 2 and VF 3 DN 125 and DN 150 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.

Main data:

- The advanced design incorporates load related 'switch-off' to ensure that actuator and valve are not exposed to overload.
- Digital feedback end position indication signal for valve end position is available by terminal 4 or 5.
- Manual override.

Ordering

Type	Power supply	Speed	Max. stroke	Code No.
AMV 85	24 V~	8 s/mm	40 mm	082G1450
	230 V~			082G1451
AMV 86	24 V~	3 s/mm	40 mm	082G1460
	230 V~			082G1461

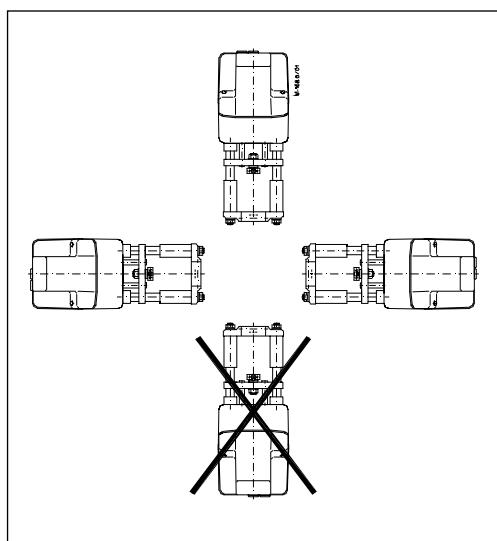
Accessories

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

Technical data

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

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.

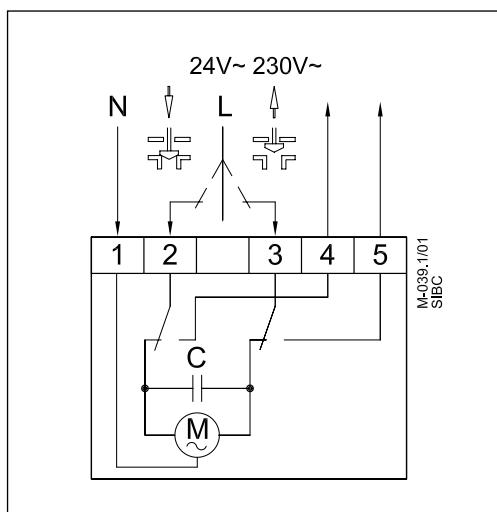
Disposal

The actuator must be dismantled and the elements sorted into various material groups before disposal.

Wiring



230 Vac version:
Do not touch anything on the PCB!
Lethal voltage!



Terminal 1

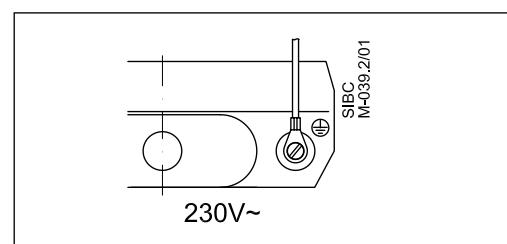
Neutral/Common (0 V)

Terminals 2, 3:

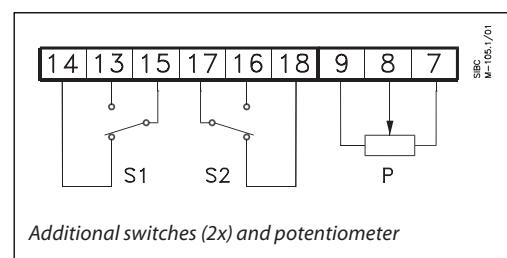
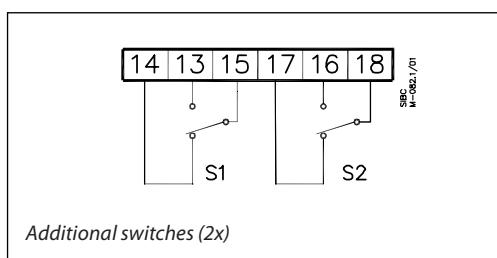
Control voltage input from the controller.
Power supply 24 V~, 230 V~ (dependent on type)

Terminals 4, 5:

Output used for position indication or monitoring.



Wiring - accessories

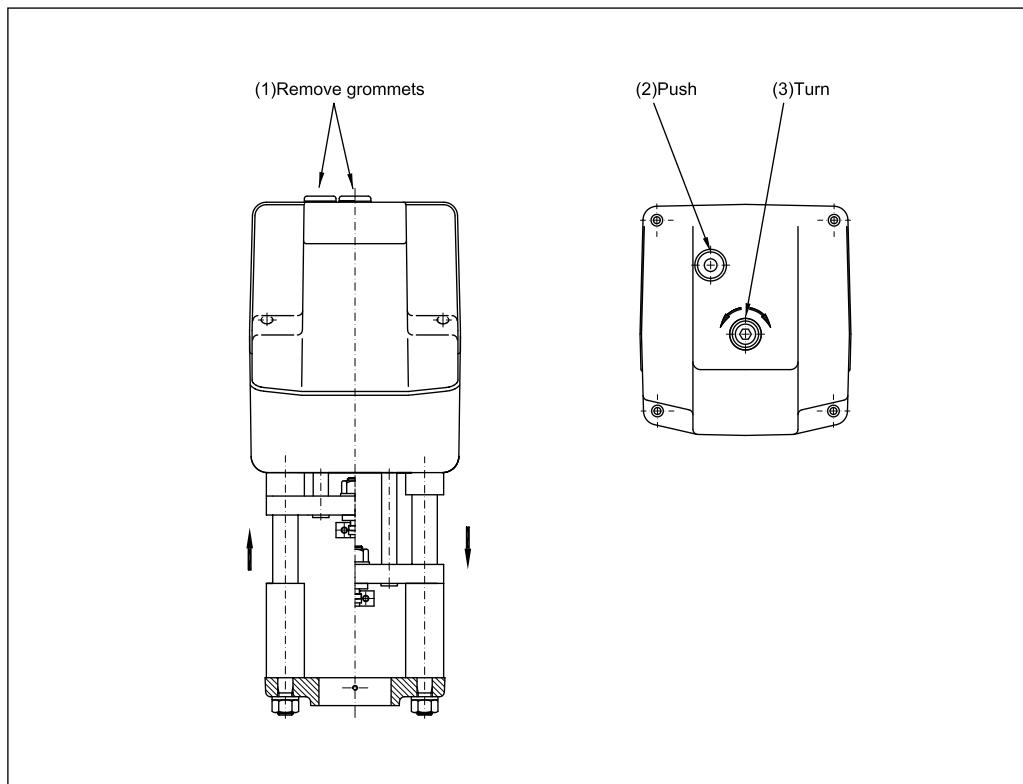


Commissioning

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.

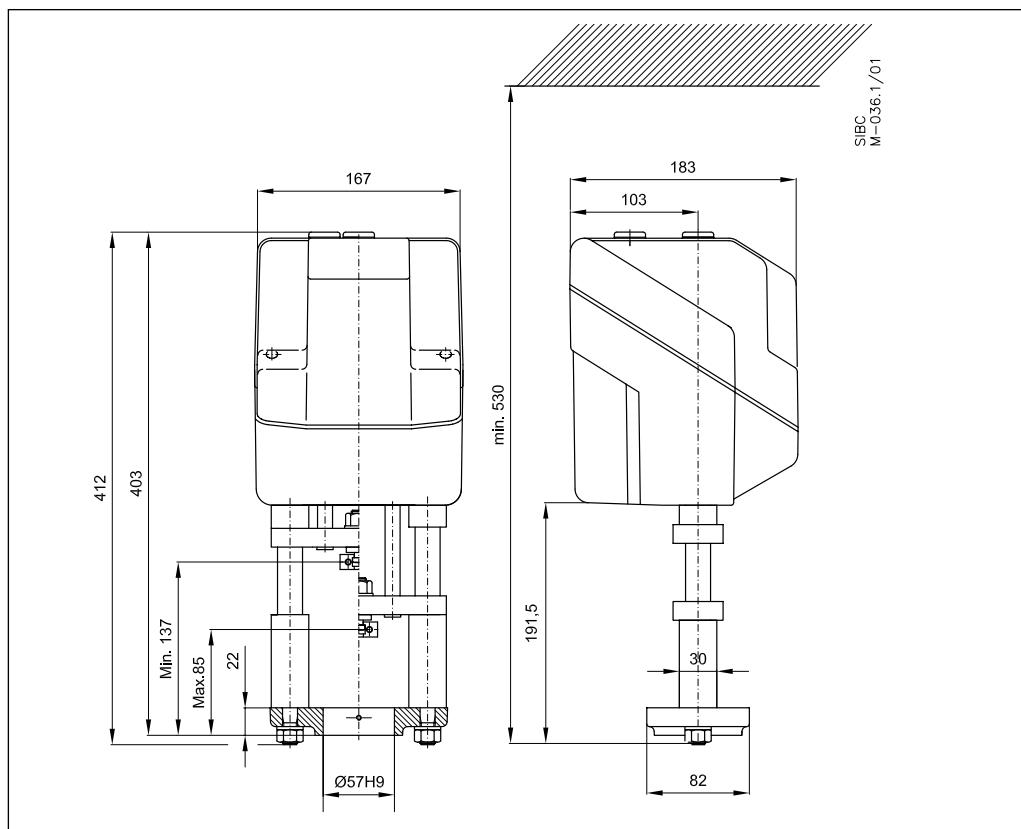
The unit is now fully commissioned.

Manual override

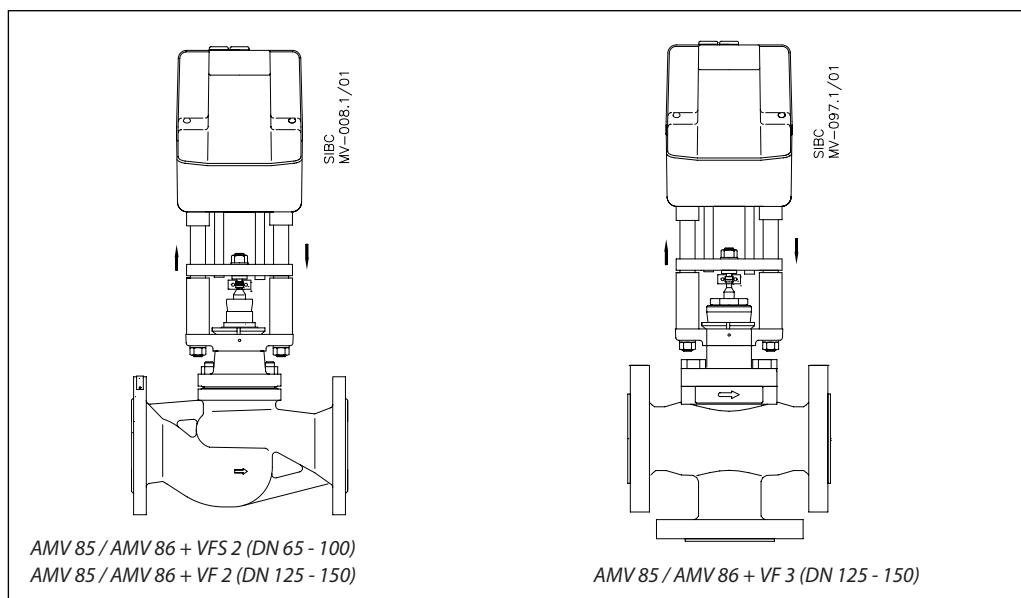
The manual override is applied by rotating the 8 mm Allen key (not supplied) to the required position. Observe the direction of the rotation symbol.

- 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 - valve combinations



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