

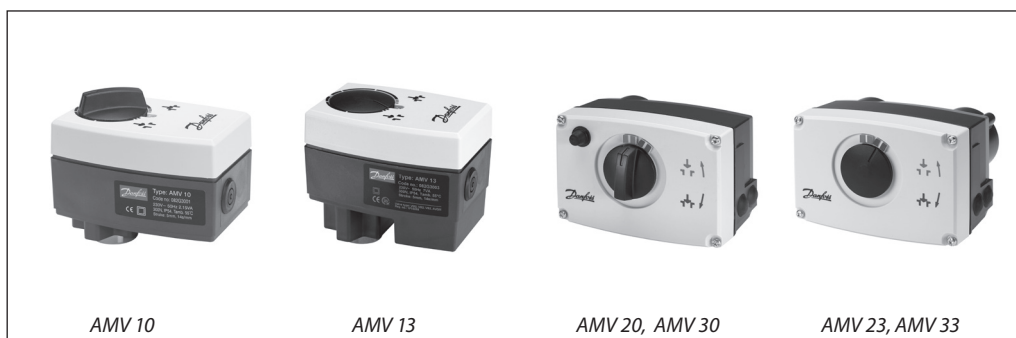
Data sheet

Actuators for three point control

AMV 10, AMV 20, AMV 30

AMV 13, AMV 23, AMV 33 - with EN 14597 certified safety function (spring down)

Description



The actuators with or without safety function are available for 3-point controls. The spring return actuators can be used to provide safety shut off on power failure. They are used with VS2, VM2, VB2, VMV and AVQM valves.

In addition to basic function such as manual control and position indication, the actuators are also equipped with force sensitive switch-off to ensure that actuators and valves are not exposed to overload. This function automatically ensures the self-adjustment of the end positions on the valve.

Main data:

- Nominal voltage:
 - 24 VAC, 50 Hz/60 Hz
 - 230 VAC, 50 Hz/60 Hz
- Control input signal: 3 point
- Force:
 - AMV 10, 13300 N
 - AMV 20, 23, 30, 33450 N
- Speed:
 - AMV 10, 13 14 s/mm
 - AMV 20, 23 15 s/mm
 - AMV 30, 333 s/mm
- Max. medium temperature:
 - AMV 10, 13 130 °C
 - AMV 20, 23, 30, 33 150 °C
- End-position signals

Ordering

Actuators

Type	Supply voltage	Code No.
AMV 10	230 V~	082G3001
AMV 10	24 V~	082G3002
AMV 20	230 V~	082G3007
AMV 20	24 V~	082G3008
AMV 30	230 V~	082G3011
AMV 30	24 V~	082G3012

Accessories for AMV 20/23, AMV 30/33

Type	Code No.
Additional switch (2x)	082G3201
Additional switch (2x) and potentiometer (10 kΩ)	082G3202
Additional switch (2x) and potentiometer (1 kΩ)	082G3203

Actuators with safety function - EN 14597

Type	Supply voltage	Code No.
AMV 13	230 V~	082G3003
AMV 13	24 V~	082G3004
AMV 23	230 V~	082G3009
AMV 23	24 V~	082G3010
AMV 33	230 V~	082G3013
AMV 33	24 V~	082G3014

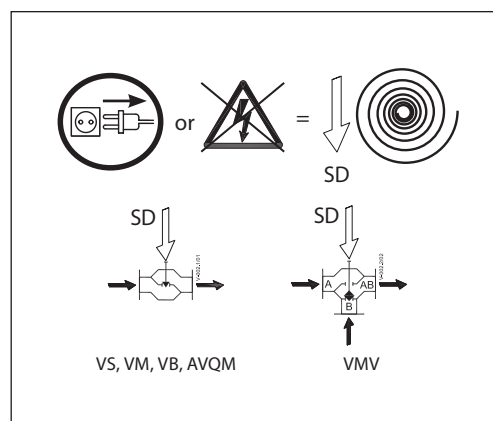
Technical data

Type		AMV 10	AMV 13	AMV 20	AMV 23	AMV 30	AMV 33
Power supply	V	24V, 230AC; +10 ... -15%					
Power consumption	VA	2	7	2	7	7	12
Frequency	Hz	50 /60					
Control input		3-point					
Spring return function		-	x	-	x	-	x
Close of force	N	300		450			
Max. stroke	mm	5		10			
Speed	s/mm	14		15		3	
Max. medium temperature		130		150			
Ambient temperature	°C	0 ... 55					
Storage and transport temperature		-40 ... 70					
Protection code		IP 54					
Weight	kg	0,6	0,8	1,4	1,45	1,4	1,45
marking in accordance with standards		EMC- Directive 2004/108/EEC: EN 60730-1, EN 60730-2-14 Low Voltage Directive 73/23/EEC: EN 60730-1, EN 60730-2-14					

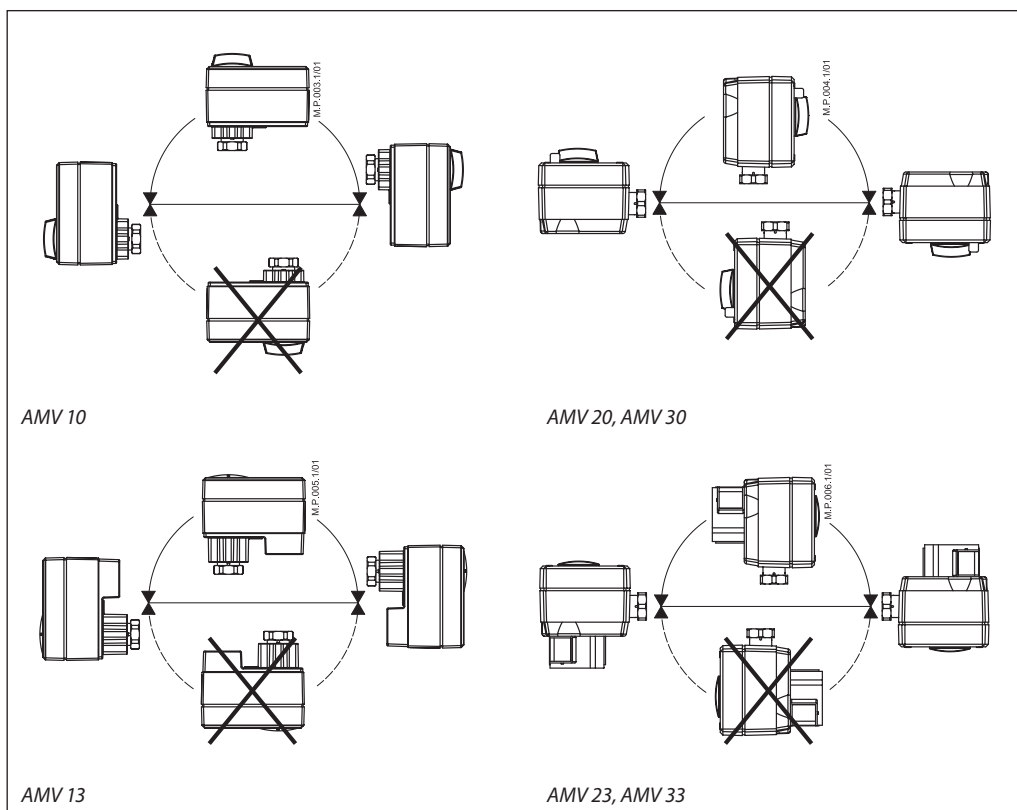
Safety function

The safety function will fully open or close the valve by power failure, depending upon the chosen safety action (SD).
 Valve selection will also affect the safety action. The safety function unit is factory fitted to the rear of the actuator.

Valve type	Spring action selection will	
	Close port A-AB	Open port A-AB
VS	SD	-
VM (DN 15-50)	SD	-
VB (DN 15-50)	SD	-
AVQM (DN 15-50)	SD	-
VMV	-	SD



Installation



Disposal

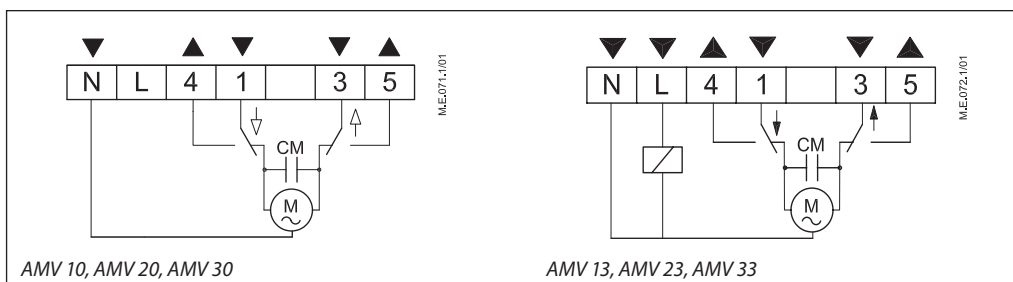
The actuator must be dismantled and the elements sorted into various material groups before disposal.

Wiring



230 VAC version:

Do not touch anything on the PCB!
Do not remove the cover before the power supply is fully switched off.



Terminals 1, 3:

Control voltage input from the controller.

L

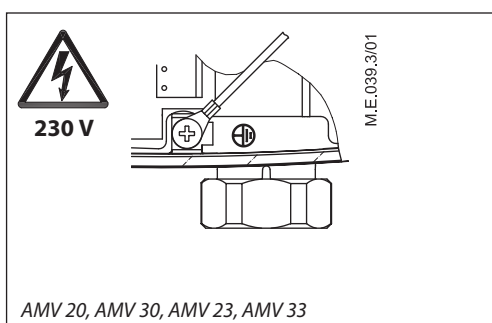
Power supply 24 V~, 230 V~

Terminals 4, 5:

Output used for position indication or monitoring.

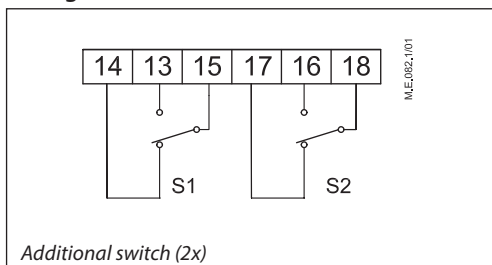
N

Common (0 V)

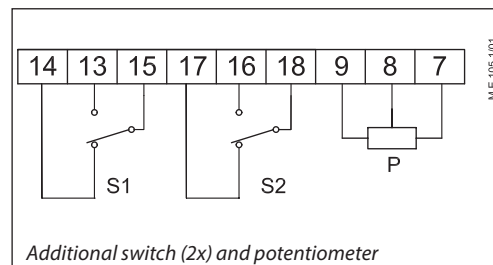


AMV 20, AMV 30, AMV 23, AMV 33

Wiring - accessories



Additional switch (2x)



Additional switch (2x) and potentiometer

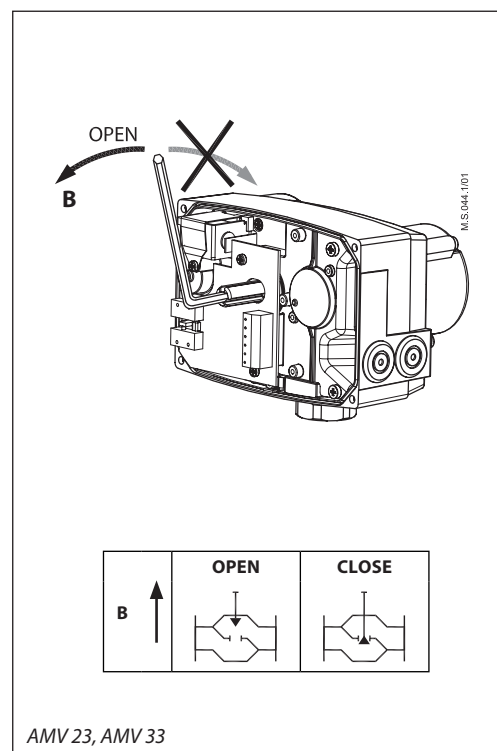
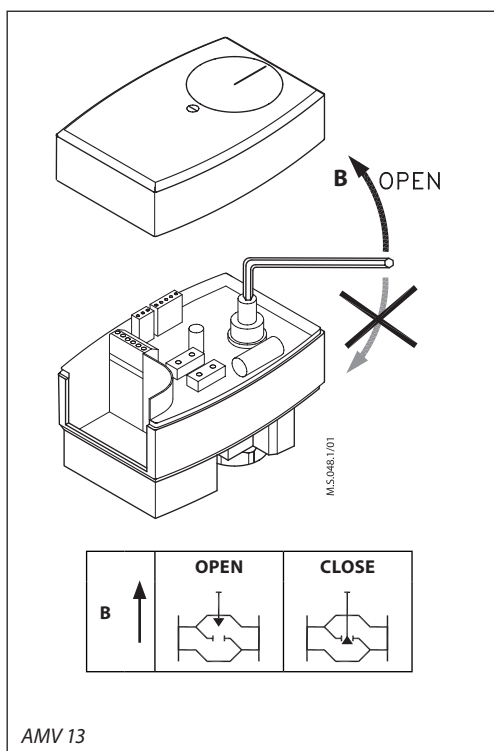
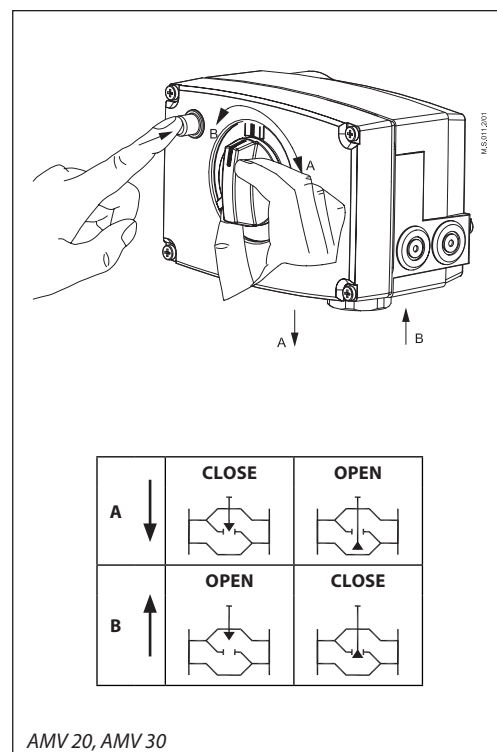
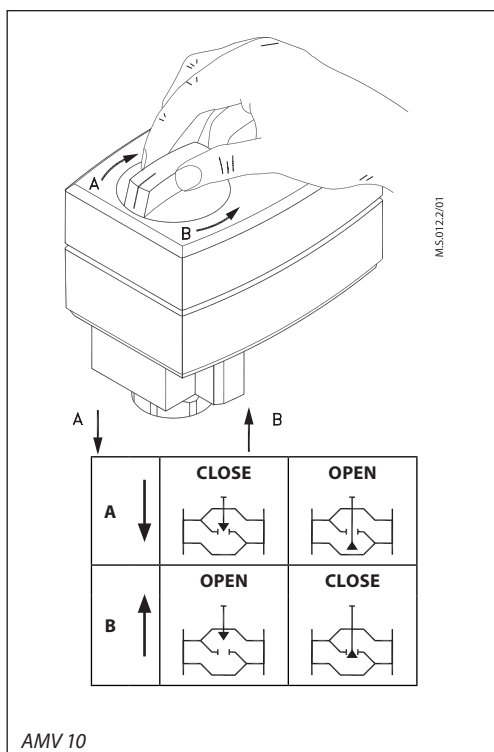
Commissioning

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

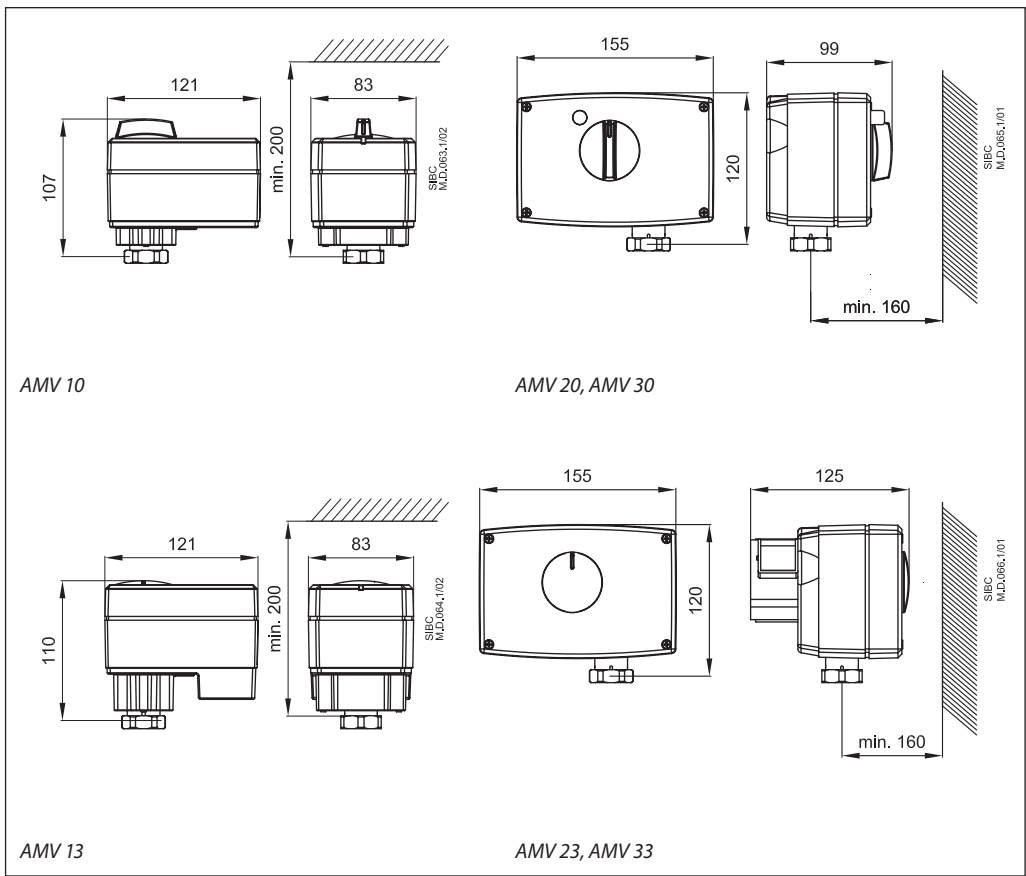
- Turn on the power.
- Set the appropriate control signal and check that the valve stem direction is correct for the application.

The unit is now fully commissioned.

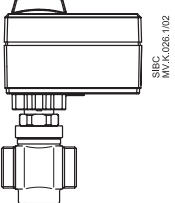
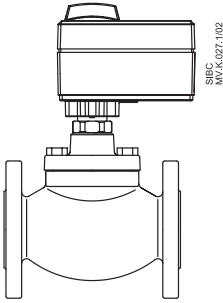
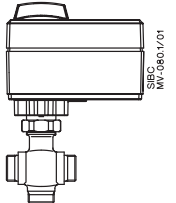
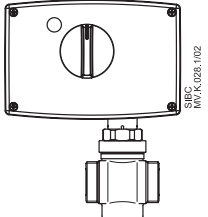
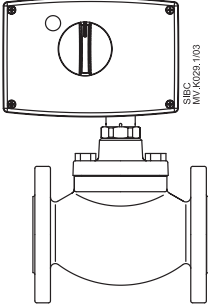
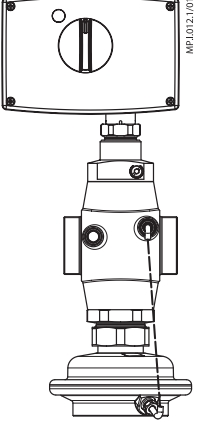
Manual Override



Dimensions



Actuator - valve combinations

 <p>SIBC MV.K.026.1/02</p>	 <p>SIBC MV.K.027.1/02</p>	 <p>SIBC MV.080.1/01</p>
<p>AMV 10, AMV 13 + VM2 (DN 15 - 25) VS2 (DN 15 - 25)</p>	<p>AMV 10, AMV 13 + VB2 (DN 15, 20)</p>	<p>AMV 10 + VMV (DN 15 - 40)</p>
 <p>SIBC MV.K.026.1/02</p>	 <p>SIBC MV.K.026.1/03</p>	 <p>MP.L.012.1/01</p>
<p>AMV 20/30, AMV 23/33 + VM2 (DN 15 - 50) VS2 (DN 15 - 25)</p>	<p>AMV 20/30, AMV 23/33 + VB2 (DN 15 - 50)</p>	<p>AMV 20/30, AMV 23/33 + AVQM (DN 15 - 50)</p>

