

## Data sheet

# Actuators for three point control

## AMV 55, AMV 56

## Description

**Features:**

- Load related “switch off” function that prevents overloading
- Optional auxiliary switches, feedback potentiometer and valve stem heater are available.

**Main data:**

The actuators are used with valves:

- VFM2 (DN 65-150) only in combination with AMV 55,
- VFS 2 (DN 15-50) only in combination with AMV 56 and clutch **065Z7551**,
- VFS 2 (DN 65-100),
- VL 2/3 (DN 100),
- VF 2/3 (DN 100-150),
- VL 2/3 & VF 2/3 (DN 65, 80) only in combination with AMV 56 and adapter **065Z0312**,
- AFQM (DN 65-125) and AFQM 6 (DN 40-50).

- Nominal voltage:  
24 VAC 50/60 Hz,  
230 VAC 50/60 Hz,
- Control input signal: 3 point
- Force:  
2000 N (AMV 55),  
1500 N (AMV 56)
- Stroke: 40 mm
- Speed:  
8 s/mm (AMV 55),  
4 s/mm (AMV 56)
- Max. medium temperature: 200 °C
- Manual operation

## Ordering

**Actuators**

| Type   | Power supply | Code No.        |
|--------|--------------|-----------------|
| AMV 55 | 24 VAC       | <b>082H3020</b> |
| AMV 55 | 230 VAC      | <b>082H3021</b> |
| AMV 56 | 24 VAC       | <b>082H3023</b> |
| AMV 56 | 230 VAC      | <b>082H3024</b> |

**Accessories<sup>1)</sup>**

| Type   | Code No.        |
|--|-----------------|
| Potentiometer (10 kΩ/30 mm)  | <b>082H7035</b> |
| Potentiometer (10 kΩ/40 mm)  | <b>082H7036</b> |
| Potentiometer (1 kΩ/30 mm)   | <b>082H7038</b> |
| Potentiometer (1 kΩ/40 mm)   | <b>082H7039</b> |
| Additional switches (2×)   | <b>082H7037</b> |
| Stem heater 24 V AC/DC<br>(VF, VL valves DN 65-80)                           | <b>065Z0315</b> |
| Stem heater 24 V AC/DC<br>(VF, VL valves DN 100 and<br>VFS2 valves DN 15-50) | <b>065Z7020</b> |
| Stem heater 24 V AC/DC (VF valves<br>DN 125, 150 and VFS valves DN 65-100)   | <b>065Z7022</b> |
| AMV 56 adapter (VF, VL valves DN 65,80)                                      | <b>065Z0312</b> |
| AMV 56 clutch (VFS 2 DN 15-50)   | <b>065Z7551</b> |
| AM-PBU 25 - Power backup unit <sup>2)</sup>                                  | <b>082H7090</b> |

<sup>1)</sup> only one potent. or add. switches can be added)

<sup>2)</sup> only for 24V version

Technical data

| Type                                       |      | AMV 55   | AMV 56 |
|--|------|--|--------|
| Power supply                               | V    | 24, 230; ± 10 %  |        |
| Power consumption                          | VA   | 7  | 17,5   |
| Frequency                                  | Hz   | 50/60  |        |
| Control input                              |      | 3-point  |        |
| Close of force                             | N    | 2000   | 1500   |
| Max. stroke                                | mm   | 40   |        |
| Speed                                      | s/mm | 8  | 4      |
| Max. medium temperature                    | °C   | 200  |        |
| Ambient temperature                        |      | 0 ... 55   |        |
| Storage and transport temperature          |      | -40 ... 70   |        |
| Ambient humidity                           |      | 95 % r.h., non-condensing  |        |
| Protection class                           |      | I (230 V); III (24 V)  |        |
| Grade of enclosure                         |      | IP 54  |        |
| Weight                                     | kg   | 3,8  |        |
| - marking in accordance with the standards |      | Low Voltage Directive (LVD) 2014/35/EU: EN 60730-1, EN 60730-2-14<br>Electromagnetic Compatibility Directive (EMC) 2014/30/EU: EN 61000-6-2,<br>EN 61000-6-3 |        |

Installation

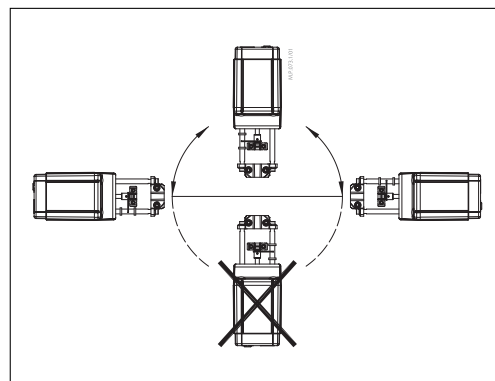
**Mechanical**

The actuator should be mounted with the valve stem (use a 4 mm Allen key -not supplied) in either horizontal position or pointing upwards. Use a M8/SW13 key (not supplied) to fit the actuator to the valve body. Allow for necessary clearance for maintenance purposes.

The valve has position indication rings which should be pushed together before commissioning; after stroking they indicate the ends of the stroke.

**Electrical**

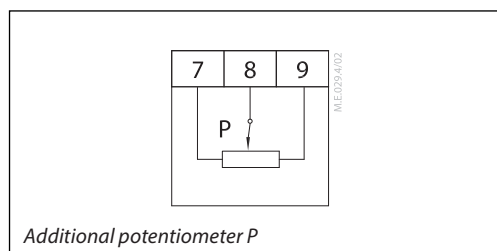
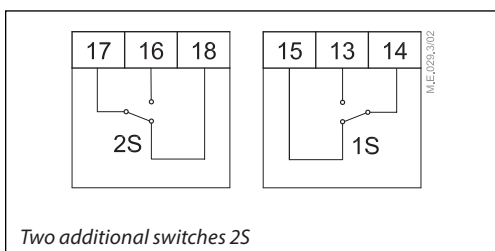
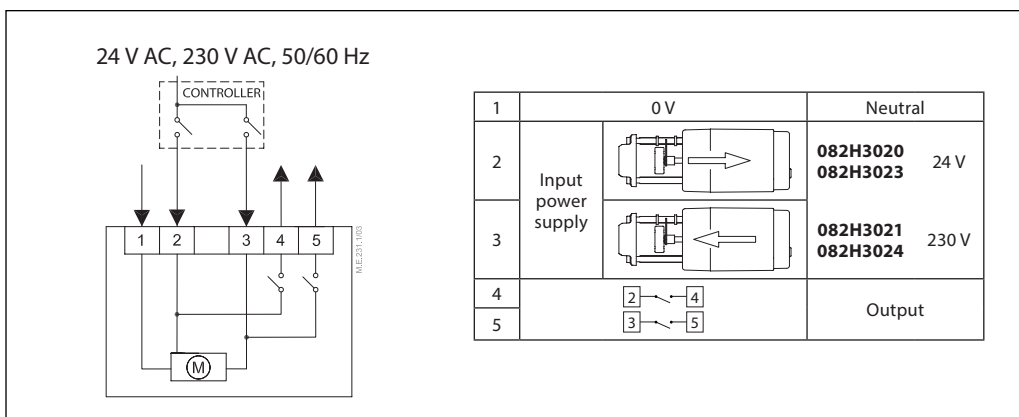
Electrical connections can be accessed by removing the cover. Two M16 × 1,5 cable entries are provided. Both entries are provided with a rubber grommet for use with flexible cable. Note that in order to maintain the enclosure IP rating, appropriate cable glands must be used.



Wiring



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



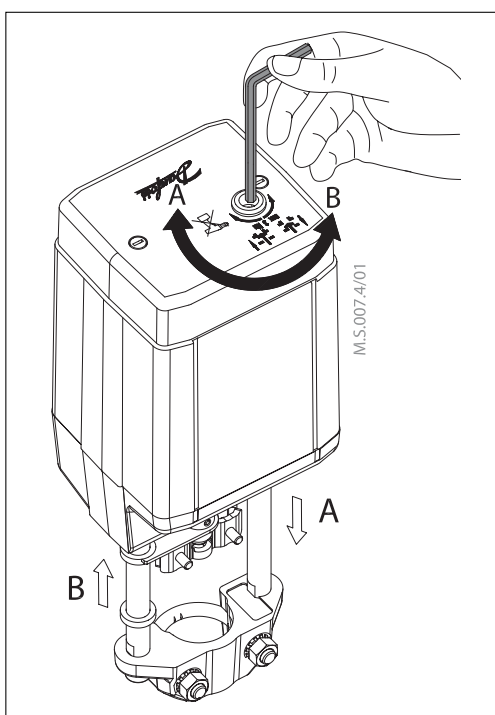
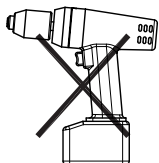
Commissioning

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.

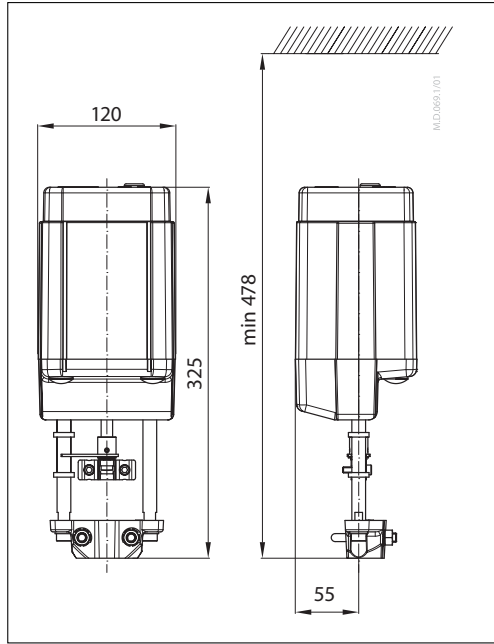
Manual override



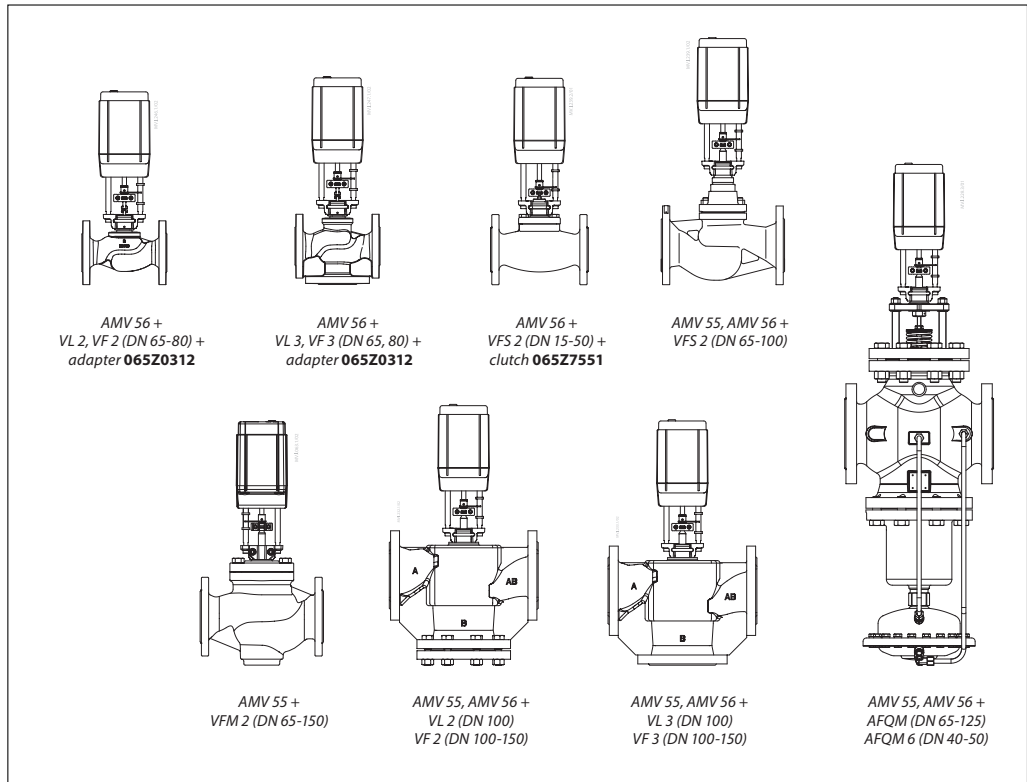
The manual override is applied by rotating the 4 mm Allen key (not supplied) to the required position. Observe the direction of the rotation symbol.

- Disconnect control signals
- Adjust valve position using an Allen key
- Set valve to closed position
- Restore control signals

Dimensions



Actuator - valve combinations



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