

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	082H3020
AMV 55	230 VAC	082H3021
AMV 56	24 VAC	082H3023
AMV 56	230 VAC	082H3024

Accessories¹⁾

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

¹⁾ only one potent. or add. switches can be added)

²⁾ 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 Electromagnetic Compatibility Directive (EMC) 2014/30/EU: EN 61000-6-2, EN 61000-6-3	

Installation

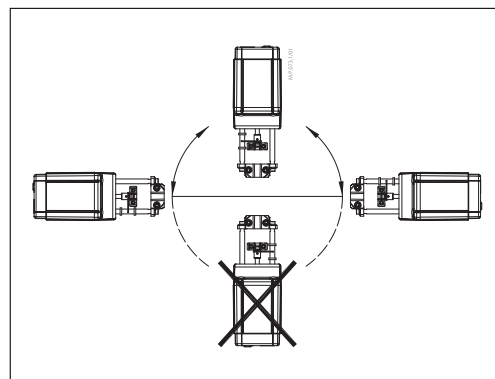
Mechanical

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

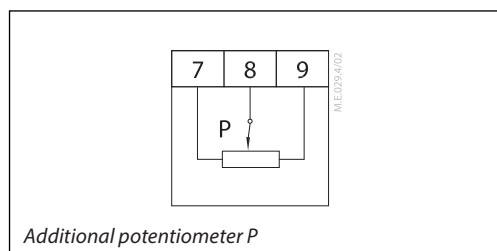
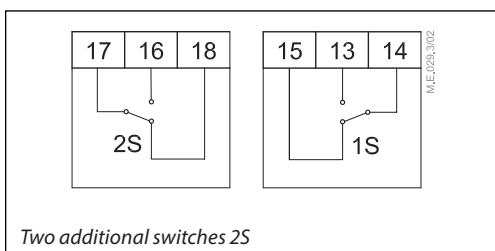
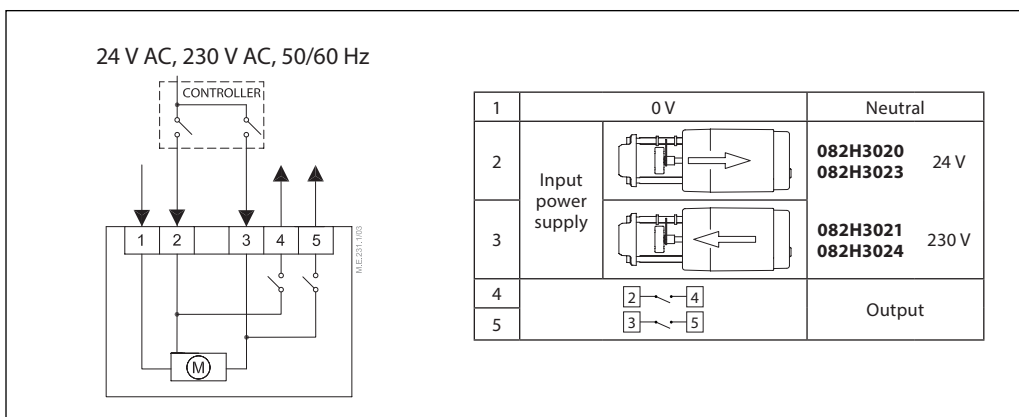
Electrical connections can be accessed by removing the cover. Two M16 × 1,5 cable entries are provided. Both entries are provided with a rubber grommet for use with flexible cable. Note that in order to maintain the enclosure IP rating, appropriate cable glands must be used.



Wiring



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



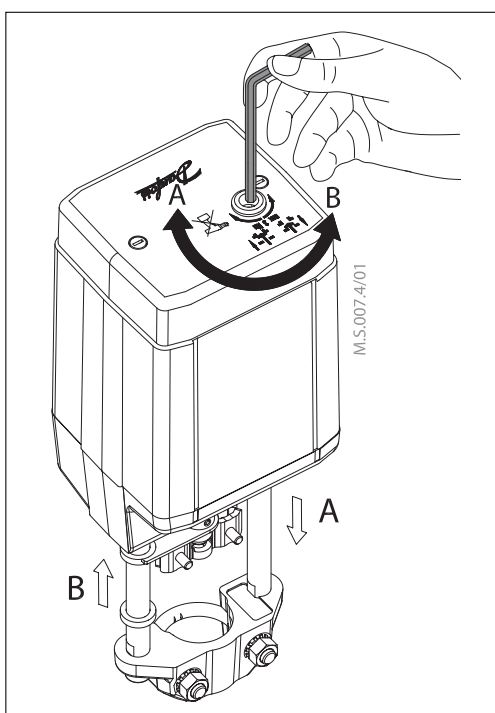
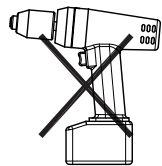
Commissioning

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.

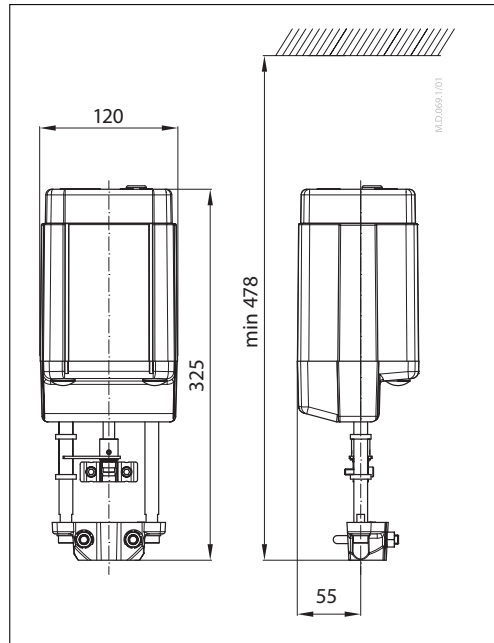
Manual override



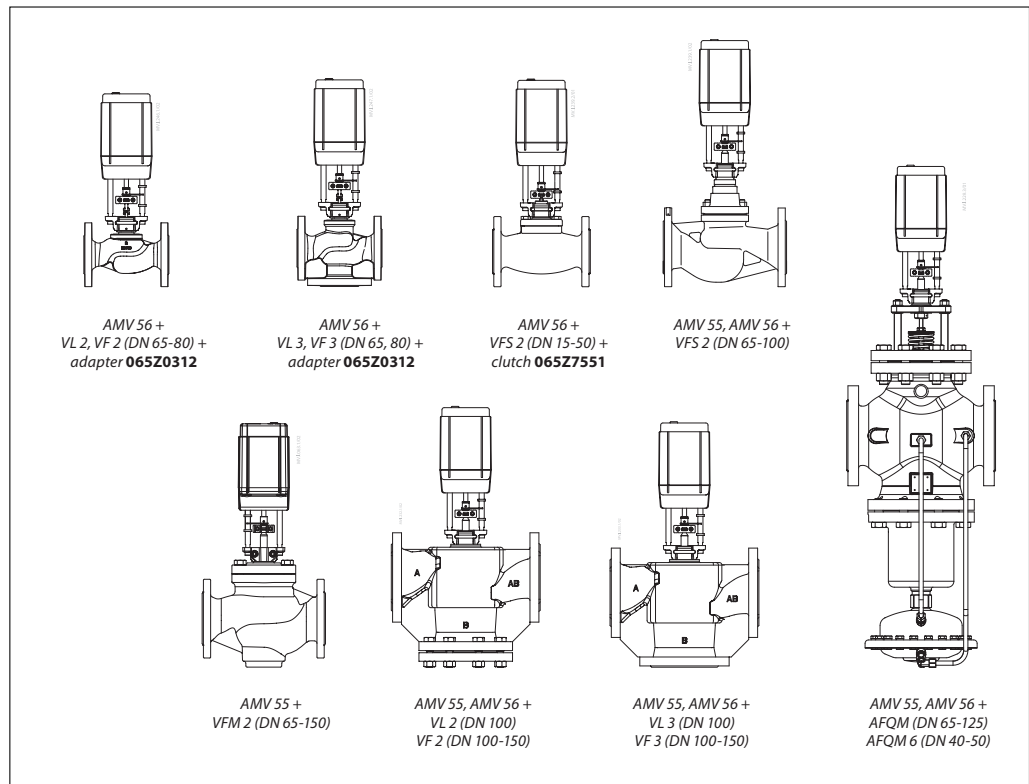
The manual override is applied by rotating the 4 mm Allen key (not supplied) to the required position. Observe the direction of the rotation symbol.

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

Dimensions



Actuator - valve combinations



Danfoss A/S

Climate Solutions • danfoss.com • +45 7488 2222

Any information, including, but not limited to information on selection of product, its application or use, product design, weight, dimensions, capacity or any other technical data in product manuals, catalogues descriptions, advertisements, etc. and whether made available in writing, orally, electronically, online or via download, shall be considered informative, and is only binding if and to the extent, explicit reference is made in a quotation or order confirmation. Danfoss cannot accept any responsibility for possible errors in catalogues, brochures, videos and other material. Danfoss reserves the right to alter its products without notice. This also applies to products ordered but not delivered provided that such alterations can be made without changes to form, fit or function of the product.

All trademarks in this material are property of Danfoss A/S or Danfoss group companies. Danfoss and the Danfoss logo are trademarks of Danfoss A/S. All rights reserved.