



Gear actuators

AMV 25 / AMV 35

Actuators for three point control

Description

AMV electric actuators are used with, VRB, VRG, VF, VL valves with additional adapter (Code No. **065Z0311**, not supplied) and VFS 2 valves up to DN 50 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.

Features & benefits


- The advanced design incorporates load related 'switch-off' to ensure that actuators and valves are not exposed to overload;
- Digitale feedback end position indication signal for valve end position is available by terminal 4 or 5;
- Low weight and robust;


Ordering

Product code numbers

Type	Description	Supply voltage [V]	Code number
AMV 35	AMV 35 24V 3s/mm 15mm 600N	24 V AC	082G3020
AMV 35	AMV 35 230V 3s/mm 15mm 600N	230 V AC	082G3021
AMV 25	AMV 25 24V 11s/mm 15mm 1000N	24 V AC	082G3023
AMV 25	AMV 25 230V 11s/mm 15mm 1000N	230 V AC	082G3024

Accessories code numbers


 <p>003G6396</p> <p>SP Stem Clutch AMV(E) 25, AMV(E) 35</p> <p>SP Stem Clutch AMV(E) 25, AMV(E) 35</p>	 <p>065Z0311</p> <p>AdapAMx15/16/25/35- VRB/G,VF/L2009dn15-50</p> <p>AdapAMx15/16/25/35- VRB/G,VF/L2009dn15-50</p>	 <p>082H7015</p> <p>Additional switch 2S AMV 25 35</p> <p>Additional switch 2S AMV 25 35</p>	 <p>065Z7548</p> <p>ADAPTER</p> <p>ADAPTER</p>
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082H7016

**ADD.S.
2S+POTENTIOMETER
(10K)AMV25,35**

ADD.S. 2S+POTENTIOMETER
(10K)AMV25,35



082H7017

**ADD.SWITCH
2S+POTENTIOMETER(1K)AM**

ADD.SWITCH
2S+POTENTIOMETER(1K)AMV25,35



065B2171

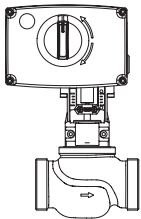
STEM HEATER

STEM HEATER

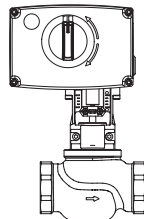
Overview

Product portfolio

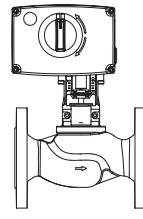
Actuator - Valve combinations



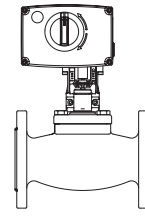
AMV 25, AMV 35 +
Adapter (065Z0311)
VRB 2, VRB 3 ext. thread (DN 15-50)
VRG 2, VRG 3 ext. thread (DN 15-50)



AMV 25, AMV 35 +
Adapter (065Z0311)
VRB 2, VRB 3 Int. thread
(DN 15-50)



AMV 25, AMV 35 +
Adapter (065Z0311)
VF 2, VF 3 (DN 15-50)
VL 2, VL 3 (DN 15-50)



AMV 25, AMV 35 +
VFS 2 (DN 15-50)

Functions

Operation

Commissioning

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

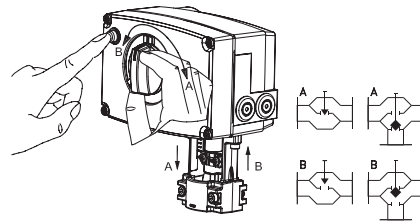
- Turn on the power.
- Set the appropriate control signal and check that the valve stem direction is correct for the application.

The unit is now fully commissioned.

Manual override

The manual override is achieved by turning the manual knob to the required position. Observe the direction of rotation symbol.

- Disconnect control signals
- Press rubber button
- Adjust valve position using the control knob
- Set valve to closed position
- Restore control signals



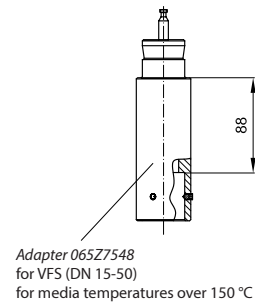
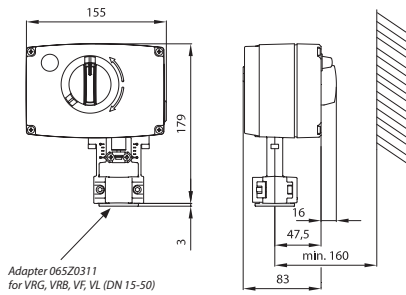
Product details

General data

Technical data

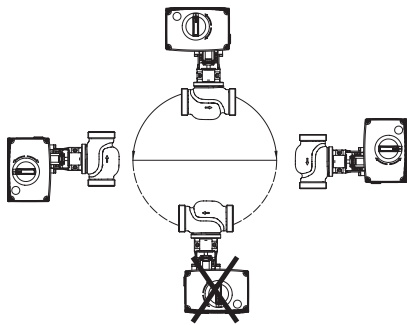
Type		AMV 25	AMV 35
Power supply	V	24 AC, 230 AC; +10 to -15 %	
Power consumption	VA	2	7
Frequency	Hz	50/60	
Control input		3-point	
Closing force	N	1000	600
Max. stroke	mm	15	
Speed by 50 Hz (60 Hz)	s/mm	11 (8.8)	3 (2.4)
Max. medium temperature	°C	150 (200 - with adapter or mounted horizontally)	
Ambient temperature		0 ... 55	
Storage and transport temperature		-40 ... 70	
Grade of enclosure		IP 54	
Weight	kg	1.55	

Dimensions

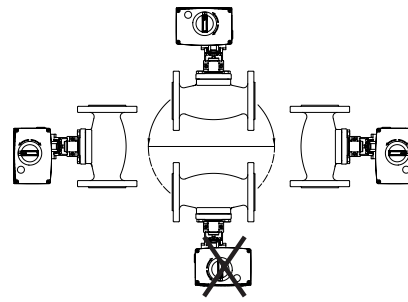


Installation

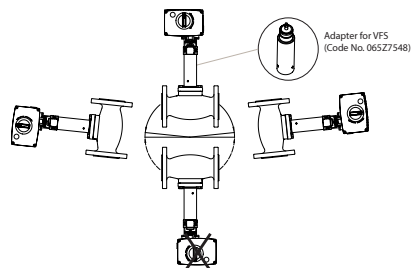
$T_{\max} \leq 150^{\circ}\text{C}$ for AMV 25, 35 and VRB, VRG, VF and VL



$T_{\max} \leq 150^{\circ}\text{C}$, for AMV 25, 35 and VFS



$T_{\max} = 200^{\circ}\text{C}$ for AMV 25, 35 and VFS



Mechanical

Use 4 mm Allan key (not part of actuator delivery) to mount actuator on the valve. Installation of the valve with the actuator is allowed in horizontal position or upwards. Installation downwards is not allowed.

The actuator must not be installed in an explosive atmosphere, at ambient temperature lower than 0°C or at ambient temperature higher than 55°C . It must not be subject to steam jets, water jets or dripping liquid as well.

Note: the actuator may be rotated up to 360° with respect to the valve stem by loosening the retaining fixture. Once the actuator is placed, retighten the fixture.

Electrical

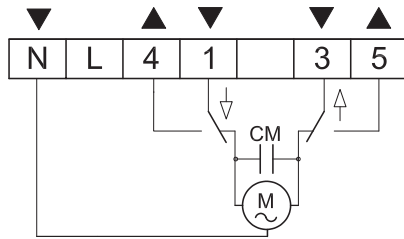
Electrical connections can be accessed by removing the actuator cover. Two cable gland entries with thread (M20 x 1.5 and M16 x 1.5) are prepared for cable glands.

Note: Cable and cable gland used must not compromise the actuator's IP rating, and must ensure the connectors are fully strain relieved. Please observe local rules and regulations as well.

Wiring



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



Terminals 1, 3:

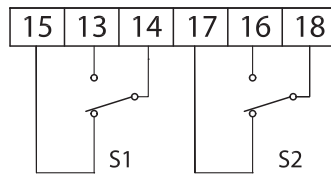
Control voltage input from the controller. Power supply 24 V, 230 V (dependent on type)

Terminals 4, 5:

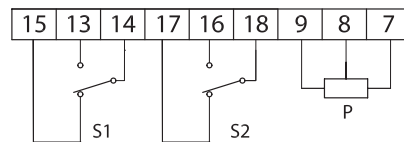
Output used for position indication or monitoring.

N
Neutral/Common (0 V)

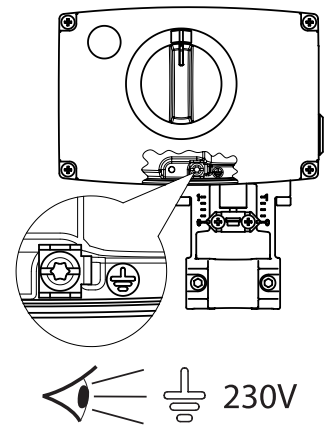
Accessories



Additional switches (2x)



Additional switches (2x) and potentiometer



Certificates, declarations and approvals

The list contains all certificates, declarations, and approvals for this product type. Individual code number may have some or all of these approvals, and certain local approvals may not appear on the list.

When you click on the link you will be directed to the latest version of the 'Declaration of Conformity'. Products developed and sold before this date of issue conform to the directives/standards in force at the time of their sale.

Approval type	Title	Certification body	Approval topic
Export Control Declaration	Gear and Thermal actuators	Danfoss	
UA Declaration	UA Actuators 2024-06-27	Danfoss	EMC, LVD
EU Declaration	Danfoss EU 221011EN0815101.04	Danfoss	LVD, EU RoHS

Contact details

Online support

Danfoss offers a wide range of support along with our products, including digital information, software, mobile apps and expert guidance. See the possibilities below.



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