



Electrical actuators

AMV 85 / AMV 86

Description

The actuators AMV 85 and AMV 86 are used with VFM 2 (DN 150-250), VFS 2 (DN 65-100), VF2/3 (DN 125, 150) and AFQM (DN150-250) valves.

Features & benefits

- “Self stroking” function
- Load related “Switch off” function that prevents overloading
- Manual operation
- Diagnostic LED

Ordering

Product code numbers

Type	Supply voltage [V] AC	Actuator speed [s/mm]	Code number	VVS DK
AMV 85	24	8	082G1450	461072550
AMV 85	230	8	082G1451	461072551
AMV 86	24	3	082G1460	461072560
AMV 86	230	3	082G1461	461072561



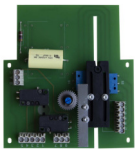
Accessories code numbers



065Z7021

STEAM HEATER

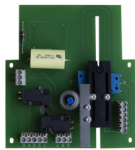
STEAM HEATER



082H7083

Accessories - Electr Act

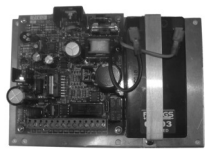
ADD. SWITCH (2X) AND POT.
AMV 85/8/24



082H7080

Accessories - Electr Act

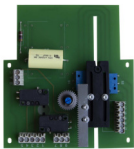
ADD. SWITCH (2X) AND POT.
AMV 86/3/230



082H7090

AM-PBU 25, Supply
voltage [V] AC: 24

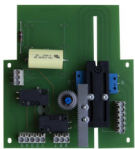
AM-PBU 25



082H7082

Accessories - Electr Act

ADD. SWITCH (2X) AND POT.
AMV 85/8/230



082H7081

Accessories - Electr Act

ADD. SWITCH (2X) AND POT.
AMV 86/3/24

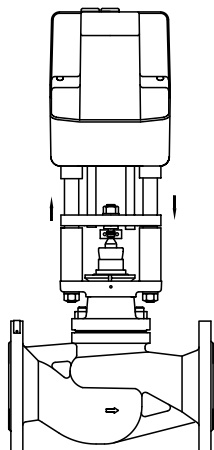
Accessory code numbers only for Danish market:

Code number	VVS-nr.
082H7081	46 0946.827
082H7080	46 0946.828
082H7083	46 0946.823
082H7082	46 0946.824
065Z7021	46 0946.905

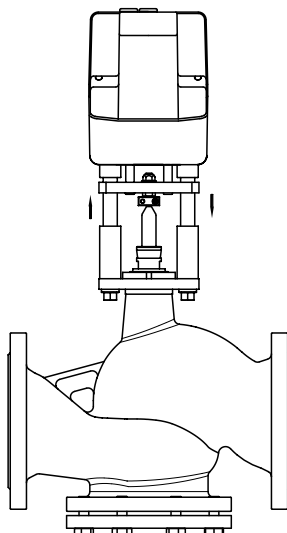
Overview

Product portfolio

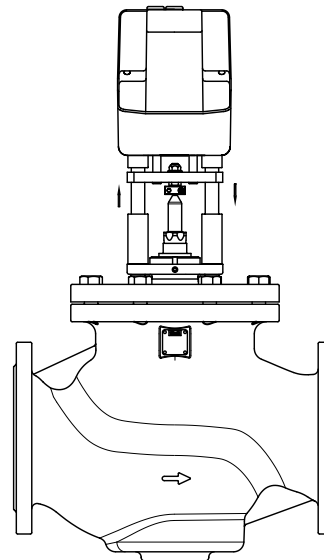
Actuator - valves combinations



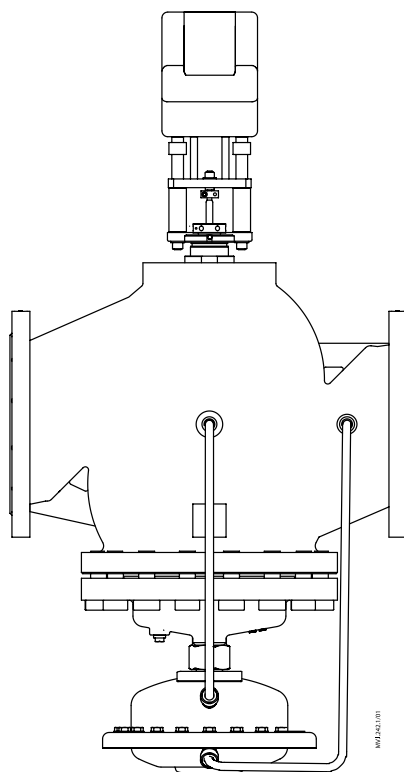
AMV 85/86 + VFS 2 (DN 65 - 100)



AMV 85/86 + VF 2 (DN 125 - 150)
AMV 85/86 + VF 3 (DN 125 - 150)



AMV 85/86 + VFM 2 (DN 150-250)



AMV 85/86 + AFQM (DN 150 - 250)

Functions

Operation

Commissioning

The following mechanical and electrical installation and the necessary checks and tests are to be completed in order to commission the unit:

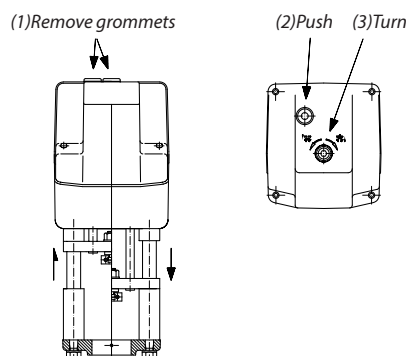
- Turn on the power.
- Set the appropriate control signal and check the valve stem direction is correct for the application.

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



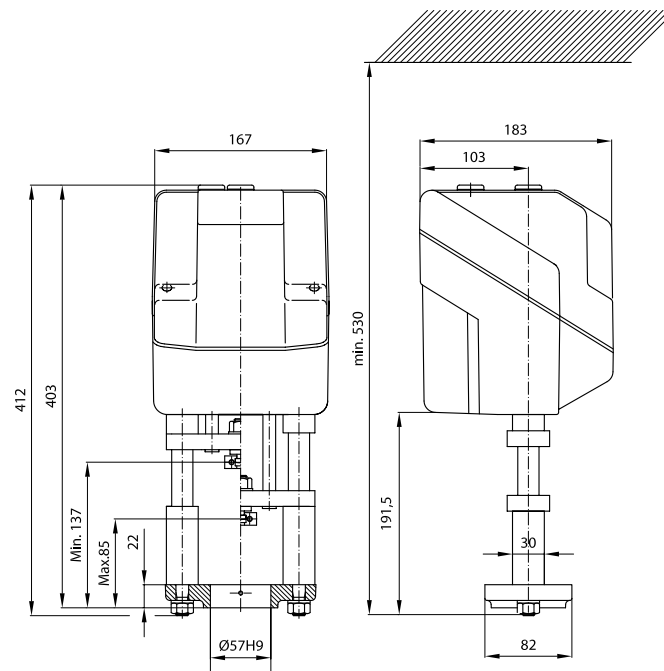
Product details

General data

Technical Data

Type		AMV 85	AMV 86
Power supply	V~	24 AC, 230 AC ; +10 to -15%	24 AC, 230 AC ; +10 to -15%
Power consumption	VA	10.5	23
Frequency	Hz	50 / 60	50 / 60
Control input		3-point	3-point
CI force	N	5000	5000
Max. stroke	mm	40	40
Speed	s/mm	8	3
Max. medium temperature	°C	200	200
Ambient temperature	°C	0 ... 55	0 ... 55
Storage and transport temperature	°C	-40 ... +70	-40 ... +70
Protection Class		I (230 V); III (24 V)	I (230 V); III (24 V)
Grade of enclosure		IP 54	IP 54
Weight	kg	9.80	10.0

Dimensions



Installation

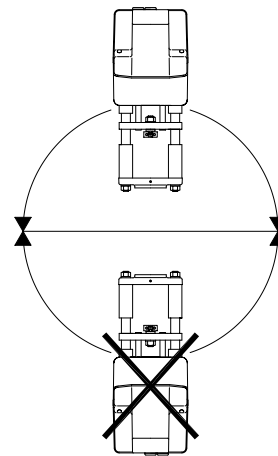
Mechanical

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.

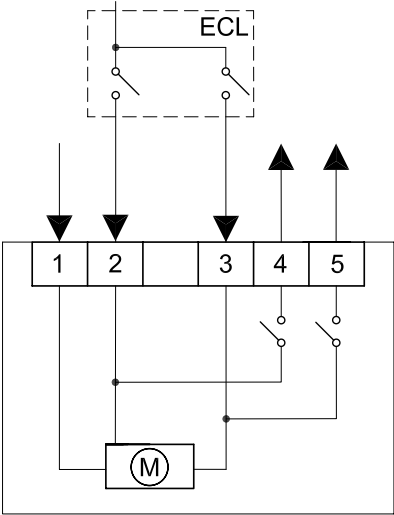


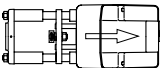
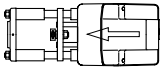
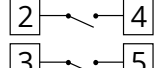


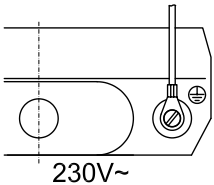
Wiring

 **230 VAC version:** Do not touch anything on the PCB! Do not remove the cover before the power supply is fully switched off.

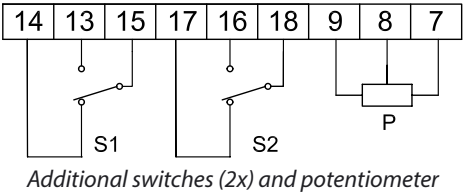
24 V, 230VAC, 50/60 Hz



1	0V	Neutral
2		Input power supply
3		
4		Output
5		



Accessories



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	Issuer	Approval topic
UA Declaration	UA Actuators 2024-06-27	Danfoss	EMC
UA Declaration	UA Controllers 2024-07-25	Danfoss	EMC
Export Control Declaration	Actuators pressure flow and temperature	Danfoss	
EU Declaration	Danfoss EU 221011EN0815101	Danfoss	LVD

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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