



Electrical actuators

AMV 150

Description

Actuator is primarily designed to regulate valve in the respond to the demand of a controller in District heating, heating, floor heating, solar heating, zone heating, comfort cooling, ventilating and air conditioning systems etc.

Actuator should be controlled by electronic controllers with triacs or solid state relays with zero cross detection.

Actuator can be used in combination with:

- Valve types VS 2 (DN 15 only) and VMV
- Self acting flow controller AVQM (DN15 only)

Note: If a controller with relay outputs is used then relays with higher current rating and inrush current capabilities (min. 40A) should be selected.

Features & benefits

- Manual operation
- Position indication
- Supplied with 1.5 m cable
- Suitable for high temperatures

Ordering

Product code numbers

Description	Actuator speed [s/mm]	Supply voltage [V] AC	Code number	VVS DK
AMV 150 24V 24s/mm 5mm 250N	24	24	082G3089	460947450
AMV 150 230V 24s/mm 5mm 250N	24	230	082G3090	460947460

Accessories code numbers



082H8053

Cable (230 V) 5 m

Cable (230 V) 5 m



082H8052

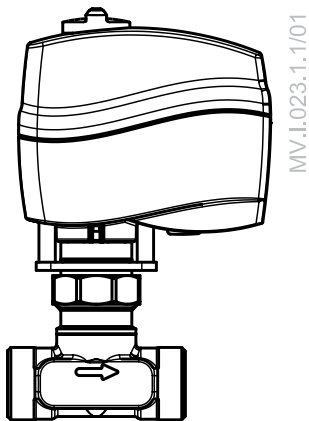
Cable (24 V) 5 m

Cable (24 V) 5 m

Overview

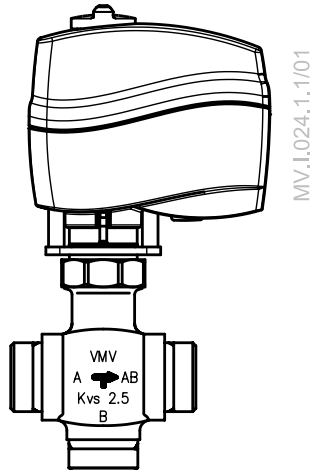
Product portfolio

Actuator - valve combinations



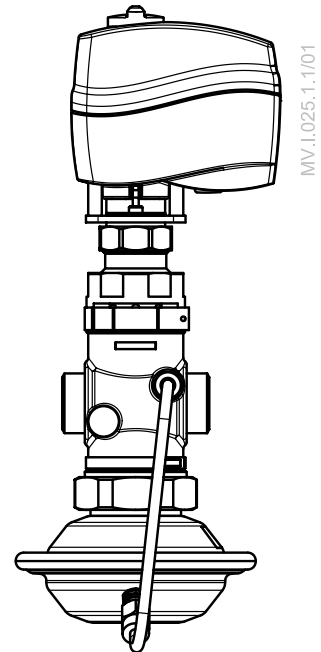
MV.I.023.1.1/01

AMV 150 + VS 2 (DN 15)



MV.I.024.1.1/01

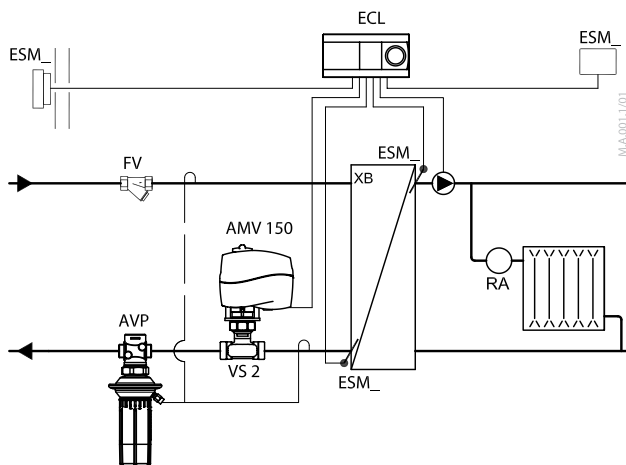
AMV 150 + VMV



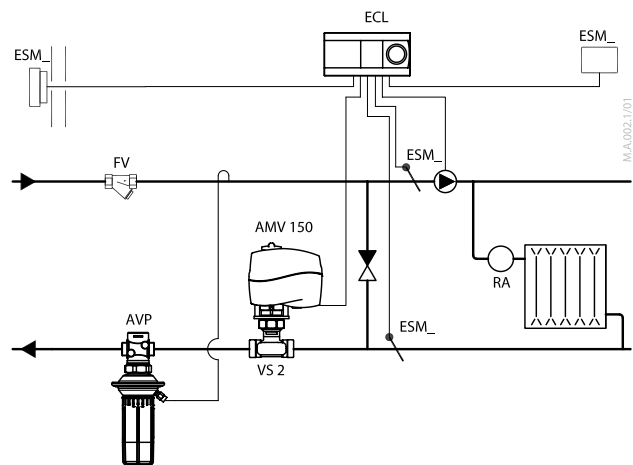
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AMV 150 + AVQM (DN 15)

Application examples



Indirectly connected district heating system with heat exchanger



Direct-connected district heating system with mixing facility

Functions

Operation

Commissioning

Complete the mechanical and electrical installation (see instructions) and perform the necessary checks and tests:

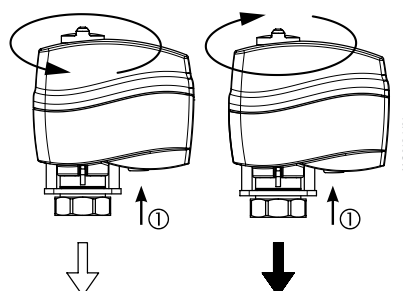
- Turn on the power
- Set the appropriate control signal and check that the valve stem direction is correct for the application.

The unit is now fully commissioned.

Manual operation

- ① Press and hold the button (on the bottom side of the actuator) during manual operation.

Remark: A "click" sound after energizing the actuator means that the gear wheel has jumped into normal position.



Product details

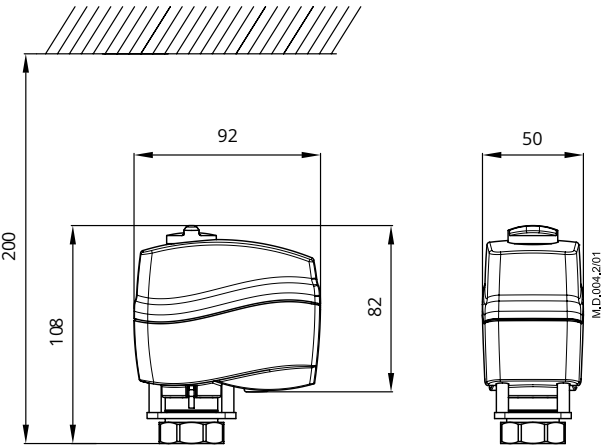
General data

Technical data

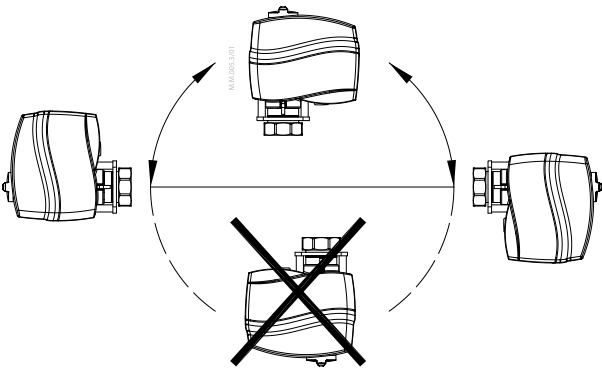
Power supply (V)	24 or 230 AC; +10 % to –15 %
Power consumption (VA)	1 (24 V), 8 (230 V)
Frequency (Hz)	50 /60
Control input	3-point
Closing force (N)	250
Max. stroke (mm)	5
Speed (s/mm)	24
Max. medium temperature (°C)	150
Ambient temperature (°C)	0 ... 55
Storage and transport temperature (°C)	–40 ... +70
Ambient humidity	95 % r.h., non-condensing
Protection class	II
Grade of enclosure	IP 54
Weight (kg)	0.34



Dimensions



Installation



Mechanical

The actuator should be mounted with the valve stem in either horizontal position or pointing upwards.

Electrical

Important: It is strongly recommended that the mechanical installation is completed before the electrical installation.

Each actuator is supplied with the connecting cable for the controller.

Wiring

24 V

Grey	Stem down	↓	
Black	Common		
Red	Stem up	↑	

M.E.001.1/01

230 V

Black	Stem down	↓	
Blue	Common		
Brown	Stem up	↑	

M.E.001.2/01

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

Contact details

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