

Simplify your work! Increase your **performance!**

Based on years of customer insight and successful development of motorized control valves, Danfoss introduces new control valves and electrical actuators for heavy duty district heating applications.

The electrical actuator series AMV(E) 655, 658 SU/SD and 659 SD fits the complete control valve range and provides a new level of convenience through excellent control performance and quality features.

The actuator provides risk reduction through improved thermal and overload protection, which ensures a trouble free operation of the actuator inside the system.

Created with your needs in mind, the heavy duty MCV's contribute to simplify your work and allow you to make an easy choice for higher performance. See for yourself...



DN65-250 valve range is covered

The new AMV(E) 655 actuator is all-in-one and designed to fit the entire range of VFM 2 valves.

HIGH PERFORMANCE WITH THE NEW AMV (E) 655 ACTUATOR

ONE ACTUATOR

Is all you need

The range of Danfoss MCV's comprises a new line of electrical actuators that matches every control valve from DN 65 to DN 250. This makes it is easy for you to select the right actuator, and it reduces the number of product variants you need to keep on stock and apply in your application.

One actuator can be applied as 3-point or modulating by just a simple switch of a jumper. The new range of MCV's come with unique features that allow you to fit the combination of electrical actuator and control valve to any need district heating application.

Features

- » One actuator covers the whole range of VFM 2 control valves, DN 65-250
- » 3-point or modulation control signal selection (jumper switch setting)
- » Slow/fast option (jumper switch setting)



SAVE TIME AND REDUCE COSTS

On every installation

The new range of MCV's is less complex and time consuming to install due to the LED signal feedback information (red, green and yellow) indicating status, alarms and valve position. Extra flexibility during installation is provided since the actuators can be mounted in all positions and hold an IP 54 protection class also in bottom-up position. Also no additional efforts or money are required to get a manual electrical operation of the control valve.

Features

- » Installation in all positions (360°) is possible
- » IP 54 protection class in all positions
- » All switches included (no need of extra switches)
- » Manual operation of the control valve, either mechanical and/or electrical
- » LED signaling – operation status, alarms, position



A cost effective solution

The new range of HD motorized control valves simply cost you less time, money and effort through easy selection, installation, commissioning and maintenance during its lifespan.

Simplified use

The electrical actuator is designed with your needs in mind and includes

selected features that save time and simplify the process of handling and operation.

Advantages for all

Years of customer insight and product development for district heating applications have allowed us to create a flawless actuator that comply perfectly with all your requirements.

Technical support

Danfoss has a long track record and a vast pool of knowledge in producing motorized control valves for district heating applications. This means you will always get the highest level of technical expertise and support from our staff, which are situated close to you.



LESS TIME AND EFFORT

Adds to more convenience

Significantly reduced commissioning time is enabled by the self-stroking function, which automatically adapts the stroke to the valve end positions. The risk of troubleshooting is minimized by the actuator's auto detection of the Y signal. Other key features like the inverse/direct function and the ability to set the valve characteristic to work as either logarithmic or linear ensures an easy, fast and convenient commissioning process.

Features

- » Self-stroking adaptation to valve end positions
- » Inverse/direct function
- » Auto detection of Y signal
- » Adjustable control characteristic
- » Integrated external switches



INCREASED CONTROL PERFORMANCE

And operational safety

By having integrated protection of the electro motor, both thermic and on overload, the risk of failure in operation and of the system as a whole is drastically minimized. The new range of MCV is designed to have the highest k_{vs} value within its product class and possess a 100:1 control ratio. As a result the actuator operates with high precision control performance, while reducing costs since fewer valves are needed to control the application.

Features

- » Electro motor protection (thermic and overload)
- » Safety function (TÜV certified) - Spring up (SU), Spring down (SD)
- » Control ratio 100:1



ELECTRICAL ACTUATORS

Types: AMV(E) 655, 658 SU/SD and 659 SD

The electrical actuators AMV(E) 655, 658 SU/SD and 659 SD can be controlled by electronic controllers with modulating or 3-point control output in heating, district heating and cooling systems.

Main data:

- » Nominal voltage (AC or DC):
 - 24 V, 50 Hz/60 Hz
 - 230 V, 50 Hz/60 Hz
- » Control input signal: modulating or 3-point
- » Force: 2000 N
- » Stroke: 50 mm
- » Speed (selectable): 2 or 6 s/mm
- » Max. medium temperature: 200 °C

The actuators can also be used in combination with:

Control valves, type				Self-acting controllers, type		
VFS (DN 65-100)	VFU	VF (DN 100-150)	VL (DN 100)	AHQM (DN 125-150)	AFQM PN 16 (DN 65-125)	AFQM PN 25



SEATED CONTROL VALVE

Type: VFM 2

2-way seated control valve applicable for heating, district heating and district cooling systems.

Features:

- » Logarithmic control characteristic
- » Control ratio > 100:1
- » Pressure relieved design

- » Temperature range (°C): -10...150
- » Flange connection

Main data:

- » DN (mm): 65-250
- » k_{vs} (m³/h): 63-900
- » PN (bar): 16

The VFM 2 control valve gives a perfect match with Danfoss HD actuators, type:

- » AMV(E) 655
- » AMV(E) 658 SU/SD
- » AMV(E) 659 SD

LOOK FOR A SOLUTION TO YOUR DISTRICT HEATING APPLICATION

Danfoss offers a complete range of motorized control valves for your district heating and cooling applications. Contact Danfoss or read more at

www.heating.danfoss.com



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