

Danfoss iMCV® - intelligent motorized control valves

## Aim for **intelligent solutions** And **hunt down** your costs

### The "i" stands for energy saving intelligence

Danfoss iMCV's feature a unique built-in intelligence in the form of enhanced anti-hunting for improved thermal comfort and energy saving that increases system performance and optimizes average temperature setpoint of the building. It simplifies and stabilises the HVAC system and leads to 10-15% saving of energy consumption (within  $\pm 1K$ ) in cooling and 8-10% in heating systems. With iMCV, you can optimise conventional systems to deliver better performance and reduce operating costs. The iMCV® range includes control valves with pressure relieved design that ensure simplicity because a single actuator supports the entire range from DN 15 to DN 80. Our range of iMCV® field devices are designed and tested as bubble tight, which contributes to energy efficiency in a HVAC system. This leads to 3-5% savings on pump energy consumption.



**8-15%**  
**energy saving**

Enhanced anti-oscillation improves thermal comfort and saves energy by optimizing the temperature setting for the building.

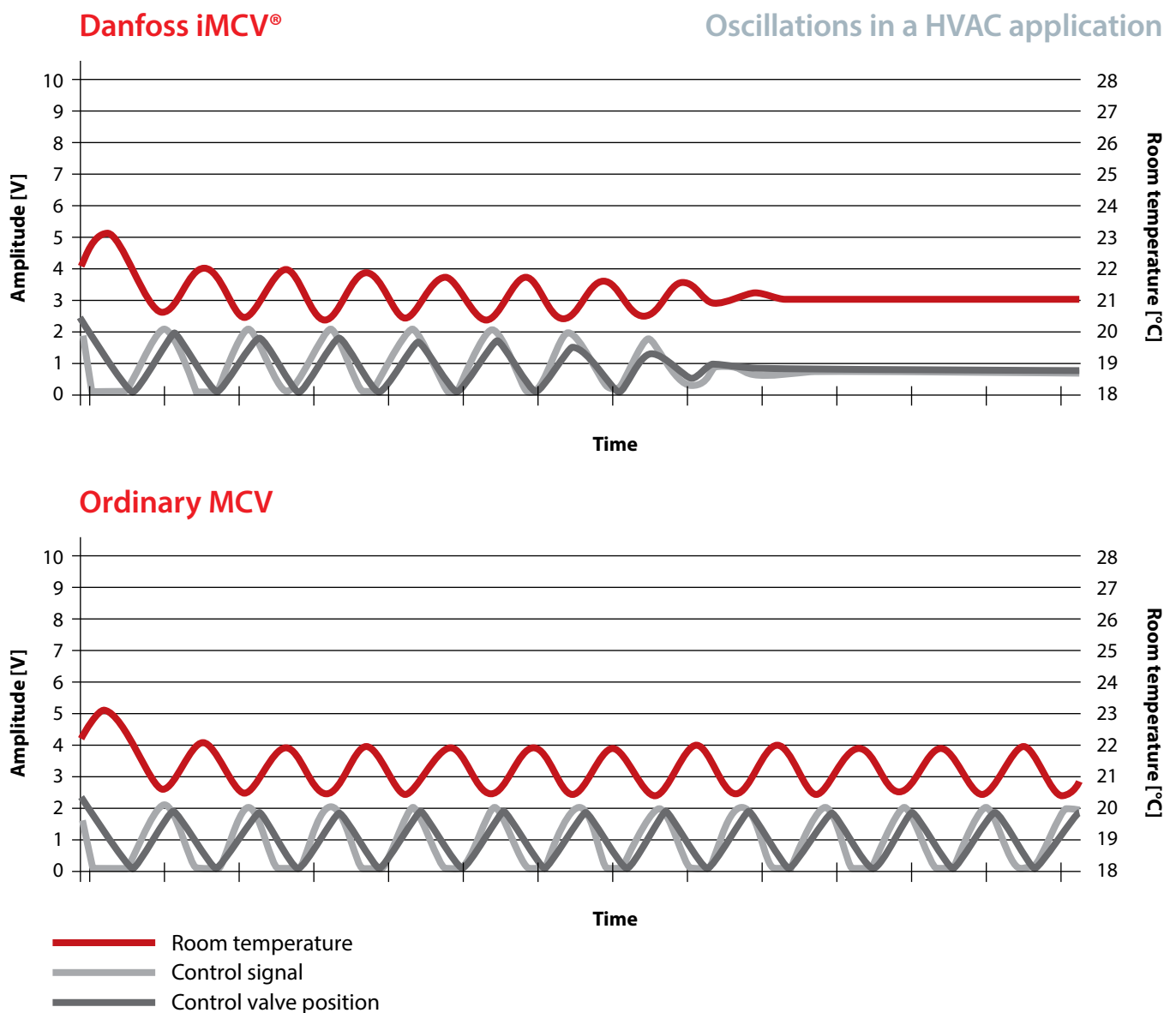
# What makes Danfoss iMCV<sup>®</sup> unique?

## The intelligent anti-oscillation function

Danfoss has developed a new generation of intelligent motorized control valves (iMCV<sup>®</sup>) with a patented, built-in anti-oscillation feature.

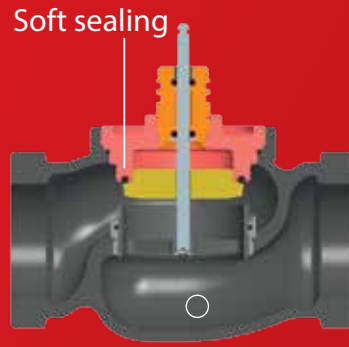
Advanced algorithms are installed in the actuator, which continuously detects, tracks and prevents the undesired oscillation in the control loop.

**This reduces time consumption and costs for (re)tuning of a control loop and (re)visiting of the customers installation.**



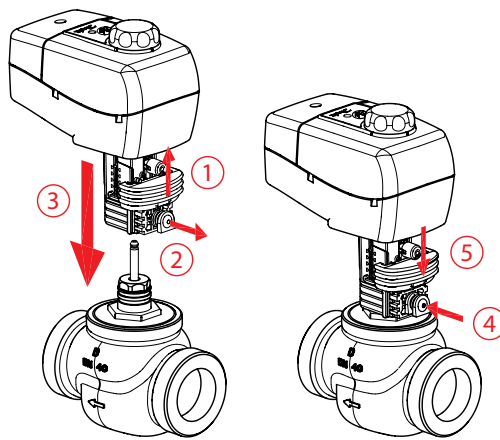
# 100% tight

The new iMCV™ is 100% tight due to a soft sealing construction. It leads to 3-5% energy savings on pump energy consumption.



## Installation in 3 seconds

Connection of the new generation of actuators and valves can be done instantaneously – without any tools. Simple commissioning and installation hunts down your costs!



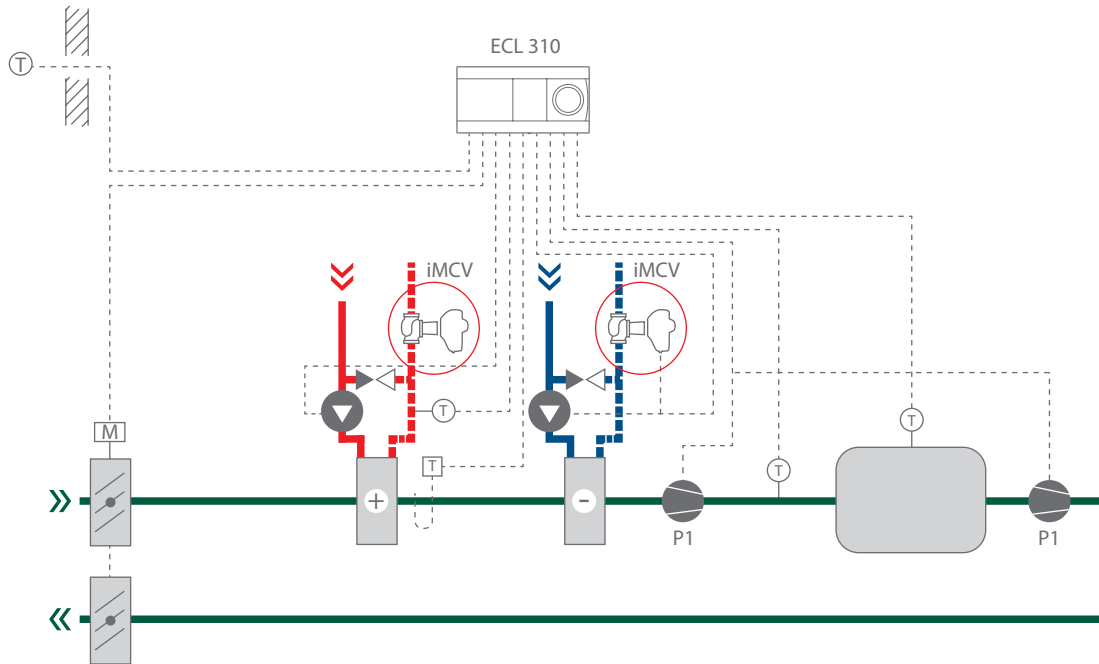
## We call it simplicity

The electrical actuator AMV(E) 435 fits to the whole range of iMCV® control valves from DN15 to DN80. It reduces costs for stock-keeping and simplifies the replacement and selection process.



| Valve type | VRB 2/3, VRG 2/3 |    |    |    |    |    | VL 2/3 |    |    |    |    |    |    |    | VF 2/3 |    |    |    |    |    |    |    |
|------------|------------------|----|----|----|----|----|--------|----|----|----|----|----|----|----|--------|----|----|----|----|----|----|----|
| DN [mm]    | 15               | 20 | 25 | 32 | 40 | 50 | 15     | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 15     | 20 | 25 | 32 | 40 | 50 | 65 | 80 |
|            |                  |    |    |    |    |    |        |    |    |    |    |    |    |    |        |    |    |    |    |    |    |    |

# iMCV fits your air handling unit



## iMCV<sup>®</sup> app for iPhone



| What is iMCV ? | Product browser | Valve selector | News section |
|----------------|-----------------|----------------|--------------|
|                |                 |                |              |

**Danfoss A/S** • DK-6430 Nordborg • Denmark • Tel.: +45 74 88 22 22 • Fax: +45 74 49 03 95  
 E-mail: [districtenergy.danfoss.com](mailto:districtenergy.danfoss.com) • [www.hvac.den.danfoss.com](http://www.hvac.den.danfoss.com)

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.