

## Valves & Actuators

For energy-efficient comfort heating, cooling, HVAC and domestic hot water systems  
Kvs 0.25 - 310

OSBY OAB

 **REGIN**

THE CHALLENGER IN BUILDING AUTOMATION



## Valves and actuators for energy-efficient systems

With a tradition in the valve industry that extends back to the 1920s, Osby Armatur (OAB) is a strong brand within valve technology. This tradition and expertise lives on at our production site in Osby. There we develop, install and test our valves.

### Energy efficient systems put great demands on valve characteristics

The precision and performance of valves are decisive factors in creating an energy-efficient system. At Regin's production centre in Osby, great emphasis is therefore placed on developing high control precision and leakage-free valves. Being a front-runner in the valve industry, Regin can now offer five valve ranges which have been developed using new technology, making them all bubble tight when closed and thereby minimising energy losses. The valves are available in dimensions up to DN 150. This technology will gradually be applied to other series of valves, as well.

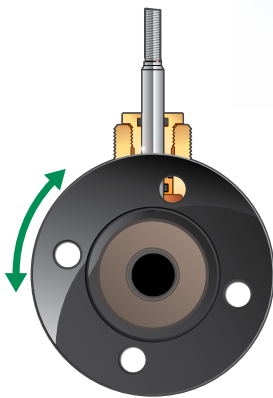
### Save energy using Regin OAB-valves

In most systems for comfort and hot water production, the valves are over-dimensioned\*, especially in older installations. Traditionally, valves were selected to tolerate the most extreme conditions in order to be on the safe side. As a result, the valves were over-sized in normal operating conditions and only a part of their stroke was being used. By installing a valve with the correct kvs value, high control precision and valve authority and more stable control are achieved, as well as a more energy efficient operation. If you choose an OAB-valve from the Regin product series you will both minimise energy costs and save the environment.

*Regin's valves are marketed under the name OAB; a brand which stands for high quality performance.*

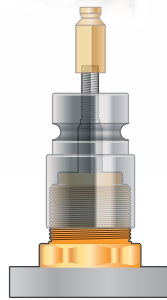


\* In practice, it has been possible to reduce the installed effect by 30-50 percent, with maintained comfort.



**READY STEADY GO**

*The FRS valves' dimensions, turnable flange connections and pre-mounted flange seals make installation quick and easy.*



**Regin Ready-Steady-Go valves**

We at Regin want to make installation easy for you. We call it Ready-Steady-Go. A good example is our FRS valve, which is a replacement for older STL valves (TA valves). The FRS valve has high control precision and is leakage-free when closed. Installation is facilitated by measurements designed for installing between flanges, turnable flange connections and pre-mounted flange seals.

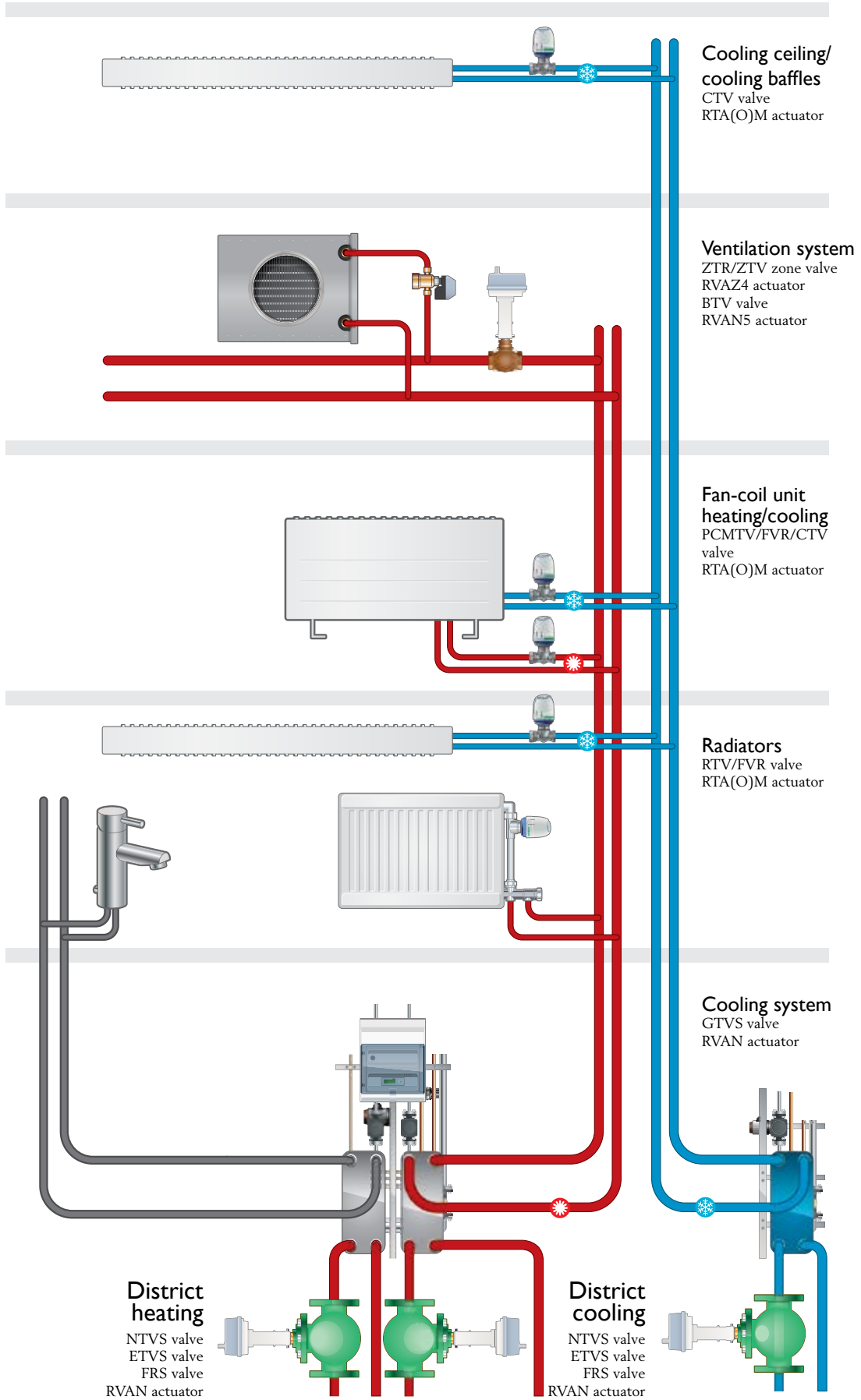
**Complete solutions – valve with actuator**

Regin can offer you the actuators you need. If you want to use other actuator brands, we have a complete collection of suitable adapters. We also offer a large selection of adapters for adapting our RTA(O)M and RVAN actuators to valves from other suppliers.

**Regin's valve sizing calculator**

Regin's web-based tool for valve sizing makes it considerably easier to calculate the required kv value and valve authority as well as select the right valve and kvs value for the application. It can also help you find a suitable actuator for the calculated valve. The valve sizing calculator is available on Regin's website [www.regincontrols.com](http://www.regincontrols.com).





**Cooling ceiling/  
cooling baffles**  
CTV valve  
RTA(O)M actuator

**Ventilation system**  
ZTR/ZTV zone valve  
RVAZ4 actuator  
BTV valve  
RVAN5 actuator

**Fan-coil unit  
heating/cooling**  
PCMTV/FVR/CTV  
valve  
RTA(O)M actuator












**Radiators**  
RTV/FVR valve  
RTA(O)M actuator

**Cooling system**  
GTVS valve  
RVAN actuator







**District  
heating**  
NTVS valve  
ETVS valve  
FRS valve  
RVAN actuator

**District  
cooling**  
NTVS valve  
ETVS valve  
FRS valve  
RVAN actuator




## Radiators, underfloor heating, fan-coil, chilled ceilings and ventilation systems

	 <p><b>RTV</b> 2-way <i>Kvs:</i> 1.2 – 1.4 <i>DN:</i> 10 – 15</p>		<p><b>RTA(O)M – thermal actuators</b> <i>Supply voltage:</i> 24 V AC, 24 V AC/DC or 230 V AC <i>Control signal:</i> On/off or 0...10 V <i>Force:</i> 100 or 125 N</p>
	 <p><b>FVR</b> 2-way <i>Kvs:</i> 0.01...1.1 (adjustable) <i>DN:</i> 10 – 20</p>		
	 <p><b>CTV</b> 2-way for aftertreatment systems <i>Kvs:</i> 0.12 – 1.9 (adjustable) <i>DN:</i> 10 – 20</p>		
	 <p><b>VTTV/VTTR/MTTB</b> 2-, 3-way and 3-way (bypass) zone valves For control of cold/hot water in fan-coil or chilled beams applications <i>Kvs:</i> 0.25 – 6 <i>DN:</i> 15 – 20</p>	  	<p><b>RTAOM – thermal actuators</b> <i>Supply voltage:</i> 24 V AC, 24 V AC/DC or 230 V AC <i>Control signal:</i> On/off or 0...10 V <i>Force:</i> 100 or 125 N</p> <p><b>RTAN – thermal actuators</b> <i>Supply voltage:</i> 24 V AC or 230 V AC <i>Control signal:</i> On/off or 0...10 V <i>Force:</i> 100 or 140 N</p>
	 <p><b>ZTV/ZTR, ZTVB/ZTRB</b> 2- and 3-way For individual room control and for example control of baffles/batteries, hot/cold water, fan convectors, and after-heaters/after-coolers <i>ZTV/ZTR:</i> <i>Kvs:</i> 0.25 – 7 <i>DN:</i> 15 – 25 <i>ZTVB/ZTRB:</i> <i>Kvs:</i> 8 – 20 <i>DN:</i> 25 – 40</p>		<p><b>RVAZ4</b> <i>Supply voltage:</i> 24 V AC/DC or 230 V AC <i>Control signal:</i> 3-point or 0...10 V <i>Force:</i> 400 N</p>
	 <p><b>ZFCM</b> For on/off control of hot or cold water in heating or cooling systems. <i>Kvs:</i> 3.2 – 10 <i>DN:</i> 15 – 32</p>		<p><b>RVAFC</b> <i>Supply voltage:</i> 230 V AC <i>Control signal:</i> On/off</p>








## Heating, cooling and ventilation systems

	 <p><b>MVFL</b> 2- and 3-way <i>Kvs:</i> 0.16 – 25 <i>DN:</i> 15 – 40 <i>With thread, welded unions or flange</i></p>		<p><b>RVAZ4LI</b> <i>Supply voltage:</i> 24 V AC/DC or 230 V AC <i>Control signal:</i> 3-point or 0...10 V <i>Force:</i> 400 N</p>
	 <p><b>BTV</b> 2-way <i>Kvs:</i> 0.6 – 39 <i>DN:</i> 15 – 50</p>		<p><b>RVAN5</b> <i>Control signal:</i> 3-point or 0...10 V <i>Force:</i> 500 N <i>Stroke time:</i> 30 s (0...10 V) 60 s (3-point)</p>
	 <p><b>GTVS/GTRS</b> For cold and hot water, district heating systems, cooling systems and steam 2- and 3-way <i>Kvs:</i> 16 – 310 <i>DN:</i> 32 – 150</p>		<p><b>RVAN</b> <i>Supply voltage:</i> 24 V AC/DC or 230 V AC <i>Control signal:</i> 3-point or 0...10 V (24 V) 3-point only (230 V)</p> <p><i>Force:</i> RVAN5 500 N RVAN10 1000 N RVAN18 1800 N RVAN25 2500 N</p>

## Heating, cooling and ventilation systems, domestic hot water

	<p><b>MTVS/MTRS</b> 2- and 3-way <i>Kvs:</i> 0.63 – 39 <i>DN:</i> 15 – 50</p>	 <p><b>RVAN5</b> <i>Supply voltage:</i> 24 V AC/DC or 230 V AC <i>Control signal:</i> 3-point or 0...10 V <i>Force:</i> 500 N <i>Stroke time:</i> 30 s (0...10 V) 60 s (3-point)</p>
	<p><b>ETRS</b> 3-way <i>Kvs:</i> 0.63 – 40 <i>DN:</i> 15 – 50</p>	

## Valves and actuators for district heating/cooling

	 <p><b>ETVS</b> 2-way <i>Kvs:</i> 0.63 – 40 <i>DN:</i> 15 – 50</p>	 <p><b>RVAN</b> <i>Supply voltage:</i> 24 V AC/DC or 230 V AC <i>Control signal:</i> 3-point or 0...10 V (24 V) 3-point only (230 V)  <i>Force:</i> RVAN5 500 N RVAN10 1000 N RVAN18 1800 N RVAN25 2500 N</p>
	<p><b>NTVS (DIN standard)</b> For cold and hot water, district heating systems, cooling systems and steam 2-way <i>Kvs:</i> 0.4 – 310 <i>DN:</i> 15 – 150</p> 	
	<p><b>FRS</b> For cold and hot water 2-way <i>Kvs:</i> 0.6 – 20 <i>DN:</i> 15 – 65 (Replaces TA's STL valves)</p> 	

## Pressure independent control valves

 <p><b>PCTVS / PCTV / PCMTV</b> Hot or cold water, cooling systems (max. 50 % glycol) 2-way <i>DN:</i> 15 – 32 <i>Max. flow setting:</i> 45-3000 l/h</p>  <p><b>PCMTV 32....50</b> Hot or cold water, cooling systems 2-way <i>DN:</i> 32 – 50 <i>Max. flow setting:</i> 6000-18000 l/h</p>	 <p><b>RVAPC</b> <i>Supply voltage:</i> 24 V AC or 230 V AC <i>Control signal:</i> 3-point or 0...10 V <i>Force:</i> 120 N +30% -20%</p>  <p><b>RTAM100 – thermal actuators</b> <i>Supply voltage:</i> 24 V AC, 24 V AC/DC or 230 V AC <i>Control signal:</i> On/off or 0...10 V <i>Force:</i> 100 or 125 N</p>  <p><b>RVASMI6... – rotating actuators</b> <i>Supply voltage:</i> 24 V AC or 230 V AC <i>Control signal:</i> 2-point, 3-point or 0...10 V <i>Torque:</i> 16 NM</p>
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## Adapter kits

 <p>For adaption of Regin's valves to actuators from Belimo, TAC Forta, Siemens and Controlli. Adapter and stem extension included.</p>	 <p>For adaption of the RTA(O)M and RVAN actuators to valves of various brands: TA, Oventrop, Cazzaniga, MMA, Danfoss, Heimeier, etc.</p>
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## Everything you need for a complete system

### Integrated systems with web solutions

The Regin System has everything you need to create integrated systems for building automation. Products that are included are, for example, EXOflex, a freely programmable controller with modular design, and EXOcompact, a range of freely programmable controllers for heating, cooling and zone control, etc. The Regin System also contains SCADA systems and different solutions for access via the Internet and integration with other systems.

### Corrigo

Corrigo is a range of controllers for heating, domestic hot water, air handling, zone control and cooling. Corrigo is available with communication (TCP/IP, Modbus, LON etc.) for integration into systems.

### Regio

Regio is a range of room controllers for heating, cooling and ventilation etc. in different zones. Using Regio you can build up everything from stand-alone systems for one room and communicating systems for several rooms to freely programmable systems for a building with comprehensive SCADA.

### Optigo

Optigo is a universal controller, which solves all basic control needs in a cost-effective way. Optigo is delivered with applications for ventilation systems, heating and domestic hot water systems as well as pressure, CO<sub>2</sub> and humidity.

### Sensors and transmitters

Regin has a wide range of sensors and transmitters for temperature, pressure, CO<sub>2</sub>, occupancy, air and humidity.



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