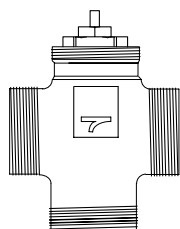
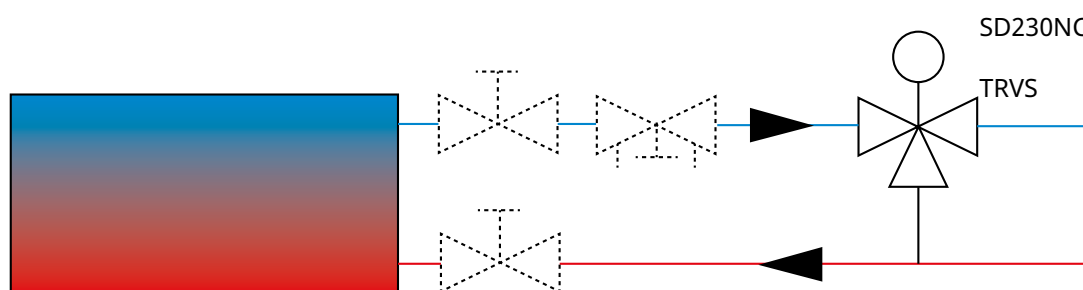
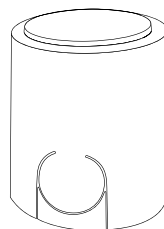


Original instructions

VOT15/20/25NC



TRVS



SD230NC

SE ... 3

EN 7

NO 11

DE 15

ES 19

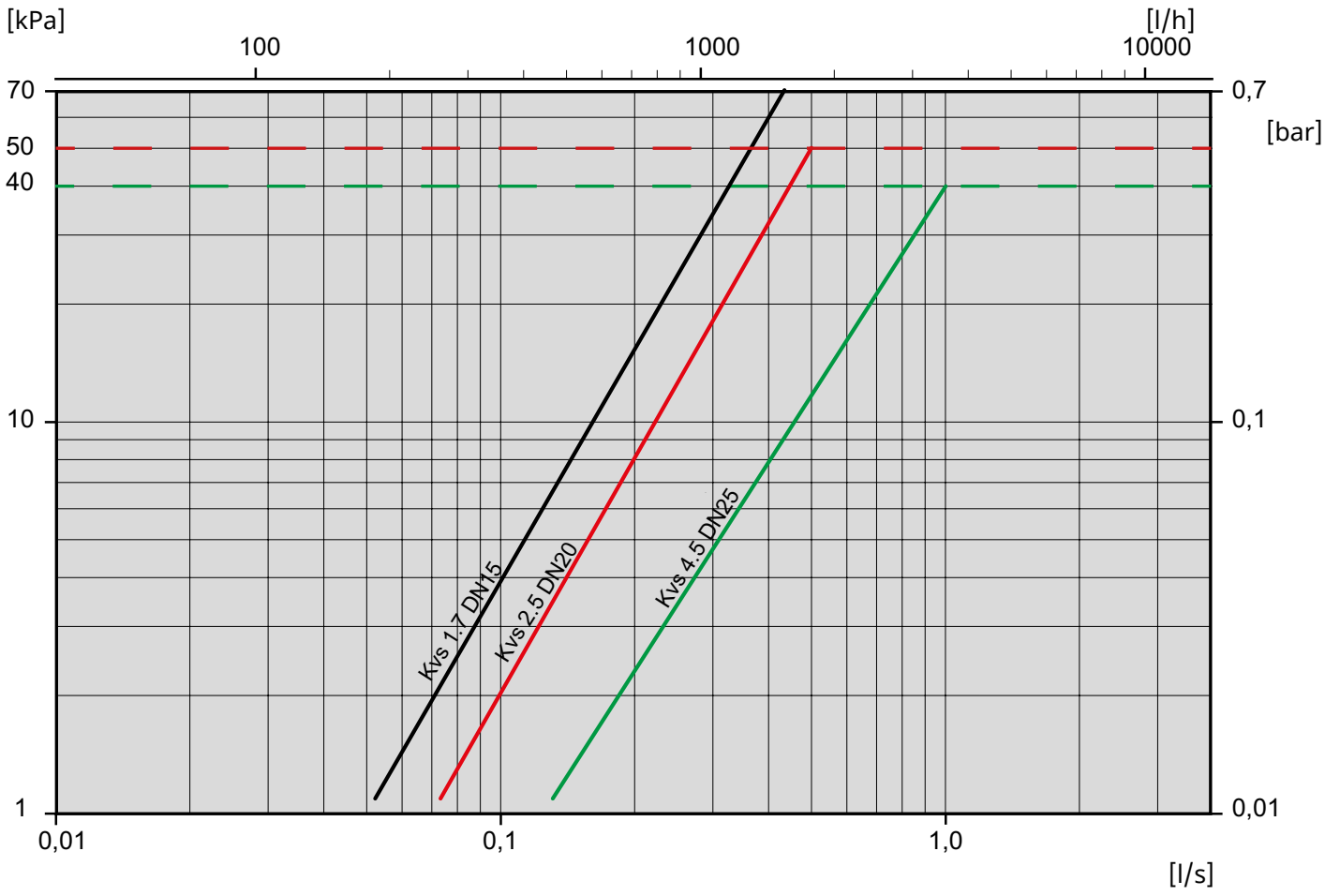
FR 23

NL 27

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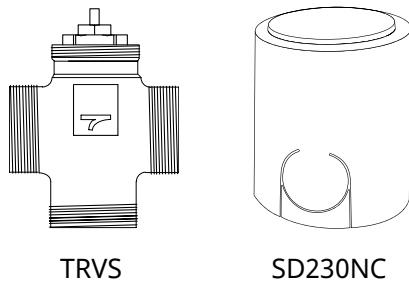
Diagram TRVS

The valve size for water applications can be defined using the diagrams below.



Constituent parts

VOTxxNC, 3-way control valve and thermal actuator



TRVS

SD230NC

VOT15NC

Type	Specification
TRVS15	3-way control valve DN10 (G15, ½" outside thread)
SD230NC	Actuator on/off 230V 230V~

VOT20NC

Type	Specification
TRVS20	3-way control valve DN15 (G20, ¾" outside thread)
SD230NC	Actuator on/off 230V 230V~

VOT25NC

Type	Specification
TRVS25	3-way control valve DN20 (G25, 1" outside thread)
SD230NC	Actuator on/off 230V 230V~

VOTxxNC, 3-way control valve and thermal actuator

3-way control valve with on/off actuator. 230V.

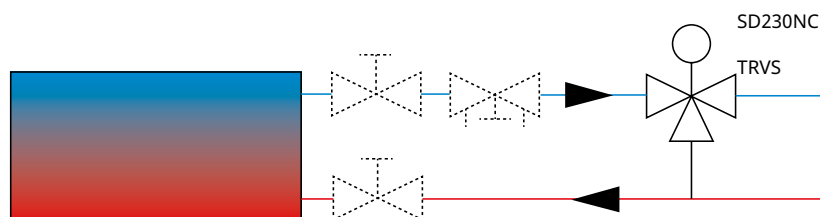
The valve kit consists of the following:

TRVS, 3-way control valve

SD230NC, actuator on/off 230V

The 3-way valve and the actuator controls the waterflow and provides a basic form of water regulation, without the possibility of adjusting or shutting the water flow off, e.g. when making maintenance.

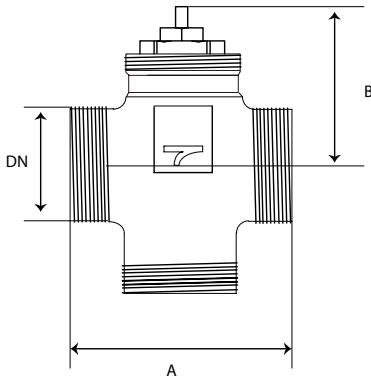
The actuator (SD230NC) controls the heat supply on/off. In unpowered mode SD230NC is closed.



----- Not included in the VOT-package

3-way control valve (TRVS)

Dimensions and technical specifications



Type	DN	A [mm]	B [mm]	Kvs*2 Control port	Kvs*2 Bypass port	Close-off pressure [kPa]	Weight [kg]
TRVS15	10	52	45	1,6 Mixing 1,9 Diverting	1,0 Mixing 1,12 Diverting	250	0,2
TRVS20	15	56	46	2,5 Mixing 2,9 Diverting	1,6 Mixing 1,9 Diverting	200	0,25
TRVS25	20	80	46	6,3 Mixing 7,4 Diverting	4,0 Mixing 4,7 Diverting	100	0,55

*2) Kvs = Flow [m³/h] at a pressure drop of 1 bar and fully open valve.

Technical specifications

Body Rating: PN16

Inherent Flow Characteristic: Quick opening

Max Pressure drop DP: TRVS15: 70 kPa, TRVS20: 50 kPa, TRVS25: 40 kPa

Fluid Temperature limits: 2-110 °C

Ambient Temperature limits: 2-50 °C

Nominal stroke: 2,5 mm

Connection to actuators: M30 x 1.5

Materials:

Body: EN12165 CW617 Brass CuZn40Pb2

Stem: AISI 303 Stainless Steel (X10CrNiS1809)

Spring: AISI 302 Stainless Steel (X10CrNi1809)

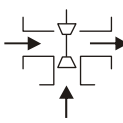



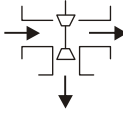



Plug: EPDM

Application area

The 3-way valve and the actuator controls the waterflow and provides a basic form of water regulation, without the possibility of adjusting or shutting the water flow off, e.g. when making maintenance.

Function

TRVS is used for hot or cold water and for water glykol mixtures up to 50 %. Note that these valves are intended to control equipment under normal operating conditions.

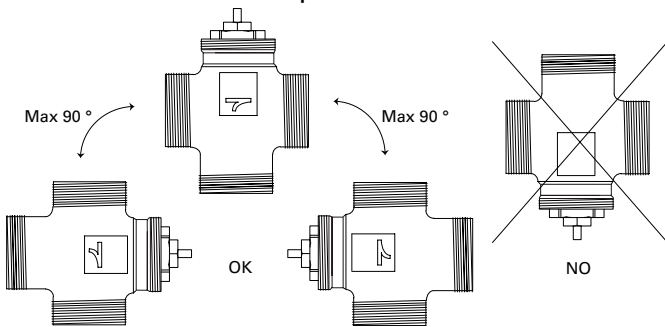
Valve type	Stem movement / Flow	
	Actuator Stem down	Actuator Stem up
 <p>3-way MIXING</p> 		
 <p>3-way DIVERTING</p> 		

Mounting

General guidelines

Shut-off valves should be mounted on all sides of the 3-way valve to facilitate service, dismantling, and to avoid draining the system. The control valve should be installed in a vertical or horizontal position.

To ensure that the control valves work properly, the inlet after the valve should be straight and have a length of at least 2x DN, and the return after should be straight and have a length of at least 6x DN.



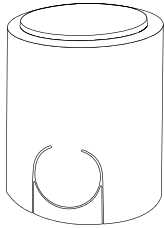
Installation must be performed by a licensed electrician and in accordance with these instructions and applicable regulations.

The system where the control valve is included must meet current safety requirements.

The pipelines should be insulated to protect the actuator from high temperatures. The insulation should leave enough room for service of the stem packing.

Actuator (SD230NC)

Dimensions and technical specifications



Type	HxBxD [mm]	Weight [kg]
SD230NC	57,3x44,1x47,5	0,3
Action	On/Off regulation, linear motion	
Supply voltage	230V, 50-60 Hz	
Power consumption	<550 mA during 100 ms. max	
Stroke force	100 N	
Stroke length	5,0 mm	
Full stroke time "On"	Nominal 4 min	
Full stroke time "Off"	Nominal 4 min	
Protection class	IP54	
Screw-nut	M30x1,5	
Cable length	1,5 m	
Isolation class	II	
Surrounding temp.	0-60 °C	

Application area

The electrical actuator in combination with the valve is used for regulating the heat supply to the unit. It's function is to open or close the valve (on/off). In unpowered mode SD230NC is closed.

The electrical actuator can be mounted and rotated after that the valve has been installed.



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