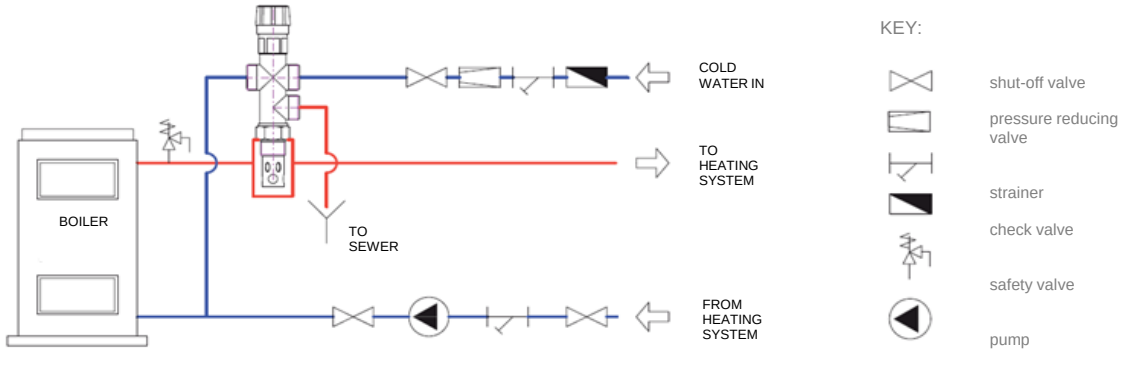
DBV 2 Two-way Recooling Thermostatic Valve

Application	Heating system with solid-fuel fired heat source
Purpose	solid-fuel fired heat source protection from overheating
Working fluid	water, water with glycol up to 1:1 ratio
Installation position	vertical or horizontal, close to the outlet of the heat source
- when installed horizontally, the hot heating fluid outlet shall point downwards	
- when installed vertically, the head shall not point downwards	

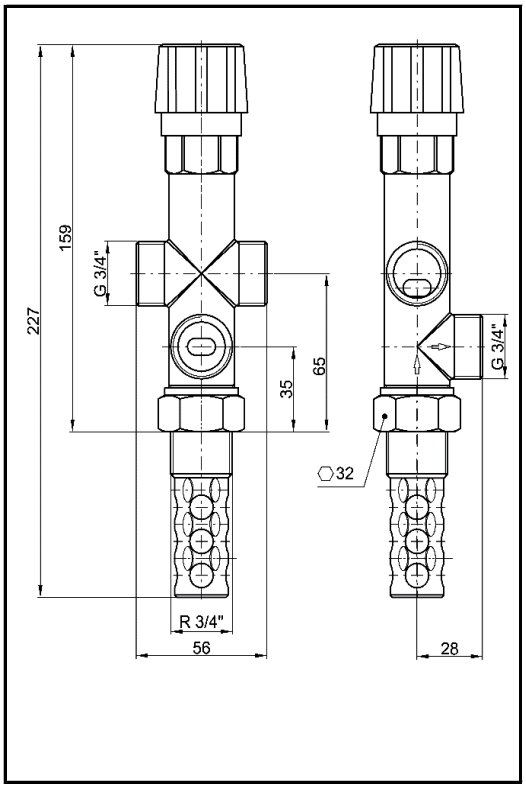
Valve function	automatic operation depending on the working fluid temperature
heating fluid temperature is below the valve opening temperature	the valve is closed
heating fluid temperature has reached the valve opening temperature	the valve starts opening both the sections at the same time – discharging hot heating fluid from a heat source to sewer through the lower section while letting cold water from the mains into the heating system return line through the upper section
heating fluid temperature has sunk below the valve opening temperature	the valve starts closing both the sections at the same time

Valve design
- the valve features 2 sections – the lower section is designed to discharge hot heating water from a heat source outlet while the upper section cools the heat source by letting cold water into its inlet
- valve opening and closing is controlled by 2 independent thermostatic elements – the valve dissipates sufficient excess heat even when one of them fails

The valve is approved in compliance with the Directive 97/23/EC (PED) and meets the requirements for a device for dissipating excess heat by Art. 4.3.8.4 EN 303-5:2012. This is a STW device of Th type by EN 14597:2012.



DBV 2 Two-way Recooling Thermostatic Valve



Technical data	
Nominal diameter	DN 20
Pipe connection	G 3/4" M
Connection to heat source	R 3/4“ M tapered
Nominal pressure	PN 6
Heating fluid max. working pressure	4 bar
Cold water max. working pressure	6 bar
Fluid max. working pressure	110 °C
Valve opening temperature	97 ± 2 °C
K_{vs} at temperature of 110°C – stroke of both elements	2.0 m^3/h
K_{vs} at temperature of 110°C – stroke of one element	1.3 m^3/h
Weight	0.70 kg
Code	**14 043**

Materials	
Valve housing	forged brass
Valve gate	forged brass
Valve head	nylon
Sealing O-rings	EPDM

Before the assembly is finished, each valve gets its serial number and is tested. During testing a pressure test is performed, tightness of all its O-rings is verified as well as simultaneous opening of both the sections, the value of the opening temperature and stroke. The course of the test is recorded.

Two-way Recooling Valve must not be used to replace a heat source safety valve.

R E G U L U S spol. s r.o. Czech Republic
Do Koutů 1897/3, 143 00 Praha 4
Tel.: +420 241 765 191
Fax: +420 241 763 976
E-mail: sales@regulus.eu
Web: www.regulus.eu