

ENGINEERING
TOMORROW

Danfoss

Thermostatic Radiator Valves | RAS-B²

The **simple solution** to a daily challenge

Combining a thermostatic radiator valve and pressure controller
for two-pipe heating systems.



2-in-1

Optimal temperature
control & automatic
hydraulic balancing
built into one
single product



installer.danfoss.co.uk

A new approach to system balancing

Unbalanced heating systems are a constant source of frustration for end users and call backs for heating installers. Noisy radiators, uneven heat distribution, excessive heating bills and energy waste are all consequences of inefficient and wasteful systems.

With RAS-B², Danfoss gives you the ability to simply and cost-effectively solve these issues while increasing your customers' comfort and satisfaction.

Automatic hydronic balancing made simple

Combining a radiator thermostat and an automatic hydronic balancing valve in a single product enables you to significantly increase the efficiency of your clients' heating systems regardless of whether the system is operating at full load (Winter) or partial load (Spring/Autumn).

You will find RAS-B² simple to work with. Installation is the same as a standard TRV, whilst commissioning the heating system is made simpler and can be performed in a fraction of the time. Once installed, the valve ensures constant hydronic balancing, 24 hours a day, 365 days a year.

The valve permanently optimises the heating system in terms of accurate room temperature control. It also provides automatic hydronic balancing during unexpected system resistance, changing occupant behaviour or fluctuations in weather conditions.

How the RAS-B² works

The secret of Dynamic Valve™ lies deep inside. The small built-in differential pressure controller ensures constant pressure across the control valve. Normal pressure fluctuations no longer affect flow through the radiators. Using a simple 1 to 7+N scale, each valve can be quickly set to any maximum flow between 25-135 liters per hour. By appropriately setting each valve, flow through the system is restricted to a maximum level. In addition, the heating system is commissioned and optimised to its full energy-saving potential.



Good for you. Good for your customers. Everybody wins.

Many of you will have experienced complaints about uneven heat distribution, noise from the heating system and high energy bills. With Dynamic Valve™, you can quickly and cost-effectively solve their issues.

Indoor comfort will be greatly increased by the even heat distribution and faster startup times while noise in the heating system will be eliminated.

The energy efficiency increase and reliable system operation will reduce both energy consumption and the number of call outs. The result is a more efficient heating system with lower costs for everybody involved.

Benefits for your customers



Even heat distribution increases comfort

.....



**Energy consumption is lowered,
reducing costs**

.....



**Condensing boilers run more often in
condensing mode**

.....



**Lower risk of noise results in
fewer callbacks**

.....

Danfoss Installer App

The Danfoss installer app has been developed to assist you throughout the working day with useful tools and product information. With the “Radiator pre-setting” tool and RAS-B2 you can calculate and set the required flow for each radiator.

By using the “Project” function you are able to calculate the pre-setting for the entire heating system, which means the balancing can be completed in a fraction of the time.



Scan the QR code and try it for free on Android or iOS

1 Select pre-setting option from “quick tools”

2 Enter flow and return temperatures and select pressure loss

3 Choose the valve and sensor

4 Enter the radiator type

5 Select the radiator size

6 Pre-set the valve

Product name	Description	Code number	dP tool™
RAS-B ² Dynamic radiator pack	RAS-C ² sensor, angle RA-DV 15 mm balancing valve and matching lockshield valve	013G7662	For simple verification of sufficient differential pressure and pump optimisation Code number: 013G7855
RAS-B ² Dynamic radiator pack	RAS-C ² sensor, angle RA-DV 10 mm balancing valve and matching lockshield valve	013G7663	
RAS-B ² Dynamic combi pack	RAS-C ² sensor and angle RA-DV 15 mm balancing valve	013G7660	
RAS-B ² Dynamic combi pack	RAS-C ² sensor and angle RA-DV 10 mm balancing valve	013G7661	