

# **Danfoss RTD-CB Back Flow Restrictor User Guide**

Home » Danfoss » Danfoss RTD-CB Back Flow Restrictor User Guide 🖺

#### **Contents**

- 1 Danfoss RTD-CB Back Flow Restrictor
- 2 Introduction
- 3 Overview
- **4 Specifications**
- **5 Product Usage Instructions**
- **6 Frequently Asked Questions**
- 7 Documents / Resources
  - 7.1 References



**Danfoss RTD-CB Back Flow Restrictor** 



#### Introduction

The Danfoss RTD-CB Back Flow Restrictor is an essential component designed for use in one-pipe heating systems, particularly when thermostatic radiator valves (TRVs) like the RTD-CB series are installed. Its purpose is to maintain correct flow direction and avoid unwanted backflow through the radiator, which helps ensure efficient heating and balanced system operation.

#### Overview

- **Purpose:** Prevents reverse flow through radiators in one-pipe systems.
- Application: Designed for use with RTD-CB valves in heating systems.
- Material: Typically made from durable brass or stainless steel for corrosion resistance.
- Compatibility: Specifically suited for Danfoss TRVs and compatible radiator setups.
- Installation Position: Installed on the return pipe directly after the radiator.

# **Specifications**

Model: 013R9467

• Product Name: RTD-CB Back Flow Restrictor

• Part Numbers: 013L1925 (DN 15), 013L1926 (DN 20)

Model Type: DKCDCode: VICHA202

• Dimensions:

DN 15: A=30mm, B=27mmDN 20: A=37mm, B=32mm

#### **Installation Instructions**

#### **Tools Needed**

- · Adjustable wrench or spanner
- PTFE tape (if applicable)
- Pipe cutter (if adjustments are needed)
- Bucket or towel (to catch any water drips)

### Step-by-Step Guide

## 1. Turn Off the Heating System:

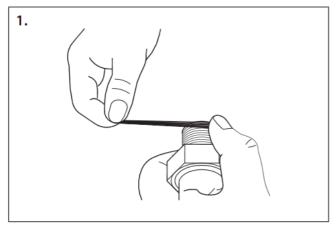
Make sure the central heating system is turned off and cooled down.

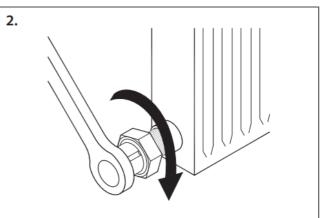
# 2. Drain the Radiator (if necessary):

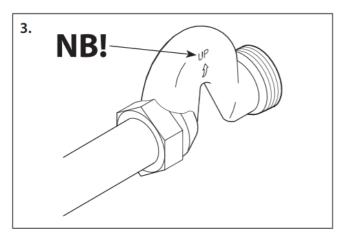
Use the bleed valve or radiator drain to relieve any pressure and drain water from the radiator.

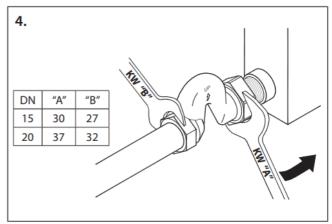
## 3. Locate the Return Pipe:

Identify the return side of the radiator – typically the cooler pipe when the system is running.









#### 4. Install the Restrictor:

- Remove the existing connector if needed.
- Insert the backflow restrictor into the valve or pipe fitting, ensuring the flow direction arrow on the restrictor matches the actual water flow.
- Use PTFE tape on threaded joints to prevent leaks.
- Tighten using a spanner or adjustable wrench.

## 5. Check for Leaks:

Once installed, reopen the radiator valves and refill the system. Look for any leaks around the new restrictor.

## 6. Bleed the Radiator:

Bleed out any trapped air using the radiator bleed key.

## 7. Test the System:

Turn the heating system back on and ensure proper flow and function.

#### **Tips**

- Always consult the system layout or heating engineer if unsure of flow direction.
- If you're working on a sealed system, remember to repressurize it after installation.

# **Product Usage Instructions**

- 1. Before installing, ensure the backflow restrictor is compatible with your system.
- 2. Turn off the water supply to the system where the backflow restrictor will be installed.
- 3. Identify the appropriate size based on your system requirements (DN 15 or DN 20).
- 4. Place the backflow restrictor in line with the water flow direction indicated by the arrow on the device.
- 5. Tighten the connections securely to prevent leaks.
- 6. Turn on the water supply and check for any leaks. Adjust connections if necessary.

## **Frequently Asked Questions**

- Q: Can the backflow restrictor be used for hot water systems?
- A: The backflow restrictor is designed for cold water systems only. Do not use with hot water.
- Q: How often should the backflow restrictor be checked for proper functioning?
- A: It is recommended to check the backflow restrictor annually or whenever there is a noticeable decrease in water pressure.
- Q: Can the backflow restrictor be installed vertically or horizontally?
- A: The backflow restrictor can be installed in both vertical and horizontal positions as long as the flow direction is maintained.

### **Documents / Resources**



<u>Danfoss RTD-CB Back Flow Restrictor</u> [pdf] User Guide RTD-CB Back Flow Restrictor, RTD-CB, Back Flow Restrictor, Flow Restrictor, Restrictor

#### References

User Manual

Manuals+, Privacy Policy

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