# truma FrostControl kit TB JG Fittings Instruction Manual



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Contents



## Symbols used

⚠ Symbol indicates possible hazards.

ⓘ Note containing information and tips.

## Intended use

The Frost Control is a current less over pressure drain valve with a frost monitor function. It can be used as an accessory for the Truma hot water units Boiler or Combi, and also for permanently installed water tanks in caravans and motor homes.

As a spare part for the FrostControl that is included with the Combi hot water units – depending on the scope of delivery.

The Frost Control is suitable for all pressure pumps and immersion pumps with a pressure of up to 2.8 bar.

⚠ The Frost Control is not suitable as an accessory for the Therme.

The materials of the unit that come into contact with water are drinking water safe (see Manufacturer's Declaration, www.truma.com – Manufacturer's Declaration).

## Function description

**Overpressure pressure relief valve**
With an overpressure of up to max. 4.5 bar (produced e.g. when the boiler heats up), the FrostControl opens automatically and releases the overpressure in fits and starts via a drainage socket.

**Manual drain valve**
The drain valve can be opened manually to empty the water.

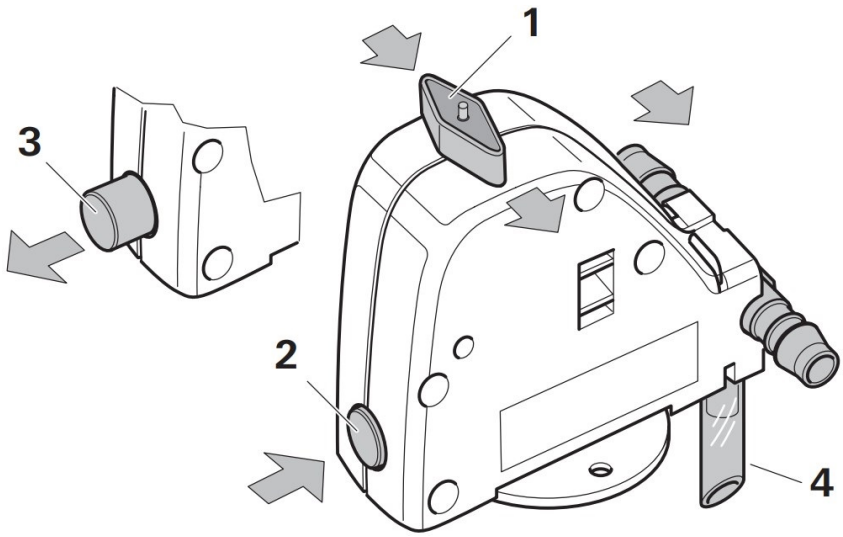
**Frost monitor**
If there is a risk of frost (ambient temperature approx. 3 °C), the FrostControl opens automatically and drains out the water in the boiler via a drainage socket.

Only at an ambient temperature of approx. 7 °C can the drain valve be closed again manually and the boiler be filled.

To guarantee perfect operation, the safety/drain valve must be installed in a heated room. If this is not done, malfunctions can occur and the drain valve opens automatically during operation.

## Operating instructions

**Figure 1**




1. Rotary switch position “Operation”
2. Pushbutton position “Closed”
3. Pushbutton position “Drain”
4. Drainage socket (routed outside through floor of vehicle)

**Fill the boiler (water tank)**

Check whether the rotary switch (Position 1) is set to “Operation” and is engaged.

Close the drain valve by pressing the pushbutton (Position 2).
The pushbutton must engage in the “closed” position.

Only when the temperature at the drain valve is above approx. 7 °C can it be closed manually with the pushbutton (Position 2) and the boiler be filled. At temperatures below 7 °C, it is recommended to switch on the vehicle heater in order to warm up the interior.

**Automatic opening of the drain valve**

If the temperature at the drain valve is below about 3 °C, it opens automatically and the pushbutton pops out (Position 3).
The water from the boiler drains out through the drainage socket (4).

⚠ Various ambient influences can interfere with the opening of the drain valve and the free run-off of the water, and Truma therefore **cannot provide a warranty for frost damage.**

#### Manual drain valve opening

Turn the rotary switch through 180° until it engages, whereby the pushbutton pops out (Position 3). The water from the boiler drains out through the drainage socket (4).

#### Closing the drain valve

Check whether the rotary switch is set to “Operation” (Position 1), i.e. parallel to the water connection and engaged.

Close the drain valve by pressing the pushbutton.
The pushbutton must engage in the “closed” position (2).

Only when the temperature at the drain valve is above approx. 7 °C can it be closed manually with the pushbutton (Position 2) and the boiler be filled.

## Maintenance

The Frost Control drainage socket (4) must be free of contamination (slush, ice, leaves, etc.) at all times so that the water can drain out easily! **No claims may be made under the warranty for frost damage!**

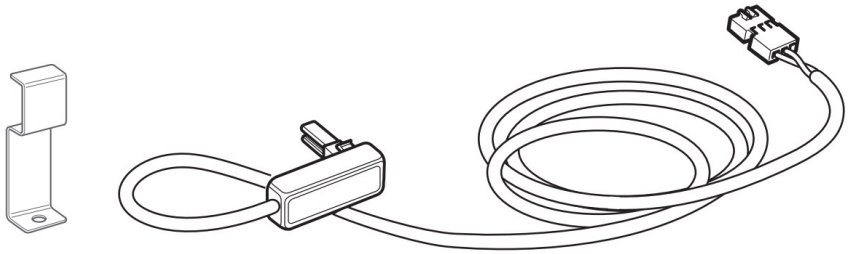
The safety/drain valve must be operated regularly (at least twice annually) to remove limescale deposits and to be certain that it is not blocked.

## Disposal

The Frost Control must be disposed of in accordance with the waste disposal regulations of the country in which it is used.

## Accessories

**Heating element for FrostControl**
Heating element with 1.5 m connector cable and retaining bracket.



ⓘ The Frost Control heating element (accessory for Combi heater) cannot be used with the Boiler due to a lack of a connecting possibility

## Technical data

**Pump pressure**

max. 2.8 bar
**System pressure**
max. 4.5 bar
**Closing temperature**
over approx. 7 °C (ambient temperature)
**Opening temperature**
below approx. 3 °C (ambient temperature)
**Operating temperature**
-30 °C – +80 °C
**Weight**
**200 g** Version with connections for flexible hoses Ø 10 mm
**250 g** Version with connections for fixed pipes Ø 12 mm (John Guest system)

Subject to technical changes.

## Troubleshooting guide

| Fault | Cause | Remedy |
|---|---|---|
| Drain valve (FrostControl) is openin g. | • Temperature at drain valve belo w approx. 3 °C. (the drain valve opens automatically at temperat ures below approx. 3 °C!) | • Switch on vehicle heater if necessary. At temperatures above approx. 7 °C at the drain valve, it can be closed again. |
| The drain valve (FrostControl) can no longer be closed. | • Temperature at drain valve is bel ow approx. 7 °C.<br>• Rotary switch not set to “Operati on”. | • Switch on vehicle heater if necessary. At temperatures above approx. 7 °C at the drain valve, it can be closed again.<br>• Turn the drain valve’s rotary swit ch to “Operation”, then press the pushbutton until it engages. |
| Water flows intermittently from the FrostControl discharge nozzle | • Water pressure too high. | • Check pump pressure (max. 2.8 bar). If the boiler is connected to a central water supply (rural or u rban connection), a pressure red ucer must be used, which will pr event pressures higher than 2.8 bar from occurring. |

**If these actions do not remedy the problem, please contact Truma Service.**

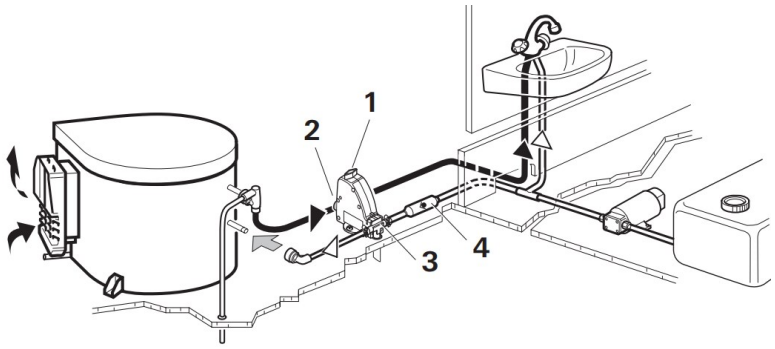
## Installation instructions

Before starting work, read through the installation and operating instructions carefully to understand how to install

the product.

**Installation instructions and location selection**

**Figure 3** – Installation example




1. Rotary switch
2. Pushbutton
3. Frost Control (Safety/drain valve)
4. Non-return valve (not included)

The FrostControl must be installed in the immediate vicinity of the boiler being protected, in a location that is easily accessible to the user. Make sure that rotary switch (1) and pushbutton (2) can still be operated.

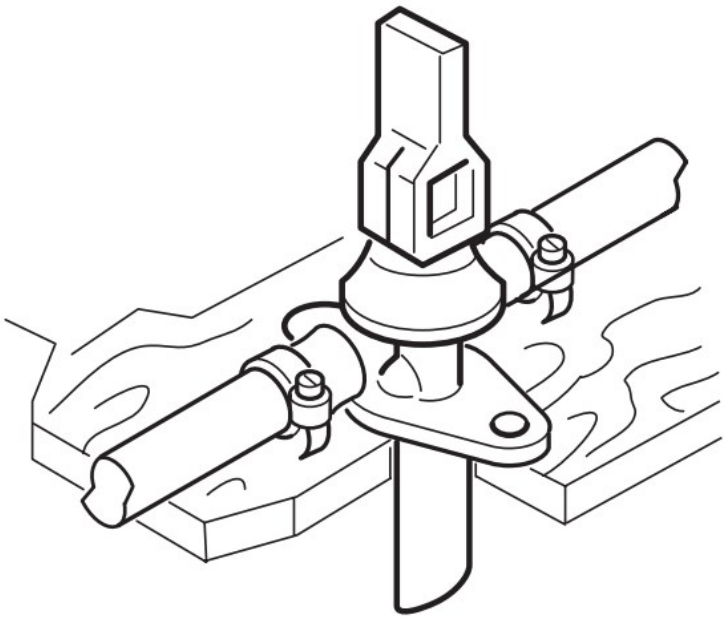
When selecting a location, ensure that the FrostControl is not installed in the vicinity of external heat sources (e.g. power supplies) or in the immediate proximity of warm air ducts.

The FrostControl must be installed in the cold water supply.

Any pressure or immersion pumps up to 2.8 bar can be used to operate the water supply.

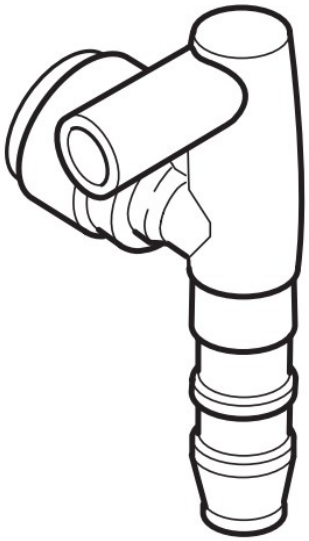
On the boiler, the FrostControl replaces the manually operated drain valve.

**Figure 4**



⚠ To allow safe drainage of the boiler contents if there is a risk of frost, an automatic aeration valve must be installed at the boiler's hot water connection. Standard on all Truma hot water units.

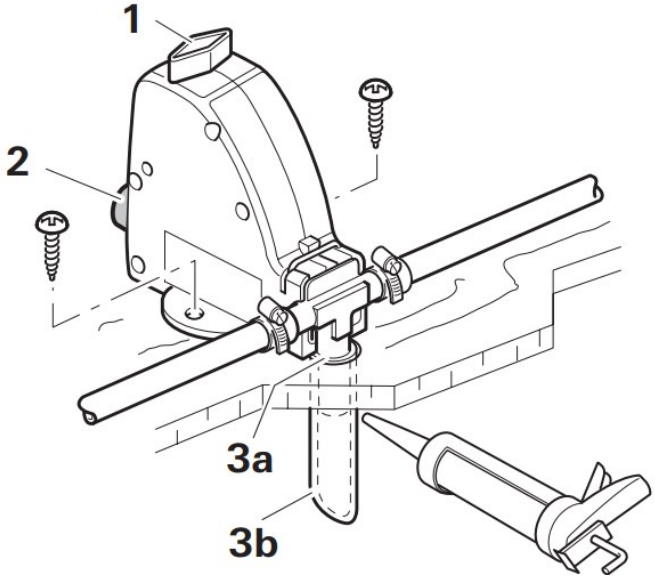
**Figure 5**



Water removal can take place directly to the outside in a splash-protected location (fit splash guards if necessary).

## Assembly

**Figure 6**




- Drill a hole (18 mm diameter) in the floor of the vehicle.
- Attach the hose (3b) to the drainage socket (3a), insert both through the vehicle floor and route to the outside.
- Align the drainage socket centrally to the hole.
- Secure the FrostControl with two B 5.5 x 25 screws (included with delivery) without tension. Screw in the screws vertically.
- Seal gap between hose and hole with plastic body sealant from below.

### Connecting the water pipes

Connect the cold water supply at the FrostControl. Route the water hoses (pipes) without tension in order to

ensure that the safety/drain valve will work properly.

Ensure that the cold water supply does not come into contact with cold bridges (e.g. the outer wall) in order to prevent freezing.

Water hoses (pipes) must be as short as possible and free of kinks.

**Installation with flexible hoses** (Ø 10 mm)
All hose rubber connections must be secured with hose clamps (including the cold water connection).

**Installation with fixed pipe routing** (Ø 12 mm) We recommend the use of John Guest ducts, insertion sleeves and locking rings.

If the boiler is connected to a central water supply (rural or urban connection) or if powerful pumps are being used, a pressure reducer must be used, which will prevent pressures higher than 2.8 bar from occurring.

Before the pressure relief valve in the Frost Control triggers, warming of the water and its resulting expansion may cause pressures of up to 4.5 bar to occur (also possible with immersion pumps).

Route all water pipes so that they slope downwards to the Frost Control. **No claims may be made under the warranty for frost damage!**

Should problems occur, please contact the Truma Service Centre or one of our authorised service partners (see www.truma.com).

In order to avoid delays, please have the unit model and serial number ready (see type plate).

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## Service

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## Documents / Resources

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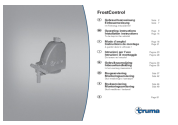
|  | truma FrostControl kit TB JG Fittings [pdf] Instruction Manual<br>FrostControl kit TB JG Fittings, FrostControl kit, TB JG Fittings, JG Fittings, Fittings |

## References

- Truma: Zubehör für Wohnwagen und Wohnmobile