

# RBM zerofrost

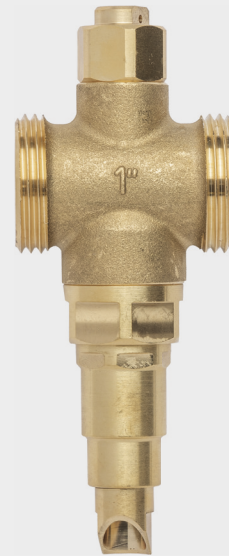
## Antifreeze valve for heat pumps



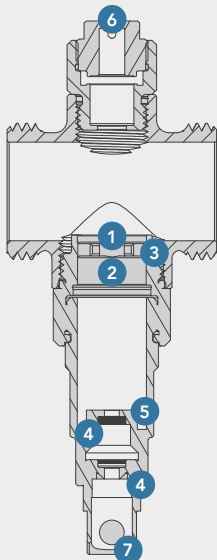
The **Zerofrost anti-freeze valve** is designed to allow a small amount of the fluid contained inside the system to drain when its **temperature drops below 3 °C**. It automatically intervenes to prevent the formation of ice within the single-block heat pump circuit, preventing blockages or obstructions in the system that can reduce its efficiency and cause damage to the system.

Zerofrost is an **environmentally friendly solution** because it eliminates the risks of using potentially polluting glycol. It is also an economical choice because it **saves on running and maintenance costs**, keeping the system in perfect working order.

Zerofrost is available in two sizes: **1" and 1 1/4"**.



- 1 Bulb inserted directly into the flow**  
It avoids negative influences from low ambient temperatures, allowing accurate system drainage only when necessary.
- 2 High-performance bulb**  
Precision and speed of intervention guaranteed over time.
- 3 Filter ring**  
It protects the bulb from any debris suspended in the water that could cause the drain to malfunction.
- 4 Surface treatment of the operating device**  
Ensures proper operation and reliability over time.
- 5 Very low discharge rate (max 1,5 l/h)**  
The special design of the drain guarantees dripping only. Unlike other devices whose drains are made with the classic shutter system, Zerofrost discharges only what is necessary, avoiding emptying the system.
- 6 Vacuum breaker valve**  
It prevents the creation of negative pressures in the system or piping generated during discharge.
- 7 Anti-drip**  
The innovative anti-drip feature prevents the formation of water bubbles and subsequent freezing.

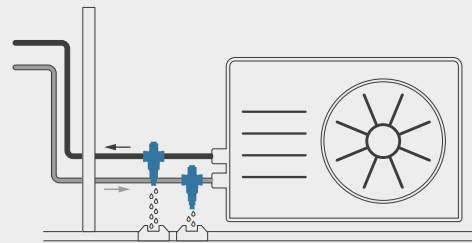


## INSTALLATION

**Zerofrost automatically intervenes to prevent the formation of ice** within the circuit of the single-block heat pumps. **Before installing the device, clean the piping thoroughly** to prevent circulating impurities from impairing its performance.

Antifreeze valves should be **installed outside**, where the lowest temperature can be reached, **and away from heat sources** that could interfere with operation.

Zerofrost **can only be installed in a vertical position**, with the outlet pointing downwards, to allow the discharged water to flow out correctly, unobstructed.



Protects heat pumps from freezing +

It is automatically activated when the fluid temperature drops below 3 °C

No power supply required

Maximum sensitivity ( $\pm 1$  °C) and rapidity of intervention

Discharge only what is necessary (max. 1.5 l/h) avoiding draining the system

Avoids the use of glycol