Cim 138

Antifreeze valve for heat pumps

PATENT PENDING

cimberio®

technological **valve** solutions

CIM138

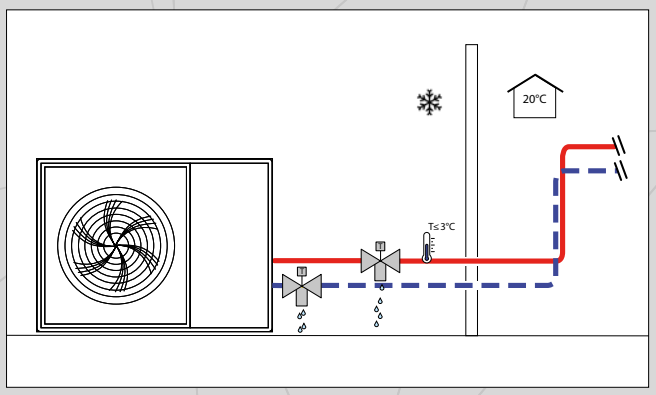
Antifreeze valve for heat pumps

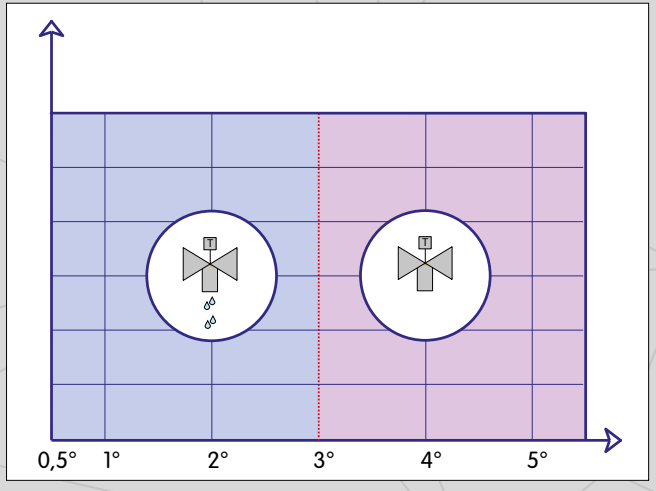
An antifreeze valve can drain the medium when the circuit temperature reaches 3 °C

Heat pumps are an effective and energy-efficient way to heat homes and buildings. However, in cold weather, the water or fluid used in the system can freeze, potentially causing damage to the system.
To prevent this from happening, the **Cim 138** antifreeze valve can be installed in the system.

The primary function of **Cim 138** is to detect when the water or fluid in the system is near freezing. When the temperature in the heat pump system drops below a certain point, the antifreeze valve opens and releases a small amount of fluid.

The antifreeze valve is an essential component of the heat pump system, as it helps to protect the system from damage caused by freezing. If the fluid in the system was to freeze, it could cause the pipes to burst, leading to costly repairs and potentially leaving the building without heat.





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INSTALLATION

The device must only be installed in a vertical position, with the outlet facing downwards, to allow the drained water to flow out properly, free of obstructions.

The antifreeze valves must be installed outdoors, where the lowest temperatures can be reached if the heat pump is locked. The antifreeze valves must be positioned well away from sources of heat in order to keep them working properly.

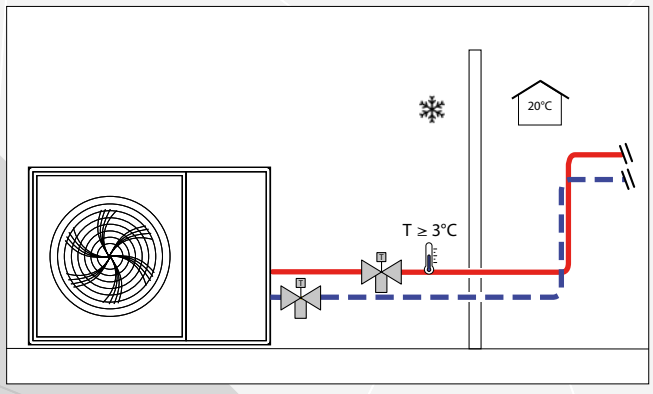
It is recommended that the antifreeze valves be installed on both pipes (flow and return).

Otherwise, water may be left in one pipe which could then freeze.

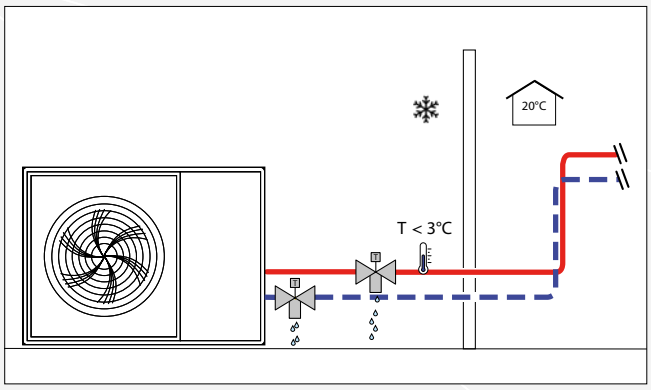
We also recommend that the system always remain pressurised, even while draining, to ensure the proper functioning of the antifreeze device.

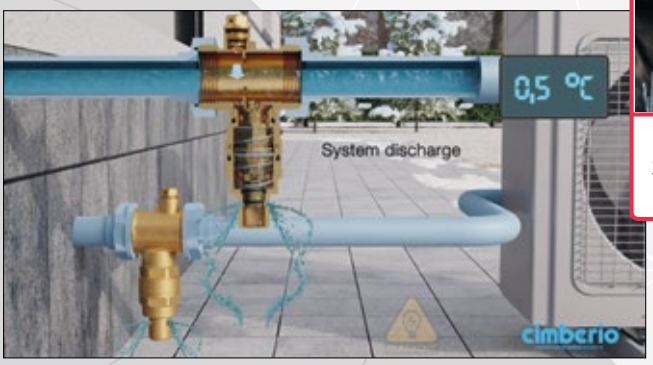
Do not make any trap connections. If the shape of the connection pipe has the potential to create a trap effect, drainage is inhibited and frost protection will no longer be guaranteed.

WINTER OPERATION IN HEATING MODE

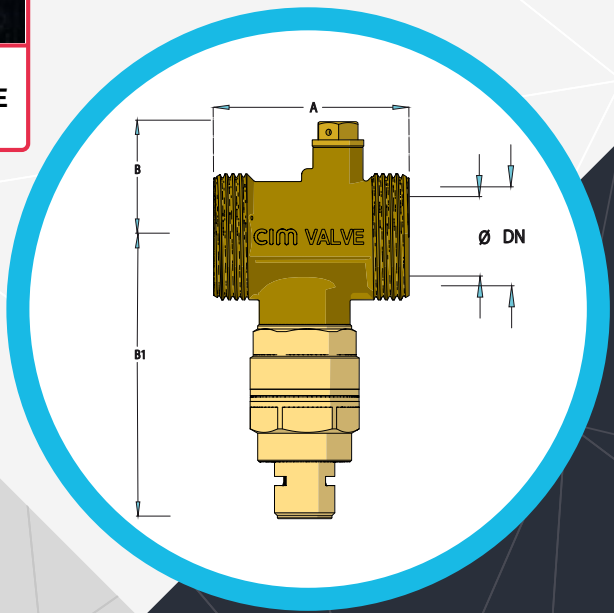


WINTER OPERATION IN THE EVENT OF A HEAT PUMP FAILURE





ANTI STALAGMITE SYSTEM



MAIN DIMENSIONS

DN		Ø	A	B	B1	KV
MALE	FEMALE					
G. 1"	G. 3/4"	21	64,5	34,5	59,5	55
G. 1"1/4	G. 1"	23	64,5	38	93	66
G. 1"1/2	G. 1"1/4	31	64,5	42	97	90
G. 2"	G. 1"1/2	40	74,5	45,5	103,5	150

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TECHNICAL DATA

Max. static working pressure:	10 bar
Operating temperature range:	0 to 75 °C
Ambient temperature range:	-30 to 60 °C
Medium temperature (opening):	3 °C
Medium temperature (closing):	4 °C
Accuracy:	±1 °C
Fluids:	Water
Materials:	Standard Brass (EN 12165 CW617-DW)
O-rings:	EPDM Perox
Threads:	ISO 228

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