# ANTI-CONDENSATION VALVE

## ART.3966

| Code | Mis | Kv [m³/h] | Set T [°C] |
|---|---|---|---|
| 3966 0145 | 3/4" | 3.9 | 45 |
| 3966 0155 | 3/4" | 3.9 | 55 |
| 3966 0160 | 3/4" | 3.9 | 60 |
| 3966 0170 | 3/4" | 3.9 | 70 |
| 3966 0245 | 1" | 3.9 | 45 |
| 3966 0255 | 1" | 3.9 | 55 |
| 3966 0260 | 1" | 3.9 | 60 |
| 3966 0270 | 1" | 3.9 | 70 |
| 3966 0345 | 1" | 11.3 | 45 |
| 3966 0355 | 1" | 11.3 | 55 |
| 3966 0360 | 1" | 11.3 | 60 |
| 3966 0370 | 1" | 11.3 | 70 |
| 3966 0445 | 1"1/4 | 12.2 | 45 |
| 3966 0455 | 1"1/4 | 12.2 | 55 |
| 3966 0460 | 1"1/4 | 12.2 | 60 |
| 3966 0470 | 1"1/4 | 12.2 | 70 |

## ART.9400 - 9401

| Code | Kv [m³/h] | Set T [°C] |
|---|---|---|
| 9400 45 | 3.9 | 45 |
| 9400 55 | 3.9 | 55 |
| 9400 60 | 3.9 | 60 |
| 9400 70 | 3.9 | 70 |
| 9401 45 | 11.3 - 12.2 | 45 |
| 9401 55 | 11.3 - 12.2 | 55 |
| 9401 60 | 11.3 - 12.2 | 60 |
| 9401 70 | 11.3 - 12.2 | 70 |

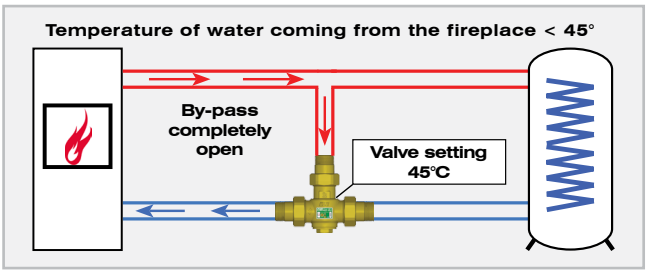
## 1 DESCRIPTION

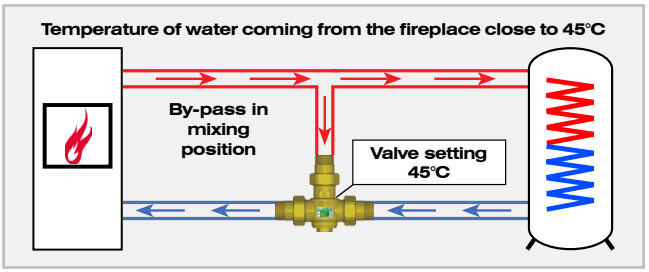
The anti-condensation valve art.3966 regulates the temperature of the water which is going from the hot water accumulator to the solid fuel heat generator, preventing any condensation formation in the circuit, while at the same time allowing the correct functioning of the generator.

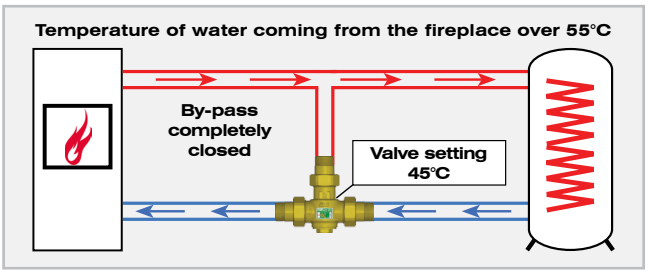
It can also be installed as a diverting valve in order to regulate the passage of water between the heat generator and the accumulator, according to the setting temperature.

## 1.1 PRINCIPLE OF OPERATION

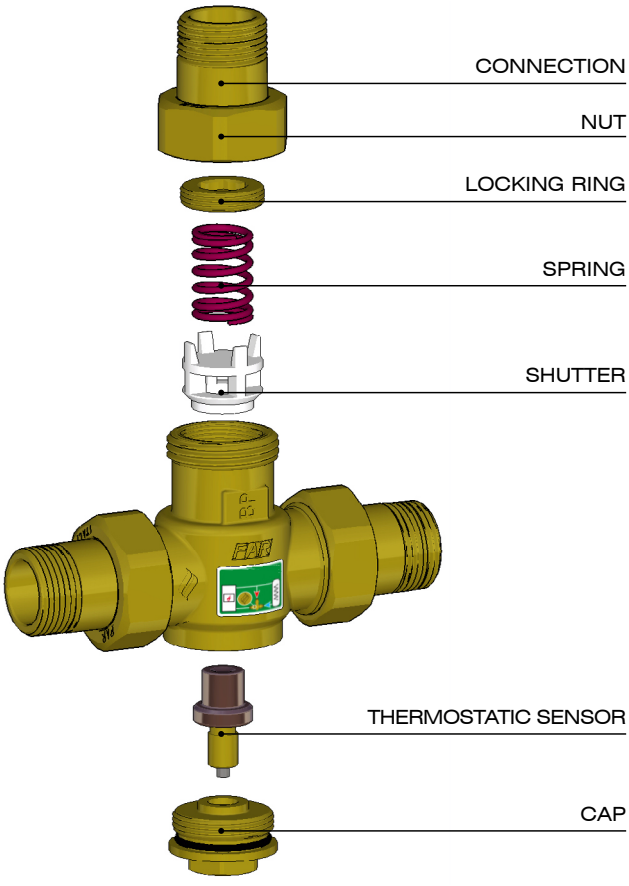
Here below you can see a few examples of the various water flows in the circuit going from the solid fuel heat generator to the accumulator. The valve regulates the opening and closing of the by-pass through a shutter, according to the temperature variations felt by the thermostatic sensor (in this case with a 45°C setting).




## 1.2 CONSTRUCTION DETAILS

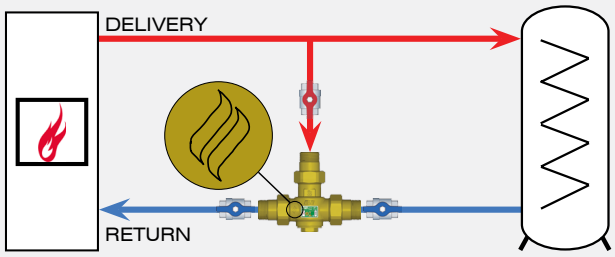


## 2 INSTALLATION

The valve can be placed either to the right or to the left of the generator and can be installed both in vertical or horizontal position.

To install the valve in the correct position you have to find the symbol marked on the valve side, which identifies the outlet where the solid fuel heat generator must be connected. Apart from the anti-condensation function, the FAR valve can be installed as a diverting valve, if needed. Please check here below the two installation options:

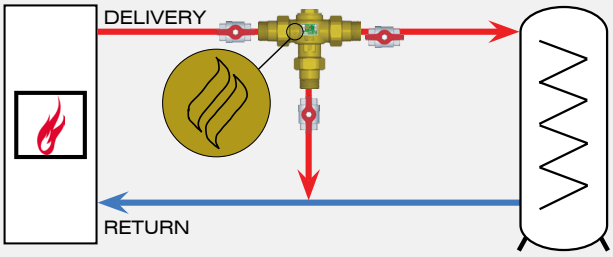
**Use of the valves as anti-condensation**




**Install the valve placing the flame symbol towards the heat generator.**

The valve must be installed on the return circuit and placed among three shut-off valves, in order to isolate the valve during maintenance or in case of any setting changes.

**Use of the valve as diverter**

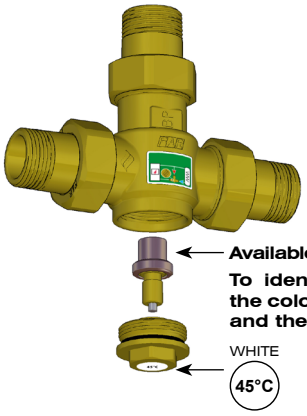



**Install the valve placing the flame symbol towards the heat generator.**

The valve must be installed on the delivery circuit and placed among three shut-off valves, in order to isolate the valve during maintenance or in case of any setting changes.

## 3 CHANGE OF SETTING

Before changing the setting, please isolate the valve from the circuit by closing the shut-off valves.



It's possible to change the thermostatic sensor in order to modify the valve setting.

Unscrew the cap, remove the sensor by hand and place the new chosen one as a substitution.

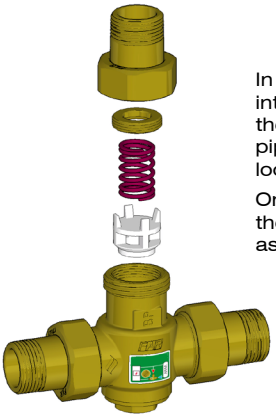
**Available setting: 45°C - 55°C - 60°C - 70°C**

**To identify the set temperature, check the colour of the upper part of the sensor and the label on the plug:**

| WHITE | GREEN | RED | LIGHT BLUE |
|---|---|---|---|
| 45°C | 55°C | 60°C | 70°C |

## 4 MAINTENANCE

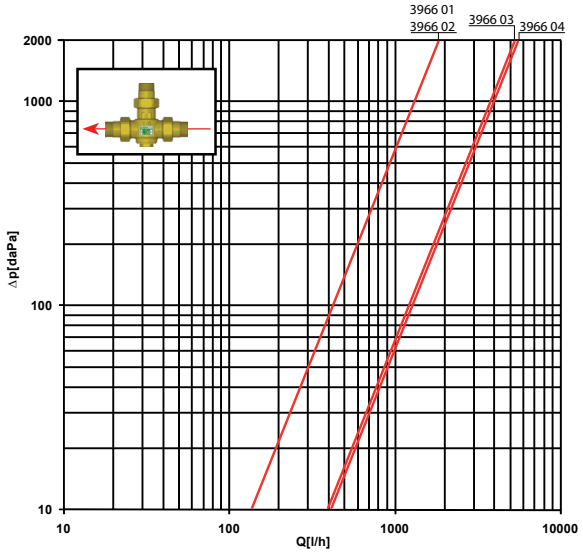
Before changing the setting, please isolate the valve from the circuit by closing the shut-off valves.



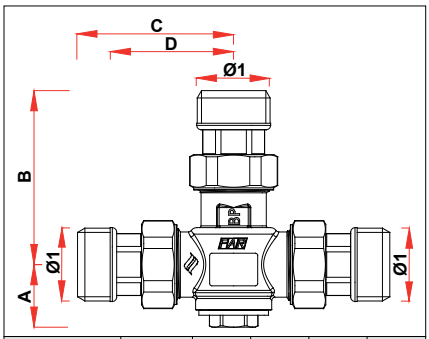
In order to make any maintenance intervention it's necessary to unscrew the connecting nut from the by-pass pipe and then remove the internal locking ring.

Once you have cleaned the spring and the shutter, replace the components as per the order shown in the picture.

## 5 FLUID DYNAMIC FEATURES




## 6 DIMENSIONAL FEATURES




| CODE | Ø1 | A | B | C | D |
|---|---|---|---|---|---|
| 3966 01xx | G3/4 | 29 | 75 | 66 | 54 |
| 3966 02xx | G1 | 29 | 80 | 72 | 57 |
| 3966 03xx | G1 | 35 | 96 | 86 | 69 |
| 3966 04xx | G1 1/4 | 35 | 105 | 94 | 80 |

## 7 TECHNICAL FEATURES

Maximum working temperature: 100°C
Maximum working pressure: 10 bar
Setting temperature: 45°C – 55°C – 60°C – 70°C
Closed by-pass temperature: Setting temperature + 10°C
Compatible fluids: water and water mixed with glycol (max. 50%)

Body: brass CW617N - CB753S
O-ring: EPDM
Spring: Stainless steel AISI302
Shutter: PSU plastic material