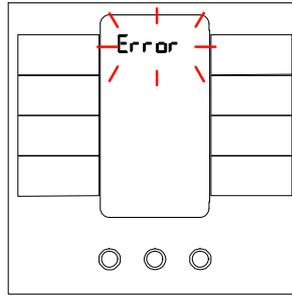


Software protection

The machine has been equipped with a number of software protections; the software monitors all inputs and outputs of the machine throughout the process. If non-allowed situations arise, the software will intervene. This intervention results in the machine being switched off and an error message being shown on the display.



LCD display with error message

ERROR LIST

Error 1 *Not applicable*

Error 2 *Temperature in boiler too high:*

- If the temperature sensor (NTC) measures a value that is outside its range (0 Ohm or infinity), the machine is switched off and 'Error 2' appears in the LCD display. This also applies if the boiling protection (see hardware protection) is activated.

Error 3 *Magnetic valve open without selection / Heating process takes too long:*

- When a dosing key is pressed, the magnetic valve is enabled. If this valve is enabled without pressing the start key, a timer is activated. If the magnetic valve is enabled more than three times within 15 minutes without the start key being pressed, this indicates that there is a leakage in the water system or that the water is boiling. In that case the machine is switched off.
- At the moment that the float in the protection water tray has reached the upper position once, the software enables the protection relay and all elements are switched off immediately. In this case the machine will not be switched off, but show error 3 after 15 minutes.
 - Reset the machine after having remedied the fault. This resetting is done by pressing the reset key on the main board through the hole in the rear panel using a small screwdriver (see figure). After this switch off the machine and on again to make the error code 3 disappear from the screen.

Error 4 *Not applicable*

Error 5 *Water selector in wrong position:*

- The water selector returns to its initial position during start-up and after each dosing. If the selector cannot find its position during the execution of this routine, it switches off and 'Error 5' appears in the LCD display.

Error 6 *Magnetic valve opened too long:*

- If, for whatever reason, the process of filling the float tank takes too long, the machine is switched off and 'Error 6' appears in the LCD display.

Error 7 *Wrong Chip card:*

- In a number of cases, it is possible to place a chip card in a chip card reader. This is present on the keyboard. Any data present can be downloaded or uploaded. If the software on this chip card does not correspond with the software in the machine, 'Error 7' appears in the LCD display.

Error 8 *Communication error between both prints:*

- There is constant communication during machine start-up and during use. This is done via the flatcable between the keyboard and the main board. If communication is impossible, 'Error 8' appears in the LCD display.

Error 9 *Pump motor rotates too slow or does not rotate at all:*

- The pump motor is rotating during machine start-up and during use. The light sensor detects no or too little pulses and 'Error 9' will appear in the LCD display.

