

Corrosion damage / water damage to control boards of the Silvento ec

Dear Sir or Madam,

We have received one or more control boards (basic, basement or comfort boards) back from you with defects which are due to corrosion or moisture damage.

We regret the inconvenience caused to you and would like to explain here how this error can occur and how it can be avoided in the future.

All control boards are equipped with water detection and function for a certain time even if they are wetted with water. If water is detected on the board, special programmes are executed in the processor, which ensure compliance with the necessary standards regarding splash water protection and switch off or reduce the voltage on the board.

However, long-term exposure to water (splash water or condensate) can cause corrosion damage, e.g. by decomposing solder joints or electronic components (e.g. on light-emitting diodes or switches and connectors). In some cases, a kind of electrolysis and thus a physical-chemical decomposition of materials can occur.

These decomposition phenomena can be recognised by corrosion on metallic components (sometimes verdigris or white washouts from the material).

If these traces are visible, the damage is water or corrosion damage for which the product or the manufacturer is not responsible. In this case, the user's behaviour is decisive for the damage that has occurred.

As a general rule, water or condensation can and may occur for a short period of time. For example, after an extensive shower bath or similar, no damage is to be expected if the fan can quickly ventilate the air humidity afterwards.

However, if condensation occurs over a long period of time or if the electronics are repeatedly and permanently splashed with water, the above-mentioned damage may occur.

In most cases, the above-mentioned damage only occurs if the fans are operated outside the intended limits of use. If, for example, too little air is discharged in relation to the humidity load (total air volume flow in the flat too low), condensate and splash water cannot be ventilated or is ventilated too slowly. This can be caused, for example, by an incorrect setting on the ventilation units or the moisture loads are higher than assumed in the ventilation planning. An incorrect setting here means that

the fan reacts too late to moisture loads, the air volume flows are too low or the fan is simply not or cannot be switched on.

In any case, more ventilation must be provided and the discharged air volume flow must be significantly increased (it may be helpful to run the fan not only in "interval" but with sensor guidance). In many cases it is necessary to ventilate via windows and doors (and this to a considerable extent), especially after moving into a flat for the first time.

A clarification of where the high moisture loads come from is also helpful to avoid further problems.

If sufficient air is removed in proportion to the moisture loads, condensation or water damage cannot occur.

Your team from LUNOS Lüftungstechnik GmbH

