

## Are the metal parts used in Hirschmann products stainless steel for applications next to the sea?

Christoph Wrobel - 2019-01-07 - Products

There is a short and a long answer. In short: not all metal is stainless steel.

Now the details, which might be still interesting to know:

- The chassis of Classic, HiOS and HiSecOS families is stainless steel 1.4016 (brushed mikrolon). This material is suitable for installations with no salt containing atmosphere, i.e. somewhere deep inside the country, not at the sea. The exception are MICE, MSP and PowerMICE which have aluminum chassis, but the modules have also the same stainless steel type.
- The screws are steel, nickel-plated
- The earth nut inside the front-plate is stainless steel 18/8.

This means: at installations next to the sea or offshore sooner or later the chassis without further protective measurements might start to corrode, but this won't affect the function, nor the safety. We have successfully tested the earthing of the chassis with 40 amps.

But: even if ordered with conformal coating, the connector contacts, nor the SFP cage can be coated. This means the function will be sooner or later affected by corroded connectors.

### **To sum up:**

For use in an aggressive atmosphere containing e.g. salt or sulfur Hirschmann recommend to use IP67 devices like OCTOPUS.

Nevertheless there are some installations - even off-shore - using Rail Switches and MICE. The questions relevant are: how long will the application be used, and how expensive is it to exchange such a product during the lifetime of the application, or how expensive will be a box build around the devices. Also keep in mind that usually there are end devices connected to a Hirschmann device which also might need an additional protection.

#### Tags

corrosive atmosphere

metal

stainless steel