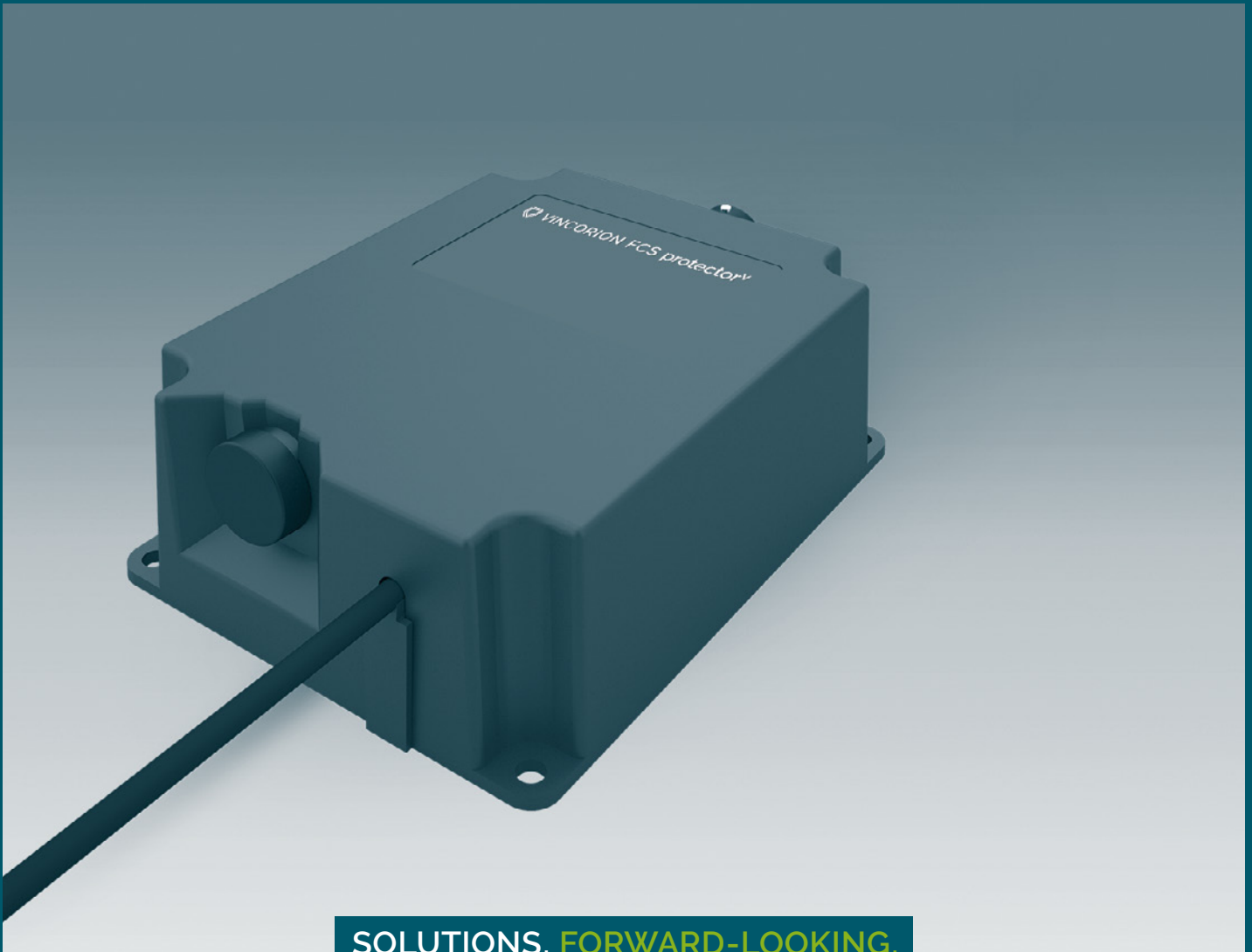




VINCORION



SOLUTIONS. FORWARD-LOOKING.



EARLY DETECTION OF RESIDUAL CURRENTS, SHORT CIRCUITS OR SPARKS WITH OUR FCS PROTECTOR[®].

The smart solution for preventing short circuits and malfunctions.

Smoldering fires caused by damage to the heating system can lead to smoke development, for example. In the confined space of an aircraft, crew and passengers can quickly be incapacitated. Early detection of a ground fault is therefore key in preventing short circuits and smoke. This is where VINCORION comes in – our external FCS protector[®] detects fault currents between a heated component and the structure signaling the heater controller to shut down the heating system before smoke can develop.

In standard systems for aviation, heating loads are monitored and regulated by single-channel or multichannel controllers. Because the current-return cable is usually

directly connected to the aircraft structure, the controller is unable to recognise fault currents between the heater and the ground by means of differential-current measurement. VINCORION's FCS protector[®] solves this problem – positioned between the controller and the heating system, it constantly measures the differential current. If a ground-fault current exceeds a threshold of 30 milliamperes (ECM req.), the FCS protector[®] modulates the load current, which will be detected by the installed controller. The controller will recognize the modulation as a ground-fault indication and switch off the channel before the peak current is applied. Thus, the FCS protector[®] reliably detects short circuits in the final electric load and protects the onboard equipment before a major failure can occur.

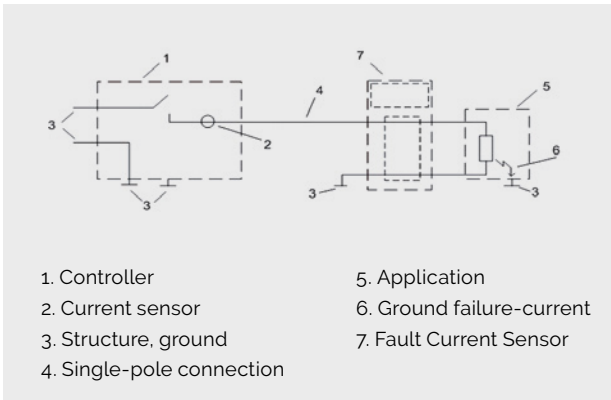
THE VINCORION FCS PROTECTOR^V – A SMALL MODULE MAKES A BIG DIFFERENCE. ENGINEERED TO INCREASE FLIGHT SAFETY.

COMPATIBLE WITH ALL TYPES OF AIRCRAFT

Standardized electric connectors and four mechanical fixing points allow for the FCS protector^V to be easily installed onto existing systems. Therefore, it's a smart VINCORION solution for economically and non-intrusively retrofitting any type of aircraft.

THE BUILT-IN BENEFITS OF THE FCS PROTECTOR^V:

- **High level of flight safety:** Electric equipment is protected against short circuits, overheating and sparks.
- **Fast and reliable:** By measuring differential currents, the failure indication is much faster and more reliable compared to conventional fuses.
- **Easy to fit:** The VINCORION FCS protector^V can easily be built into all types of aircraft – no matter if by serial installation or retrofit.
- **Lightweight construction:** Weighing only approx. 200 grams, the electronic hardware perfectly meets aviation requirements.



Technical Specifications

Weight	≤ 200 g
Size (L × W × D)	115 × 91 × 40,5 mm
Power supply	< 2 W
Standard current	max. 7,5 A and AC 115 V
Peak current for blowing the fuse	28 A for 20 ms

Other specifications and options are available on request.



FCS protector^V