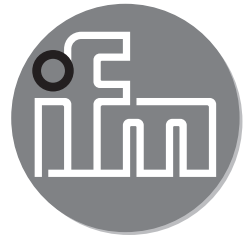


ifm electronic



**Operating instructions**  
(Ex protection related part) for inductive sensors  
according to EU directive 94/9/EC annex VIII (ATEX)  
group II, equipment category 3D

**UK**

**efector180<sup>®</sup>**

**AC327A**

**AC336A**

7390875 / 00 11 / 2011

## Operating instructions (safety-related part ATEX) Remarks for safe use in hazardous areas

### Functions and features

- Use in hazardous areas according to the classification **II 3D** (group II, category 3D, apparatus for dust atmosphere).  
The requirements of the standards EN 60079-0 and EN 60079-31 are met.

- Marking (see unit or technical data sheet):



**II 3D Ex tc IIIB T85°C Dc IP5X X -10 °C ≤ Ta ≤ 50 °C**

- Permissible operating temperature of the application (proper usage):

**-10 °C ≤ Ta ≤ 50 °C**

### Installation / Set-up

The units must only be installed, connected and set up by qualified staff. The qualified staff must have knowledge of protection classes, regulations and provisions for apparatus in hazardous areas.

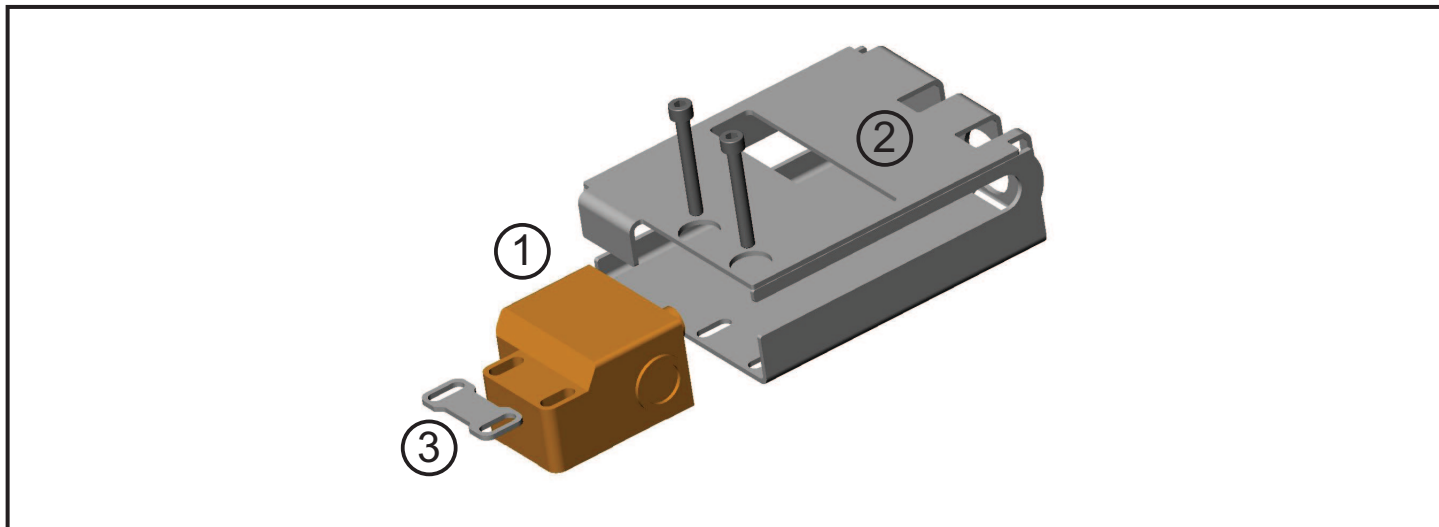
Check whether the classification (see "Marking" above and marking on the unit) is suitable for the application.

### Installation remarks / Installation

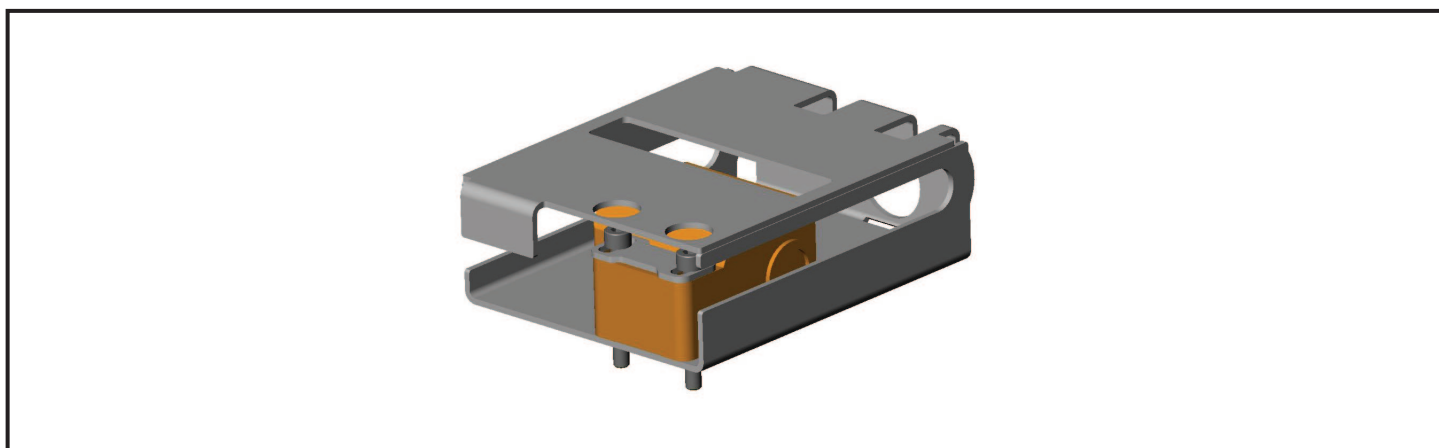
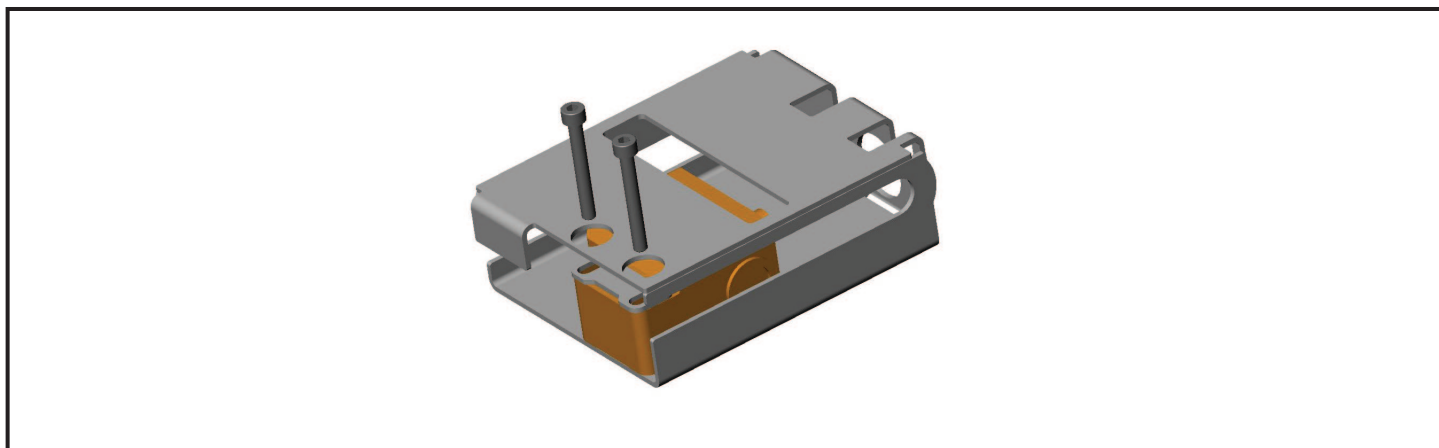
- Adhere to the respective national regulations and provisions as well as the relevant installation regulations.
- Avoid electrostatic charging on plastic units and cables.
- To avoid electrostatic charging clean the unit with a damp cloth only.
- To avoid electrostatic charging steps must be taken to ensure the equalisation of potential of metal parts (plug housing, fixing elements, protective housing, etc.).
- Do not mount the unit in the dust flow.
- Avoid dust deposits on the unit.
- Protect the unit and the cable efficiently against damage.
- For the connections and the electrical technical data please see the unit marking or the technical data sheet.
- To avoid soiling, do not remove the connector cover until attaching the mating connector.
- Avoid direct radiation with high UV components (sunlight). Mount the unit in a protected place.
- M12 plugs may only be opened or closed in a sufficiently clean environment.

## Special conditions for safe operation

The unit (1) must only be installed in conjunction with the supplied protective housing (2) and the supplied mounting plate (3).



UK



- Use sockets which are suited for hazardous areas, e.g. ifm sockets EVC\*\*A with Ex certificate (certificate number BVS 08 ATEX E 109 U).
- Connect the output (M12 socket) with a connector which is suited for the hazardous areas. The plug must be completely covered by the protective housing to avoid mechanical impact on the sensor.
- Do not separate the connectors when energized.
- The housing and housing parts made of plastic were tested in accordance with table 8 of EN 60079-0 for group II and for a low mechanical risk with an impact energy of 4 joules.

- The sensing face is not designed for mechanical stress. Therefore the unit must only be operated with target pucks which exclude mechanical stress on the sensing face.

### **Maintenance / Repair**

The unit must not be modified nor can it be repaired. In case of a fault please contact the manufacturer.

If required, the technical data sheets and EC declarations of conformity can be obtained from the manufacturer (see cover sheet). Indicate the article number.

