

## 9377 MTL fieldbus barrier module

### Introduction

The 9377-FB-R Fieldbus Barrier module is the main active component in the 9370-FB range Fieldbus Barrier System for FOUNDATION™ fieldbus networks and provides six intrinsically safe fieldbus spurs from a single incoming trunk.

See the *9370-FB technical datasheet* for full product details.

The 9377-FB-R Fieldbus Barrier module may be fitted or removed without the need to isolate trunk power. The trunk connections to the barrier module on the carrier have spark suppression by design and cannot cause ignition while they are being connected or disconnected.

**The 9377-FB-R module may be installed or removed without isolating the trunk power.**  
**READ SAFETY INFORMATION OVERLEAF**

### Compatibility

The 9377-FB-R module may be used as a direct replacement for type 9377-FB in all 937x-FB-xx-xx range (enclosure) and 938x-FB-xx range (open frame) Fieldbus Barrier systems.

### Installing a module

Remove the module from any packaging provided. Do not use, or attempt to repair, a module that has any of the pins on its underside bent or damaged, because this might affect its safety and invalidate the certification.

- Engage the two locating guides (A) on the underside of the 9377-FB-R Fieldbus Barrier module into the sockets provided on the carrier and push the module into place, locating the barrier loop over the retaining clip (B).
- Three spring-loaded fixing screws (C) are provided. Start each one in its threaded hole on the carrier and then tighten them on each side and at the top of the module (recommended torque of 0.9Nm) to secure the module.

### Removing a module

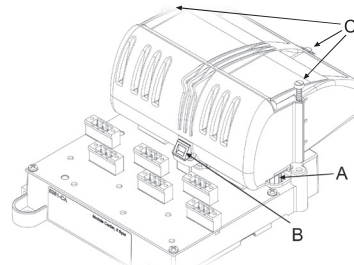
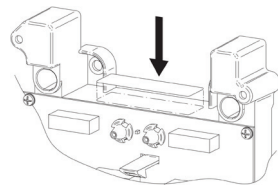
Removal is a two-step process that first breaks the electrical connection, followed by the physical removal of the module from the carrier.

- Loosen the three captive fixing screws (C) on the module to release it. The screws are spring-loaded and should retract when the thread has fully disengaged.
- Slowly pull the 9377-FB-R Fieldbus Barrier module away from its connections on the carrier until the safety retaining clip (B) stops further removal.

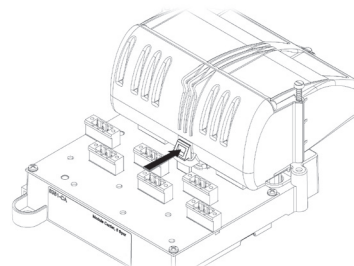
Press the clip towards the module - see removal diagram - until the barrier is released and can then be removed completely.

### Carrier Information label

An adhesive label entitled "FB CARRIER INFORMATION" is enclosed with this module. This label must be affixed to the module carrier in the location shown below. If a certification label already exists on the module carrier in this location, then the enclosed label may be discarded.



Installing 9377-FB-R barrier



9377-FB-R barrier removal

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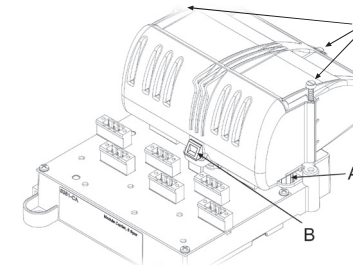
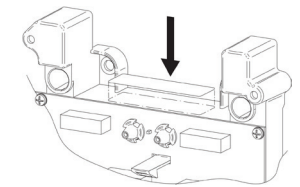
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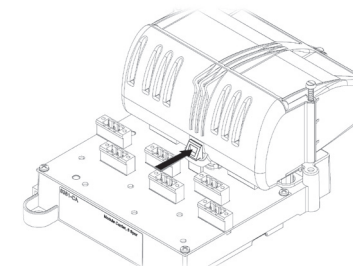
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**ATEX and IECEx Safety Instructions for 9377-FB-R Fieldbus Barrier Module**

The following information is in accordance with the Essential Health and Safety Requirements (Annex II) of the EU Directive 2014/34/EU [the ATEX Directive - safety of apparatus] and is provided for those locations where such requirements are applicable.

**General**

- a) This module must only be installed, operated and maintained by competent personnel. Such personnel shall have undergone training, which included instruction on the various types of protection and installation practices, the relevant rules and regulations, and on the general principles of area classification. Appropriate refresher training shall be given on a regular basis. [See clause 4.2 of EN 60079-17].
- b) This module has been designed to provide protection against all the relevant additional hazards referred to in Annex II of the directive, such as those in clause 1.2.7.
- c) This equipment has been designed to meet the requirements of EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-11, EN 60079-18 and EN 60079-25.

**Installation**

- a) The installation must comply with the appropriate European, national and local regulations, which may include reference to the IEC code of practice IEC 60079-14. In addition, particular industries or end users may have specific requirements relating to the safety of their installations and these requirements should also be met. For the majority of installations the Directive 1999/92/EC [the ATEX Directive - safety of installations] is also applicable.
- b) This module can be mounted in a Safe area or a Zone 2 or Zone 1 hazardous area. When mounted in a Zone 2 or Zone 1 location the module must be provided with an enclosure, which offers an additional degree of protection appropriate to the area classification.

Unless already protected by design, this module must be protected by a suitable enclosure against:

- i) mechanical and thermal stresses in excess of those noted in the certification documentation and the product specification
- ii) aggressive substances, excessive dust, moisture and other contaminants.  
Read also the Schedule of Limitations (below) for any additional or more specific information.

**Schedule of Limitations**

- 1) The 9377-FB-R Fieldbus Barrier must plug into equipment that uses the mating part of the connector covered by certificates IECEXTUN09.0014U and TUV09ATEX555354U.
- 2) The component must be housed in an appropriately certified enclosure when used in hazardous areas. When used in safe areas, the enclosure must provide ingress protection of at least IP20.
- 3) The component is intended to meet the requirements for temperature class T4 when used within its certified temperature range.
- 4) The air temperature inside the external enclosure around the component must not exceed +75°C during normal operation.
- 5) The component shall only be powered from supplies conforming to IEC 61158.

**Inspection and maintenance**

- a) Inspection and maintenance should be carried out in accordance with European, national and local regulations which may refer to the IEC standard IEC 60079-17. In addition specific industries or end users may have specific requirements which should also be met.

**Repair**

This module cannot be repaired by the user and must be replaced with an equivalent certified product.

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