FB Com Unit Application in Redundant Systems

Contents of the Document

This document is intended for users of the FB Remote I/O system.

This document contains system-relevant information that you require for inserting and removing of active com units of the FB Remote I/O system. The document provides additional information that is not contained in the manual.

The document helps the user to avoid redundancy problems caused by improper inserting and removing of active com units.

The following steps are described:

- Removing the active com unit
- Inserting a second com unit

Note

Pepperl+Fuchs accepts no responsibility for redundancy problems caused by improper inserting or removing of com units to the device itself, other devices or the plant.

Overview

In redundant FB installations, the front connectors of the two com units (CU) are connected to each other via an intrinsically safe com unit connection cable (1). This cable connection (1) is also designated as a front link or redundancy link.

The cable connection (1) is an exclusive com unit/com unit communication connection for the data exchange between the two com units.

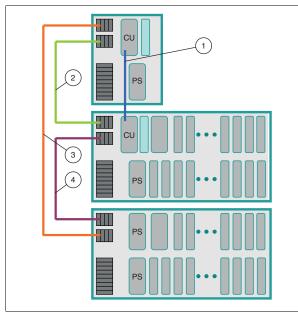
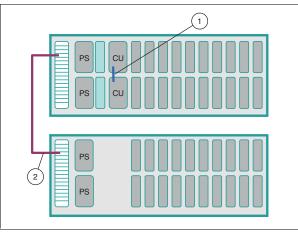


Figure 1 Redundant FB installation with 48 slots

1	FB9283 – com unit connection cable
2	FB9271 – backplane connection cable
3	FB9273 – backplane connection cable
4	FB9272 – backplane connection cable

- CU Com unit
- PS Power supply



Redundant FB installation with 40 slots Figure 2

- 1 FB9283 - com unit connection cable
- 2 FB9274 - backplane connection cable
- CU Com unit
- PS Power supply

Procedure for Inserting and Removing the Active Com Unit

Caution!

Disturbance of the device function Improper inserting or removing of the active com unit causes redundancy problems.

- Remove the com unit connection cable (1) before removing the active com unit.
- Connect the com unit connection cable (1) before inserting the second com unit.

Removing the Active Com Unit

- (1) The active com unit is identified by a flashing LED.
 - FB8203 com unit: green LED
 - Other com units: yellow LED
- Remove the com unit connection cable (1) between (2) the redundant com units (CU).
- L The premature removing of the active com unit causes a delayed redundancy takeover by the redundant com unit. Due to discharge processes within the already removed com unit, communication via the com unit connection cable (1) continues for a short time.
- (3) Remove the com unit.



- **Inserting the Second Com Unit**
- (1) Connect the com unit connection cable (1) to the second com unit (CU).
- A direct communication start for possible adjustment routines immediately after completion of the boot process is ensured.
- Insert the second com unit.

