

Sofern Geräte und Komponenten des IS-RPI Systems als eigensichere Betriebsmittel nach EN 50020 in explosionsgefährdeten Bereichen installiert, betrieben, gepflegt oder gewartet werden, müssen die Baumusterprüfbescheinigung nach EN 50020 und die entsprechenden nationalen und lokalen Errichterbestimmungen zu Konstruktion, Installation und Betrieb eingehalten werden.

### Modulträger

Das Modul RSD-CI-Ex8 bzw. RSD-CI2-Ex8 darf nur in Verbindung mit einem der Modulträger (RSD-TB-Ex.SC oder RSD-TB-Ex.SP) aus dem IS-RPI-System betrieben werden (siehe Abbildung 1).

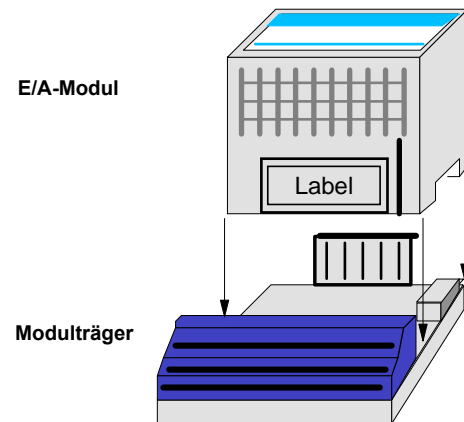


Abbildung 1

Die Modulträger dürfen nur an andere Module bzw. Gateways des IS-RPI-Systems angeschlossen werden. Nur so wird sichergestellt, dass die zulässigen Daten des eigensicheren Backplane-Busses nicht überschritten werden (siehe Abbildung 2).

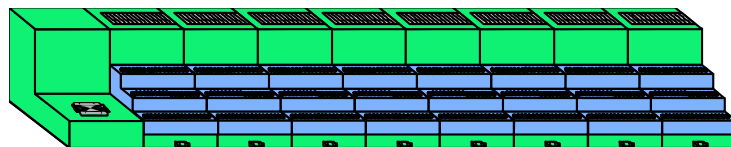
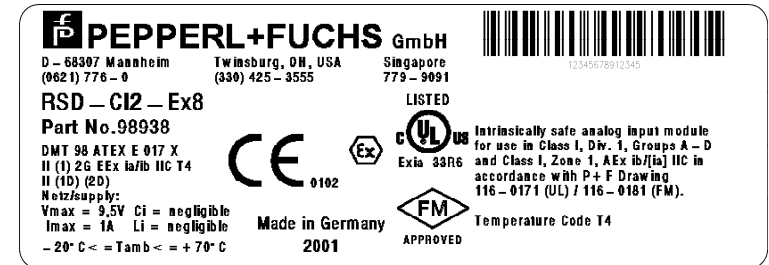


Abbildung 2

Part Nr.: 52809, 7.9.01

### Kennzeichnung

An der Modulinnenseite (s. Abbildung 1) ist das Produktlabel mit der Kennzeichnung des Moduls angebracht.



### Abdeckkappe:

Der Modulträger ist ab Werk mit einer Abdeckkappe an dem Backplane-Busananschluss versehen (siehe Abbildung 3).

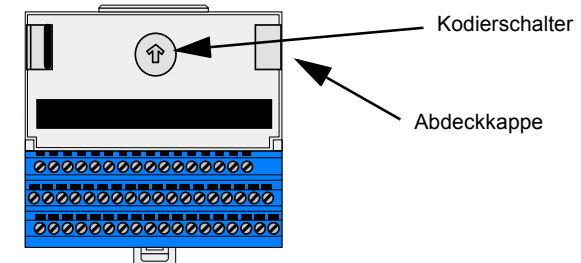


Abbildung 3

Diese Abdeckkappe darf nur abgenommen werden, wenn der Modulträger an andere Modulträger angeschlossen wird. Der Anschluss darf nicht mit nicht-eigensicheren Signalen in Verbindung gebracht werden.

### Kodierschalter

Die Stellung des Kodierschalters am Modulträger wird modulspezifisch eingestellt (beim RSD-CI(2)-Ex8: Stellung 3) und darf nach Anschluss der Leitungen am Modulträger nicht mehr verändert werden, damit ein Modul anderen Typs nicht aufgesteckt werden kann.

### Stützklemmen

Die nicht verwendeten Anschlüsse des Modulträgers (Klemmen 3, 7, 11, 15, 20, 24, 28, 32, 37, 38, 39, 46, 47, 48) dürfen nicht als Stützklemmen verwendet werden (s. Abbildung 4).

Part Nr.: 52809, 7.9.01



When installing, commissioning, operating and maintaining devices or device components of the IS-RPI system as an intrinsically safe electrical apparatus in potentially explosive atmospheres, you must heed the EC-type of examination certificate and the applicable national and local construction, installation and operating regulations.

### Terminal Base

The module RSD-CI(2)-Ex8 may only be used with a RS-TB-Ex.SC or RS-TB-Ex.SP intrinsically safe terminal base unit (Figure 1).

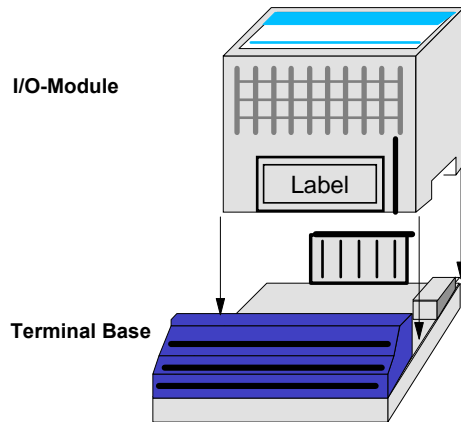


Figure 1

The Terminal Bases may only be used with Modules or Gateways of the ISRPI-System. Thus the intrinsically safe values of the backplane bus system are not exceeded (Figure 2).

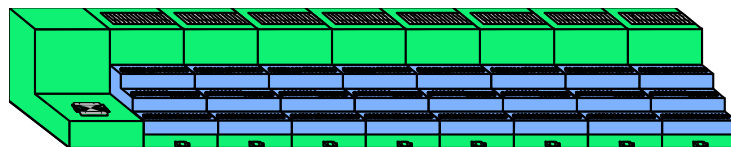
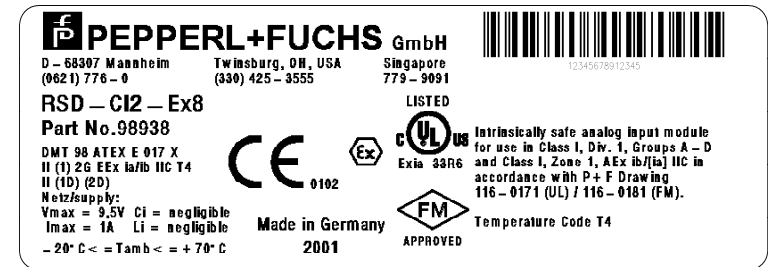


Figure 2

Part No.: 52808, 7.9.01

### Label

The product label is located on the inside of the module (Figure 1):



### Cover plug for backplane bus

The Terminal Base is provided with a cover plug for the backplane bus ex works.

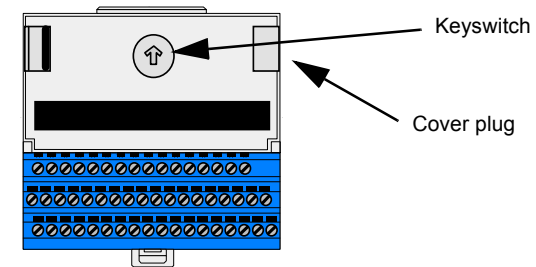


Figure 3

The cover plug can only be removed when another Terminal Base is connected. The connection must not be connected to any signals, which exceed the intrinsically safe values of the backplane bus.

### Key switch

The position of the key switch on the Terminal base is module specific (RSD-CI(2)-Ex8: Position 3) and must not be changed after wiring, so that a module of another type cannot be mounted.

### Supporting Terminals

Do not use the unused terminals (terminals 3, 7, 11, 15, 20, 24, 28, 32, 37, 38, 39, 46, 47, 48) on this terminal base unit. Using these terminals as supporting terminals can result in damage to the module and/or unintended operation of your system (See Figure 4).

Part No.: 52808, 7.9.01

### Power Supply

The modules are powered via the Terminal Base (terminals 34+, 35-); via the terminals 50+ and 51 it is possible to daisy chain to the next module (See Figure 4). The maximum intrinsically safe values must not be exceeded.

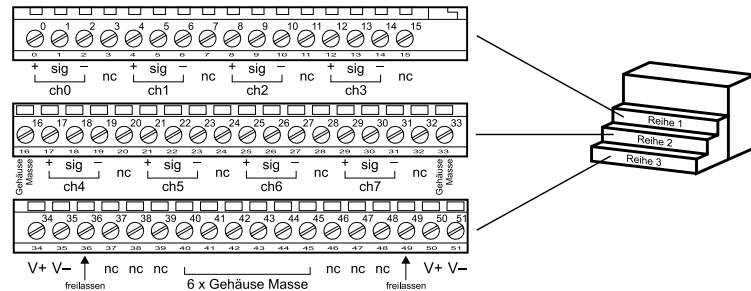


Figure 4

### Installation

This module must not be exposed directly to the environment. Provide a separate enclosure with a protection factor of at least IP54; the IS-RPI modules themselves have a protection factor of IP20. Do not remove the Cover plug on the open side of the backplane bus connection.

### Safe area mounting

The module must not be used in an intrinsically safe environment after it has been exposed to non-intrinsically safe signals.

### Repair

This module is not field-repairable. Any attempt to open this module will void the warranty and IS certification. If repair is necessary, return this module to the factory.

### ESD

Protect the IS-RPI modules against electrostatic charge. Post a sign near this module: Attention! Avoid electrostatic charge.

Part No.: 52808, 7.9.01

### Inputs

Each input can be operated from a Transmitter in the current range of 0-22 mA. Furthermore current sources can be connected, which do not exceed the Ex-Input data of the IS-RPI module. Do not apply any non-intrinsically safe signals to this module.

The channels in this module are electrically connected to each other and have a common plus-line.

Important: When interconnecting several lines, you must consider the total accumulated power and check for intrinsic safety.

### Electromagnetic Compatibility

To achieve the EMC protection class it is necessary to use shielded multicore cable and to have a shield for each channel. The isolation of each wire has to be higher than 500 V.

### Ambient Temperature

The Ambient Temperature of the module (-20 °C...+70 °C) has to be considered, especially when the modules are mounted in a cabinet where the internal temperature is increased by the power dissipation of the modules itself.

If the intrinsically safe electrical circuits are led into areas with inflammable dust the following requirements have to be fulfilled.

### Zone 20

The intrinsically safe electrical circuits (Ch 0 to Ch 7) may be led into areas with inflammable dust (Zone 20). It has to be guaranteed, however, that the devices, to which these intrinsically safe electrical circuits are connected, fulfil the requirements for category 1D and are marked accordingly. All other intrinsically safe electrical circuits may not be led into Zone 20.

### Zone 21

All other intrinsically safe electrical circuits may also be led into areas with inflammable dust (Zone 21). It has to be guaranteed, however, that the devices, to which these intrinsically safe electrical circuits are connected, fulfil the requirements for category 2D and are marked accordingly. Of course, the intrinsically safe electrical circuits (Ch 0 to Ch 7) may under the same conditions also be led into Zone 21.

### Zone 22

When the module is installed in Zone 22 the following cabinets have to be used:

- IVK-ISRPI-V16LC
- IVK-ISRPI-V8HYW
- IVK-ISRPI-V8LC

Part No.: 52808, 7.9.01