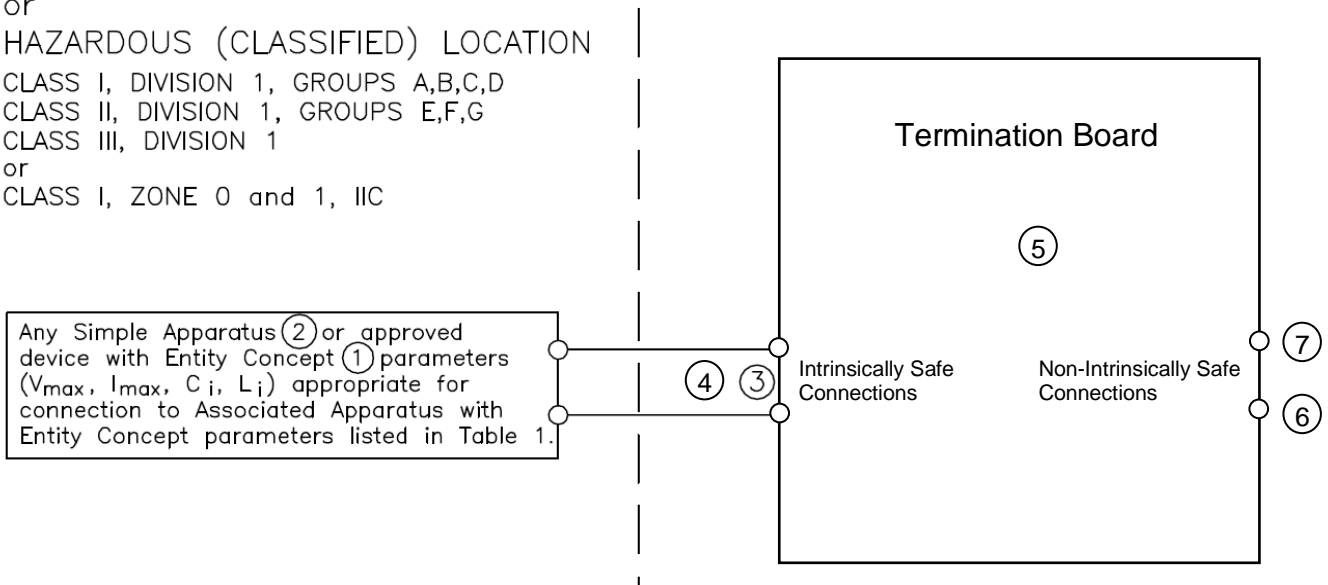


NONHAZARDOUS LOCATION  
or  
HAZARDOUS (CLASSIFIED) LOCATION  
CLASS I, DIVISION 1, GROUPS A,B,C,D  
CLASS II, DIVISION 1, GROUPS E,F,G  
CLASS III, DIVISION 1  
or  
CLASS I, ZONE 0 and 1, IIC

NONHAZARDOUS LOCATION



NOTES:

- ① The Entity Concept allows interconnection of intrinsically safe apparatus with associated apparatus not specifically examined in combination as a system when the approved values of  $V_{oc}$  (or  $U_o$ ) and  $I_{sc}$  (or  $I_o$ ) for the associated apparatus are less than or equal to  $V_{max}(U_i)$  and  $I_{max}(I_i)$  for the intrinsically safe apparatus. Capacitance and inductance of the field wiring from the intrinsically safe equipment to the associated apparatus shall be calculated and must be included in the system calculations. Cable capacitance,  $C_{cable}$ , plus intrinsically safe equipment capacitance,  $C_i$  must be less than the marked capacitance,  $C_a$  (or  $C_o$ ), shown on any associated apparatus used. The same applies for inductance ( $L_{cable}$ ,  $L_i$  and  $L_a$  or  $L_o$ , respectively). Where the cable capacitance and inductance per foot are not known, the following values shall be used:  $C_{cable} = 60 \text{ pF/ft.}$ ,  $L_{cable} = 0.2 \text{ } \mu\text{H/ft.}$   
The Entity Parameters of each channel depends on the barrier which is plug in the Termination Board (see control drawing of the barrier).
- ② This associated apparatus may also be connected to simple apparatus as defined in Article 504.2 and installed and temperature classified in accordance with Article 504.10(B) of the National Electrical Code (ANSI/NFPA 70), or other local codes, as applicable.
- ③ Where multiple circuits extend from the same piece of associated apparatus, they must be installed in separate cables or in one cable having suitable insulation. Refer to Article 504.30(B) of the National Electrical Code (ANSI/NFPA 70) and Instrument Society of America Recommended Practice ISA RP12.6 for installing intrinsically safe equipment.
- ④ Intrinsically safe circuits must be wired and separated in accordance with Article 504.20 of the National Electrical Code (ANSI/NFPA 70) or other local codes, as applicable.
- ⑤ Associated apparatus must be installed in an enclosure suitable for the application in accordance with the National Electrical Code (ANSI/NFPA 70) for installation in the United States, the Canadian Electrical Code for installations in Canada, or other local codes, as applicable.
- ⑥ The Termination Boards shall not be connected to any device which uses or generates internally any voltage in excess of the maximum voltage  $U_m$  of the barriers which are plug in the Termination Board (see Control drawing of the barrier) unless the device has been determined to adequately isolate the voltage from the Termination Board.
- ⑦ Wiring methods must be in accordance with the National Electrical Code for installations in the United States, the Canadian Electrical Code for installations in Canada, or other local codes, as applicable.
- ⑧ The pieces of associated apparatus that are used in this equipment shall be manufactured by Pepperl+Fuchs GmbH, suitable for the application and certified by a NRTL. The user/installer shall also ensure that they are fitted in


|  |                                       |                   |
|--|---------------------------------------|-------------------|
| Dieses Dokument enthält sicherheitsrelevante Angaben. Es darf nicht ohne Absprache mit dem Normenfachmann geändert werden! |                                       |                   |
| This document contains safety-relevant information. It must not be altered without the authorization of the norm expert!   |                                       |                   |
| CONFIDENTIAL acc. to ISO 16016   | Only valid as long as released in EDM | date: 2013-Dec-09 |
| PEPPERL+FUCHS  | Control Drawing                       | <b>116-0381</b>   |
| Worldwide  | HiDTB04 - *                           | sheet 1 of 2      |

accordance with CEC/NEC as advised by the manufacturer. Additionally, the associated apparatuses shall have a maximum Um of 250V RMS and a maximum Uo of 30V dc.

- ⑨ The HiDTB04 - \* Termination Board is certified as a component for mounting in a suitable enclosure where the final assembly is subject to the acceptance by the local authority having jurisdiction.

**WARNING:** Substitution of components may impair intrinsic safety.

**ADVERTISEMENT:** La substitution de composants peut compromettre la sécurité intrinsèque.

|  |                                       |                   |
|--|---------------------------------------|-------------------|
| Dieses Dokument enthält sicherheitsrelevante Angaben. Es darf nicht ohne Absprache mit dem Normenfachmann geändert werden! |                                       |                   |
| This document contains safety-relevant information. It must not be altered without the authorization of the norm expert!   |                                       |                   |
| CONFIDENTIAL acc. to ISO 16016   | Only valid as long as released in EDM | date: 2013-Dec-09 |
|  <b>PEPPERL+FUCHS</b>                   | Control Drawing                       | <b>116-0381</b>   |
| Worldwide  | HiDTB04 - *                           | sheet 2 of 2      |