

CSA Control Drawing
WirelessHART Adapter
WHA-ADP-F8B2-*-A*

ENG

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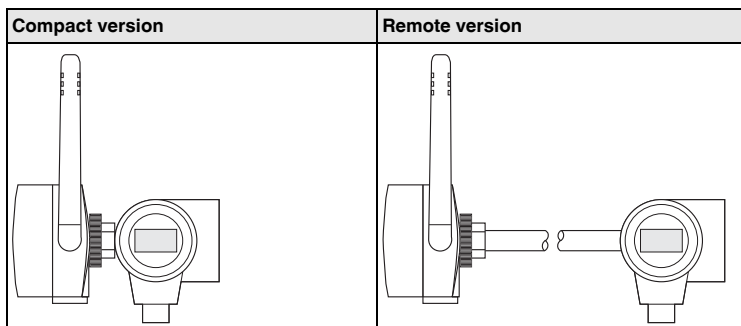
Hazardous location

Class I, Div. 1, Groups A, B, C, D
 Class II, Div. 1, Groups E, F, G; Class III
 Class I, Zone 1, Group IIC

Permissible ambient temperature and temperature code

| Temperature Code | Permissible ambient temperature electronic compartment |
|------------------|--|
| T4 | -40 ... 60 °C |

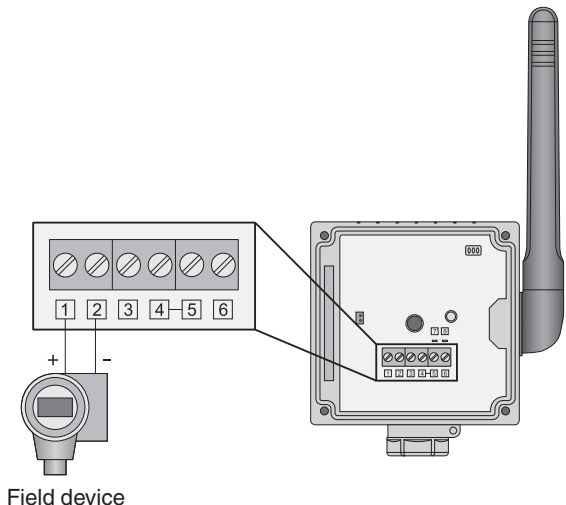
Mounting types



Adapter active (4 ... 20 mA + HART communication)

Loop-powered field device (compact or remote version)

Entity parameter:
 ■ $U_0/V_{OC} = 26 \text{ V DC}$
 ■ $I_0/I_{SC} = 98 \text{ mA}$
 ■ $P_0/P_O = 631 \text{ mW}$
 ■ $C_0 = 89.8 \text{ nF}$
 ■ $L_0 = 3.58 \text{ mH}$



Field device

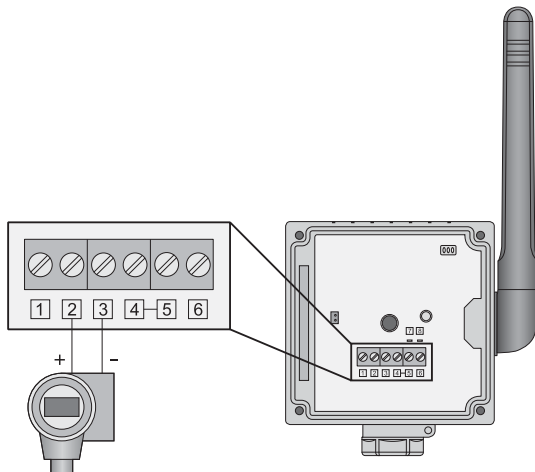
Adapter passive (4 ... 20 mA + HART communication)

A: 4-wire field device (compact or remote version)
B: 2-wire field device with ext. power supply (compact or remote version)

Entity parameter for terminals 1-6:

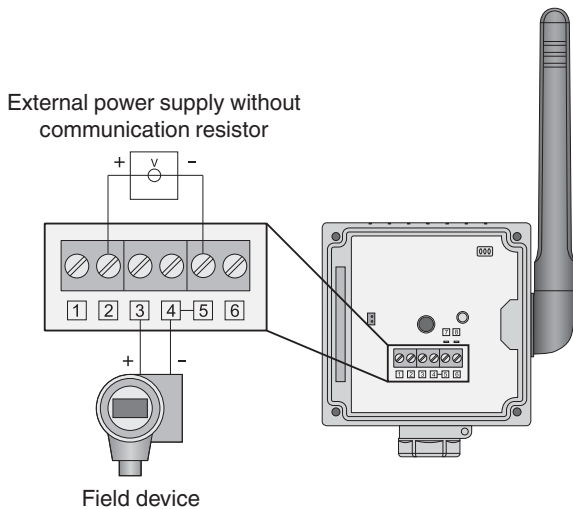
■ $U_0/V_{max} = 30 \text{ V DC}$ ■ $U_0/V_{OC} = 26 \text{ V DC}$
 ■ $I_0/I_{max} = 100 \text{ mA}$ ■ $I_0/I_{SC} = 98 \text{ mA}$
 ■ $P_0/P_1 = 3 \text{ W}$ ■ $P_0/P_O = 631 \text{ mW}$
 ■ $C_0 = 20.4 \text{ nF}$ ■ $C_0 = 79.6 \text{ nF}$
 ■ $L_0 = 120 \mu\text{H}$ ■ $L_0 = 3.46 \text{ mH}$

A: 4-wire field device (compact or remote version)



Field device

B: 2-wire field device with ext. power supply (compact or remote version)



Field device

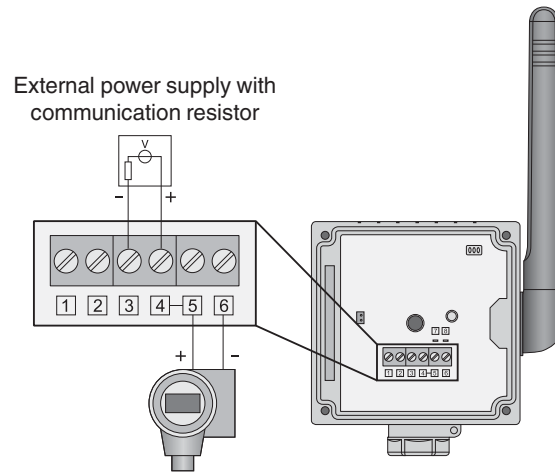
Adapter passive (only HART communication)

A: New installation parallel to HART communication (compact version)
B: Installation parallel to HART communication (remote version)

Entity parameter for terminals 1-6:

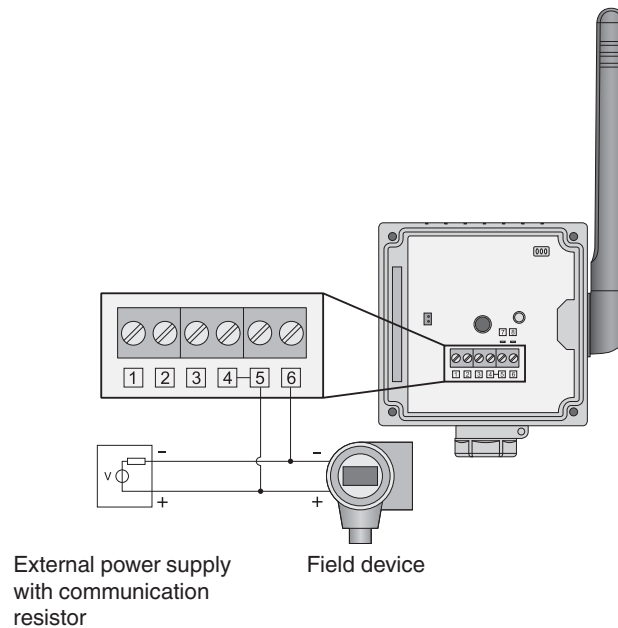
■ $U_0/V_{max} = 30 \text{ V DC}$ ■ $U_0/V_{OC} = 26 \text{ V DC}$
 ■ $I_0/I_{max} = 100 \text{ mA}$ ■ $I_0/I_{SC} = 98 \text{ mA}$
 ■ $P_0/P_1 = 3 \text{ W}$ ■ $P_0/P_O = 631 \text{ mW}$
 ■ $C_0 = 20.4 \text{ nF}$ ■ $C_0 = 79.6 \text{ nF}$
 ■ $L_0 = 120 \mu\text{H}$ ■ $L_0 = 3.46 \text{ mH}$

A: New installation parallel to HART communication (compact version)



Field device

B: Installation parallel to HART communication (remote version)



External power supply with communication resistor

Field device

Hazardous Locations Installation

Intrinsically Safe

Class I, Div. 1, Groups A, B, C, D, T4
Class II, Div. 1, Groups E, F, G

Class III

Class I, Zone 1 AEx ia IIC T4 Gb / Ex ia IIC T4 Gb

1. Installation must per the Electrical Code of the country in use.
2. Intrinsically safe and associated equipment connected to the WHA-ADP-* must be CSA certified for the country in use and must have entity parameters that satisfy the following conditions:
 $V_{OC}(U_0) \leq V_{max}(U_i)$, $I_{SC}(I_0) \leq I_{max}(I_i)$, $P_0 \leq P_i$,
 $C_a(C_0) \geq C_i + C_{cable}$, $L_a(L_0) \geq L_i + L_{cable}$
3. **WARNING:** substitution of components may impair intrinsic safety.
AVERTISSEMENT: la substitution de composants peut compromettre la sécurité intrinsèque.
4. Use supply wires suitable for 5 °C above surrounding.
5. Batteries may be changed in an area known to be hazardous. Replace only with Pepperl+Fuchs W-BAT-B2-Li battery pack.
6. Battery unit should not be crushed, punctured or otherwise damaged. Such abuse may impair the electrical safety. Dispose of used battery units in an environmentally compatible manner. Observe national regulations on waste disposal.

Class I, Div. 2, Groups A, B, C, D, T4

Class II, Div. 2, Groups F, G

Class III

1. Install per Canadian Electrical Code using threaded metal conduit.
2. Intrinsic safety barrier not required.
3. This equipment is suitable for installation in Cl. I, Div. 2, Groups A, B, C, D hazardous locations or safe area only
4. **WARNING - Explosion Hazard:** substitution of components may impair suitability for Cl. I, Div. 2.
AVERTISSEMENT - Risque d'explosion: la substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Cl. I, Div. 2.
WARNING - Explosion Hazard: do not connect or disconnect equipment unless power has been removed or area is known to be non-hazardous
AVERTISSEMENT - Risque d'explosion: ne pas déconnecter ni ouvrir l'appareil si la zone est explosible.