### Hazardous Location

**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:**

<table>
<thead>
<tr>
<th>Temperature code</th>
<th>Permissible ambient temperature electronic compartment</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3C</td>
<td>-40...+60 °C</td>
</tr>
<tr>
<td>T4</td>
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### Intrinsically safe Ex ia for Cl. I, Zone 1, Ex ia II CT4/T3C

- Class I, Div. 1, Groups A, B, C, D and Cl. I, Zone 1, Ex ia II CT4/T3C,
- All types of HART communication

- Table for terminals 1-6:

  - **U / V = 28 V DC**
  - **I / I = 99 mA**
  - **P / P = 692 mW**
  - **C = 70 nF**
  - **L = 3.45 mH**

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

- **Compact version**

- **Remote version**

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

- **Compact version**

- **Remote version**

### Adapter active (Low Power Interface):

- **Optical feature**

### Adapter passive (only HART communication):

- **Compact version**

- **Remote version**

### Intermittent safe Ex ia for Cl. I, Div. 1, Groups A, B, C, D and Cl. I, Zone 1, Ex ia II CT4/T3C

1. Installation per Electrical Code of the country in use mandatory.
2. Intrinsically safe and associated equipment connected to the SWA70 must be CSA certified for the country in use and must have entity parameters that satisfy the following conditions:
   - **Voc (Uo)**, **Vmax (Ui)**, **Isc (Io)**, **Imax (Ii)**, **Pi**,
   - **Ca (Co)**, **Ci + Ccable**, **La (Io)**, **Li + Lcable**.
3. Warning: Substitution of components may impair intrinsic safety.
4. Use supply wires suitable for 5°C above surrounding.
5. Batteries may be changed in a Cl. I area known to be hazardous.
6. Batteries may be changed in a Cl. I area known to be hazardous. For Cl. II and Cl. III: WARNING - Explosion hazard - do NOT replace battery unless the area is known to be NON-hazardous. Replace only with Endress+Hauser SWA70 battery pack.
7. 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.
8. Where this device (SWA70-C12****) is used to replace an older version (SWA70-C11**** or OSWA-CC1****) in an existing hazardous location installation, caution must be taken to ensure compatibility with the existing interconnected devices as these are different from the older versions (ref. previous Control Drawing 960018577-*)

### Battery unit:

- **Adapter active (4...20 mA + HART communication):**
  - Loop-powered field device (compact or remote version)
  - **Entity parameter:**
    - **U / V = 28 V DC**
    - **I / I = 99 mA**
    - **P / P = 692 mW**
    - **C = 70 nF**
    - **L = 3.45 mH**

- **Adapter passive (4...20 mA + HART communication):**
  - **Entity parameter for terminals 1-6:**
    - **U / V = 28 V DC**
    - **I / I = 99 mA**
    - **P / P = 692 mW**
    - **C = 70 nF**
    - **L = 3.45 mH**

### Adapter active (Low Power Interface):

- **Entity parameter for LPI:**
  - **U / V = 7.8 V DC**
  - **I / I = 1.031 A**
  - **P / P = 2.22 W**
  - **C = 9.18 µF**
  - **L = 21.51 µH**

### Adapter passive (only HART communication):

- **Entity parameter for terminals 1-6:**
  - **U / V = 28 V DC**
  - **I / I = 99 mA**
  - **P / P = 692 mW**
  - **C = 70 nF**
  - **L = 3.45 mH**

### Temperature code:

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### CL. I, Div. 2, Groups A, B, C, D

- 1. Install per the Canadian Electrical Code using threaded metal conduit.
- 2. Intrinsic safety barrier not required. Max. ambient temperature: 70°C.
- 3. Warning: Explosion hazard - Do not disconnect or open equipment when area is known to be hazardous.

### CL. II and III, Div. 2, Groups F, G

- Only for NPT conduit entries (not for plastic enclosure F32)

- 1. Install per the Canadian Electrical Code using metal conduit.
- 2. Intrinsic safety barrier not required. Max. ambient temperature: 70°C.
- 3. Warning: Explosion hazard - Do not disconnect or open equipment when area is known to be hazardous.
- 4. Warning: Substitution of components may impair suitability for Cl. II, Div. 2.