**Installation Notes RIA15**

- FM Approved Apparatus must be installed in accordance with manufacturer’s instructions.
- Install per National Electrical Code (NFPA 70).
- Use supply wires suitable for 5°C above surroundings.
- Warning: Substitution of components may impair intrinsic safety or suitability for Class I, Division 2.

**INTRINSICALLY SAFE**

- IS Class I / Div. 1 / Groups ABCD
- Installation should be in accordance with ANSI/ISA RP 12.6.01 “Installation of Intrinsically safe systems for Hazardous (classified) locations” and the National Electrical Code (ANSI/NFPA 70).
- FM Approved Associated Apparatus must meet the following parameters:
  - $U_0 \leq U_I$, $I_0 \leq I_I$
  - $P_0 \leq P_I$, $C_a \geq C_I + C_{cable}$
  - $L_a \leq L_I + L_{cable}$

  Process display entity parameters (terminals $+/-$ or $+/+$ LED or $+ / -$ auxiliary terminal $r$) are as follows:
  - $U_i$ or $V_{max} \leq 30 \text{ V DC}$
  - $I_i$ or $I_{max} \leq 200 \text{ mA}$
  - $P_i \leq 900 \text{ mW}$

  - FM Approved Associated Apparatus needs to be approved for ia when there are connections to Zone 0 or when the product is installed in Division 1.

**NONINCENDIVE**

- NI Class I / Div. 2 / Groups ABCD
- Depending on location install per National Electrical Code (NEC) using wiring methods described in article 500 through article 510.
  - Intrinsic safety barrier not required. $V_{max} \leq 30 \text{ V DC}$.
  - Warning: Do not disconnect equipment unless power has been switched off or the area is known to be non-hazardous.
- Nonincendive field wiring installation

  The Nonincendive Field Wiring Circuit Concept allows interconnection of Nonincendive Field Wiring Apparatus with Associated Nonincendive Field Wiring Apparatus or Associated Intrinsically Safe Apparatus or Associated Apparatus not specifically examined in combination as a system using any of the wiring methods permitted for unclassified locations, when $V_{oc} \leq V_{max}$, $C_a \geq C_I + C_{cable}$, $L_a \leq L_I + L_{cable}$.

  Display’s Nonincendive Field Wiring parameters are as follows:
  - $U_i$ or $V_{max} \leq 30 \text{ V DC}$
  - $I_i = 35 \mu\text{A}$
  - $I_i$ or $I_{max} = 4$ to 20 mA

  For these current controlled circuits, the parameter $I_{max}$ is not required and need not to be aligned with parameter $I_{sc}$ and $I_{t}$ of the Associated Nonincendive Field Wiring Apparatus or Associated Apparatus.

**Functional ratings**

These ratings do not supersede Hazardous Location values

- $U_{nom} \leq 2.9 \text{ DC}$
- $I_{nom} \leq 4$ to 20 mA

---

**Temperature range**

T6 $-40°C ... +60°C$

**INTRINSICALLY SAFE NONINCENDIVE, FIELD Wiring**

- IS Class I / Div. 1 / Groups ABCD
- NI Class I / Div. 2 / Groups ABCD

**Nonhazardous Locations**

- Class I / Zone 0 / AEx ia IIC
- Class I / Zone 1 / AEx ia IIC

**Hazardous (Classified) Location**

- Class I / Division 1 / Groups ABCD
- Class I / Division 2 / Groups ABCD

---

**Part No.**

RIAI15, ORIA15

**Drawing No.**

10000005542

---

**Nonhazardous Locations**

- Class I / Div. 1 / Groups ABCD
- Class I / Div. 2 / Groups ABCD

**Hazardous (Classified) Location**

- Class I / Zone 0 / AEx ia IIC
- Class I / Zone 1 / AEx ia IIC

---

**Control Drawing FM**

XA01097K/09/EN/03.17

---

**Title**

CONTROL DRAWING FM

---

**Material**

71356531

---

**Series**

Endress+Hauser