Installation Notes RIA452

- FM Approved apparatus must be installed in accordance with manufacturer’s instructions.
- The device is an Associated Intrinsically Safe Apparatus / Associated Nonincendive Apparatus / Associated Nonincendive Field Wiring Apparatus, which must be installed only in non-hazardous locations.
- Install per National Electrical Code using wiring methods described in article 500 through article 510.
- Use supply wires suitable for 5°C above surrounding.
- Degree of protection must be at least IP20, NEMA 1, Type 1.

ASSOCIATED INTRINSICALLY SAFE  I, II, III/1,2/ABCD/FG  Cl. I, Zone 0 [AEx ia] IIC

- Installation should be in accordance with ANSI/ISA RP 12.06.01 “Installation of Intrinsically safe systems for Hazardous (classified) locations” and the National Electrical Code (ANSI/NFPA 70).
- For entity installations use certified equipment that satisfy the following condition
  \[
  \frac{Uo}{Voc} \leq \frac{Vmax}{Ui} \quad \frac{Io}{Isc} \leq \frac{Imax}{Ii} 
  \]
- The terminals of the intrinsically safe circuit must be placed at least a distance of 50 mm from terminals of the non-intrinsically safe circuits, or adequate separators (e.g. ground metal partitions) must be used.

ASSOCIATED NONINCENDIVE  I, II, III/2/ABCD/FG

- 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 \( Uo/Voc \leq Vmax/UI \), \( Co/Ca \geq Cl + Cable \), \( Lo/La \geq Li + Lcable \).

AIS  I, II, III/1,2/ABCD/FG  Cl. I, Zone 0 [AEx ia] IIC

ANI  I, II, III/2/ABCD/FG

Current input active
Terminal 81, 82
- Uo or Voc or Vt \( \leq 27.6 \) V
- Po = 612 mW
- Ci \( \approx \) negligible small
- Co or Ca = 86 nF
- Lo or La = 1.6 mF

Current input passive
Terminal 11, 12
- Uo or Voc or Vt \( \leq 27.6 \) V
- Po = 7 mW
- Ci \( \approx \) negligible small
- Co or Ca = 86 nF
- Lo or La = 100 mH

Refer to protection notice ISO 16016
Edge of working parts ISO 13715
Geometrical tolerancing ISO 2768-mH-E
Part No. -
Format A4