SAFE INSTALLATION MANUAL (ATEX APPROVAL)

4-DIGIT LOOP POWERED INDICATOR
(outdoor enclosure, flameproof)

MODEL **FXE-B**

BEFORE USE ....

■ SAFETY PRECAUTIONS

This manual describes important points of caution for safe use of this product in potentially explosive atmosphere.
Please read this manual carefully before installing and operating the product.

■ MODEL NUMBER IDENTIFICATION

Model No. FXE-B – 1 2 3 4 5

1) SAFETY APPROVAL
   0 : None
   4 : ATEX flameproof

2) TERMINAL BLOCK
   0 : None

3) WIRING CONDUIT
   1 : 1/2 NPT
   2 : M20 x 1.5

4) ENCLOSURE MATERIAL
   A : Diecast aluminium
   S : Stainless steel casting

5) MOUNTING BRACKET
   0 : Without
   1 : With

■ MANUFACTURED DATE CODE IDENTIFICATION

The manufactured year and month can be identified by the serial number described on the specification label.

Serial No. Y M xxxxxx

YEAR

B : 2021	1 : 2041
C : 2022	2 : 2042
: :	: :
U : 2040	9 : 2049

MONTH

2021 - 2049(year)
M : January
N : February
P : March
: :
Y : December

⚠ WARNING

Explosions could result in death or serious injury:

- The enclosure cover must be fully engaged to meet explosion-proof/flameproof requirements.
- Do not remove the enclosure cover in explosive atmospheres when the circuit is alive.
- Before you remove the unit or mount it, or before you connect or disconnect the wiring, turn off the power supply and the input signal for safety. Do not disconnect unless the area is known to be non-explosive.
- Whenever you need to measure voltage across the terminals or apply a simulated input signal to the terminals, make sure that there is no danger of explosion in the atmosphere.
- Verify the certification of the product described on the specification label on the product.
- Verify that the operating atmosphere of the meter is consistent with the appropriate hazardous locations certifications.
- Verify that the environmental temperature is within the temperature class required for the area.

Failure to follow these installation guidelines could result in death or serious injury:

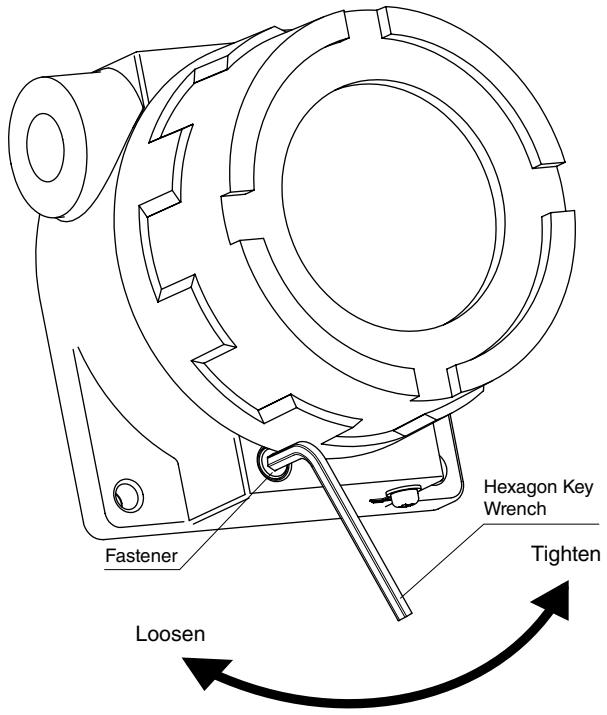
- Make sure only qualified personnel perform the installation.
- The flameproof approval of this unit is applied to the combination of the outdoor enclosure and the indicator. The indicator must not be separated or replaced.
- Substitution of components may impair suitability for the hazardous location and may cause an explosion.

⚠ SAFETY FEATURES & CAUTIONS

■ FLAMEPROOF APPROVAL

- ATEX
  EU-Type Examination Certificate: DEKRA 13ATEX0058
  Ⓔx II 2G Ex db IIC T5, T6 Gb
  Zone 1
  EN 60079-0
  EN 60079-1
- Prior to installation, check that the safety class of this unit satisfies the system requirements.
- Environmental temperature must be within the following ranges depending upon the required temperature class.
  T5 : -40°C ≤ Ta ≤ +80°C
  T6 : -40°C ≤ Ta ≤ +70°C
- Use suitable heat resistant cable and cable gland for ambient temperatures ≥ 70°C
- Before wiring, make sure there is no danger of explosion in the atmosphere.
- Before opening the enclosure, wait at least for 60 seconds after the power is removed.
- The cable entry device and stopping plugs for unused apertures shall be of a certified flameproof type, suitable for the conditions of use and correctly installed.
- The cable entry conduit is 1/2 NPT threaded or M20 × 1.5 threaded.
- Six or more cable entry threads must be engaged.
- Squeeze the cable entry and stopping plug into the conduit with the proper tool.
- Before turning the power supply on, be sure to close the enclosure cover tightly and tighten the fastener as shown in Figure 1 using a hexagon key wrench. When opening the enclosure, loosen the fastener first.

Figure 1. Enclosure fastener



- DO NOT RUB the surface of the plastic enclosure with a dry cloth. Electrostatic charge generated by the friction may cause an explosion.
- Non-metallic materials (window cement) are contained in the FXE-B enclosure and the user must consider the performance of these materials with respect to chemicals which may be present in the hazardous area.
- Be sure to earth the unit.
- For external earthing or bonding connection a cable lug shall be used so that the conductor is secured against loosening and twisting and that contact pressure is maintained.

INSTALLATION DIAGRAM for ATEX FLAMEPROOF MODEL

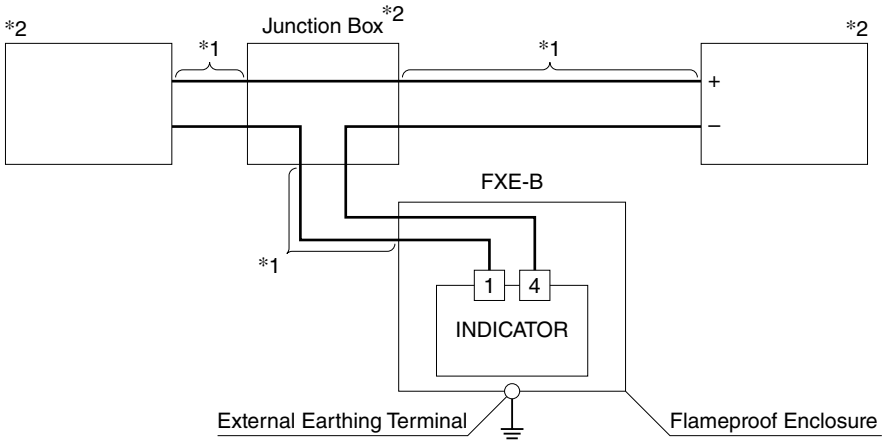


Figure 1. Without Using Internal Bridge

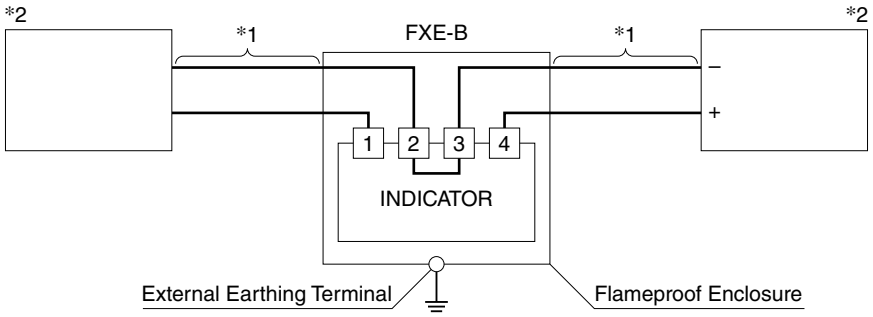


Figure 2. Using Internal Bridge

ELECTRICAL DATA
INPUT CURRENT: 4 to 20 mA DC (Max. 24 mA DC)

*1 : Install according to local installation codes.
ATEX approved cable entries or stopping plugs are required.

*2 : Other apparatus including the junction box must be ATEX approved for appropriate hazardous location.