TX7230

Isolator Module
Installation and Operation Manual

Product Safety

To prevent severe injury and loss of life or property, read the instruction carefully before installing the module to ensure proper and safe operation of the system.

European Union directive

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points.

For more information please visit the website at www.recyclethis.info

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1 Introduction

1.1 Overview

The TX7230 manufactured base on the requirement of EN 54 part 17, European Standard. In the event of short circuit on the detection loop the TX7230 Isolators either side of the loop will detect the problem and open circuit and isolates the faulty part of the loop, enabling other devises on the unaffected part of the loop to operate normally. The module will continue to monitor for the fault to be repaired, once the fault is cleared the isolator will automatically reinstate the effected part of the loop.

The unit is aesthetically pleasing with unobtrusive design that will complement modern building designs and its plug-in type assembles make installation and maintenance more convenient to the installer. The TX7230 Isolators Module is compatible to the TX7004 Analogue Intelligent Fire Alarm Control Panel, produced by single manufacture T&A, to avoid addressable communication compatibility problem.

1.2 Feature and Benefits

- EN54-17 Compliance
- In the event of a short circuit isolates faulty parts of the loop.
- Automatically resetting once the fault has cleared
- Can monitor up to 70 devices
- LED status indicator
- Loop powered device
- Aesthetically pleasing design
- Surface mounting with fix base for simple installation

1.3 Technical Specification

- Listed   LPCB Pending
- Compliance   EN54-17
- Input Voltage   24VDC [16V to 28V]
- Current Consumption   Standby 0.15mA, Alarm: 1.8mA
- Protocol   T&A
- Number of monitored   Max 70 Devices
- Output Impedance   480 ohms
- Indicator Status   Normal: Single blink/Active: Steady-on
- Material / Colour   ABS / White Glossy finishing
- Dimension / LWH   108 mm x 86 mm x38 mm
- Weight   152g (with Base), 81g (without Base)
- Humidity   0 to 95% Relative Humidity, Non condensing

2 Installation

2.1 Installation Preparation

This interface module must be installed, commissioned and maintained by a qualified or factory trained service personnel. The installation must be installed in compliance with all local codes having a jurisdiction in your area or BS 5839 Part 1 and EN54.

T&A products has available range of interfaces, each interface module is designed for specific application, it is essential to consider the requirement of both sides of the interface to avoid malfunction and typical fault scenario. The main caution is to ensure that the voltage rating of the equipment and interface module are compatible.

2.2 Installation and Wiring

1. Mount the interface module base on standard one gang electrical back box. Follow the arrow mark for the correct position. Do not over-tighten the screws otherwise the base will twist. Use two M4 standard screws.
2. Connect the wire in terminal as shown in Figure two [2].
3. Align the interface module and tabs and gently pushing the device until it locks into place.
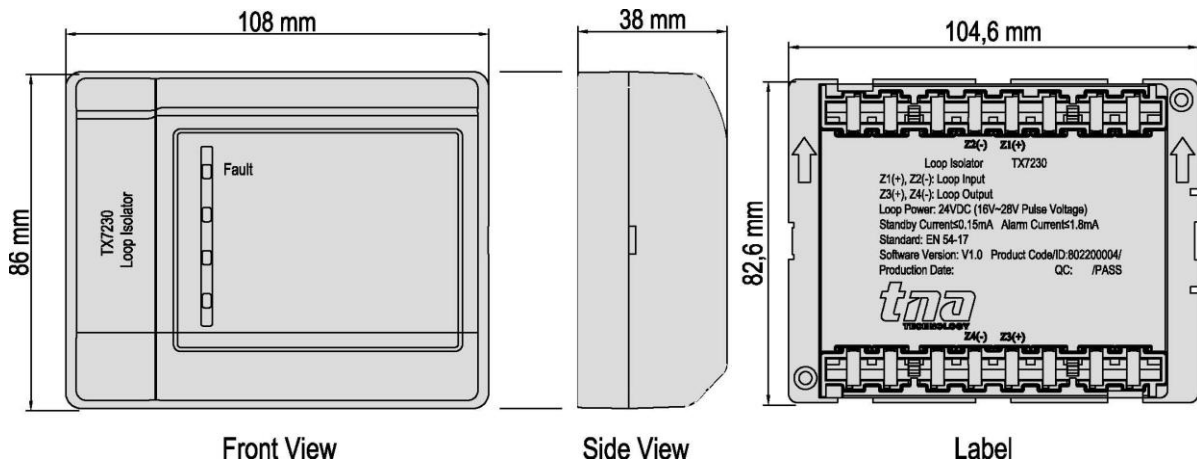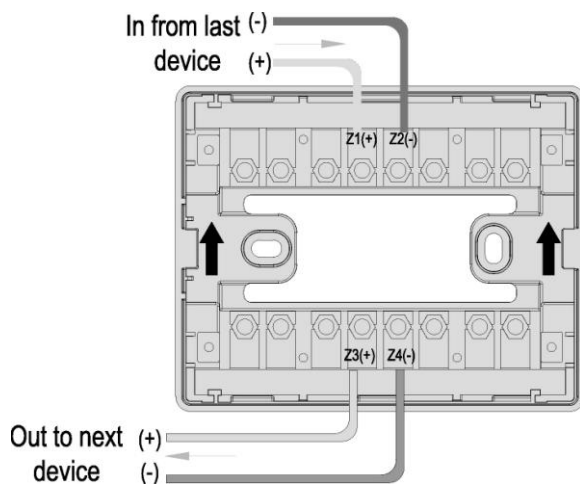

Figure 1

Terminal Description

Z1 Signal In (+)
Z3 Signal Out (+)
Z2 Signal In (-)
Z4 Signal Out (-)

Figure 2: wiring

3 General Maintenance

1. Inform the suitable personnel before conducting the maintenance.
   Note: Since Isolator cannot disable from the control panel to prevent false alarm, it is recommended to temporarily close the loop once the isolator is removed.
2. Do not attempt to repair the circuitry of the interface module, it may affect the operation to respond to a fire condition and will void the manufacturer's warranty.
3. Use a damp cloth to clean the surface.
4. Notify again proper personnel after conducting the maintenance and make sure to enable the interface module and confirm if up and running.
5. Perform the maintenance on semi-annually or depending on the site conditions.

4 Troubleshooting Guide

What you notice	What it means	What to do
Panel display loop fault	Wrong wiring or the damage the electronic circuit	Replace the device

Appendix 1

Limitation of Isolator Module

The Module cannot last forever. In order to keep the module working in good condition, please maintain the equipment continuously according to recommendations from manufacturers and relative nation codes and laws. Take specific maintenance measures on the basis of different environments.

This module contains electronic parts. Even though it is made to last for a long period of time, any of these parts could fail at any time. Therefore, test your module at least every half-year according to national codes or laws. Any interface module, fire alarm devices or any other components of the system must be repaired and/or replaced immediately as they fail.