EDWARDS

LIFE SAFETY & INCIDENT MANAGEMENT

# Ziton Device Controller

## 3-EASC-E, 3-EADC-E, 3-EAC-E

CE

Complies to AS7240.2

## Overview

The 3-EASC-E Single Circuit Ziton Device Controller and the 3-EADC-E Dual Circuit Ziton Device Controller are used to connect Ziton detectors and modules to the EST3 system. Both Ziton device controllers take up a single rail module slot on an EST3 panel. The 3-EASC-E supports a total of 127 Ziton detectors or modules on a single loop. The 3-EADC supports two loop circuits, each with a total of 127 Ziton detectors or modules. A 3-EASC-E can be upgraded to a 3-EADC-E by adding a 3-EAC-E board.

The Ziton Device controller also features a hinged front panel for a Control Display Module, which are available in a variety of LED and/or switch configurations.

The microprocessor-based Ziton Device Controller modules have a nonvolatile memory that stores the operating system software and data files, which are downloaded from a PC. The System Definition Utility Program accomplishes data file programming including the device type, address, description, sensitivity, verification, and wiring integrity. The Ziton Device Controller continuously checks the analogue value of each device reporting status to the cabinet CPU. The Ziton Device Controller can isolate ground faults to a specific addressable circuit.

Ziton Device Controller modules support prealarm (2 thresholds) operation, alarm verification and primary/alternate (4 thresholds) sensitivity settings. Ziton Device Controller modules automatically adjust the environmental compensation level of each detector every 24 hours. A maintenance alert is generated when the detector reaches the 80% dirty level. At the 100% dirty level, a dirty fault condition is generated. The automatic fire detector self-test feature requires each detector to respond to the controller with an analogue signal. The controller compares this signal with stored values for verification. Out-of-range levels are reported as faults.

All field wiring connections to the Ziton Device Controller are made via plug-in connectors, permitting termination of field wiring prior to installing the Ziton Device Controller in the enclosure. The plug-in connectors and snap rivet module mounting facilitate rapid removal and replacement without the use of tools. Class A/B wiring may be T-tapped for branch wiring, as permitted by the authority having jurisdiction.

## Standard Features

- 3-EASC-E supports a total of 127 detectors or modules
- 3-EADC-E supports a total of 254 detectors or modules
- 3-EASC-E upgradable to an 3-EADC-E
- Alarm verification
- Primary and alternate sensitivity settings
- Pre-alarm operation
- Class A or Class B (Style 7 or Style 4) circuit wiring
- Continuous monitoring of analogue device values
- Environmental compensation with maintenance alert
- Removable field wiring terminals

# Supported Ziton Devices

The 3-EAxC-E modules are compatible with the following devices.*

## Ziton Addressable Detectors

- ZP710-2 Addressable Ionization Smoke Detector
- ZP725-2 Addressable Heat Detector Type A & C Rate of Rise & Fixed Temp
- ZP720-2 Addressable Heat Detector Type B & D Fixed Temp
- ZP720-SEL Addressable Sealed Heat Detector Type B Fixed Temp
- ZP720-SEL/PLT Addressable Sealed and plated Heat Detector Type B Fixed Temp
- ZP730-2 Addressable Optical Smoke Detector
- ZPROBE-A Addressable Duct Probe kit
- Z730-SS Addressable Smoke Switch Detector
- ZP732-2 Addressable Smoke & Thermal Detector
- ZP7-SB1 Addressable Standard Detector Base

## • Manual Call Points

- ZP785-2 Addressable Manual Call Point
- ZP785-3 Addressable Manual Call Point

## • Miscellaneous

- INT-CDI Conventional Detector Loop Card
- Z760-2 2-Way Line Isolator
- Z760-SB1 2-Way Line Isolator Base
- INT-T-GEN Generic I/O Interface

## Line Device Modules

- ZP069 Loop Card set as T13 (HEAT)
- ZP069 Loop Card set as T22 (MCP)
- ZP069 Loop Card set as T23 (SPRINKLER)
- ZP069 Loop Card set as T24 (FIRE INPUT)
- ZP069 Loop Card set as T25 (FLAME)
- ZP069 Loop Card set as T26 (BEAM)
- ZP069 Loop Card set as T34 (SUB FIP)
- ZP069 Card set as T36 (SUB FIP LATCH)
- ZP069 Loop Card set as T52 (GEN INPUT)
- ZP069 Loop Card set as T53 (SILENT INPUT)
- ZP069 Loop Card set as T54
- ZP069 Loop Card set as T57 (AAM Module)

## Line Relay I/O Loop Board

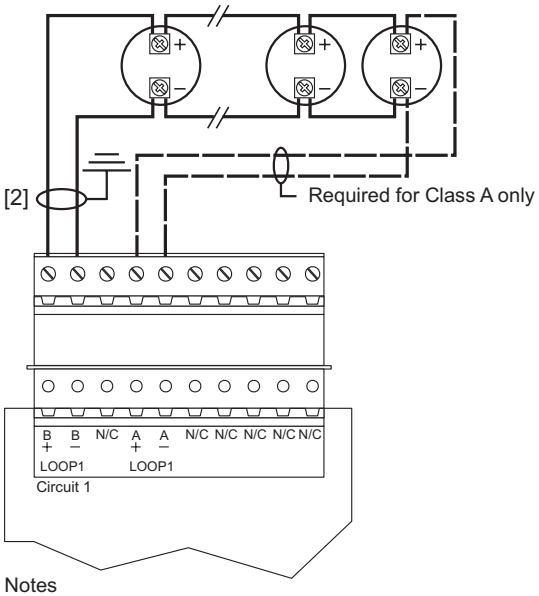
- ZP029 Card set as T21 (I/O)
- ZP029 Card set as T25 (FLAME)
- ZP029 Card set as T26 (BEAM)
- ZP029 Card set as T34 (SUB FIP)
- ZP029 Card set as T36 (SUB FIP LATCH)
- ZP029 Card set as T52 (GEN INPUT)
- ZP029 Card set as T53 (SILENT INPUT)
- ZP029 Card set as T42 (RELAY)
- ZP029 Card set as T54
- AS1668 Fan Control Loop Card
- INT-031 Multifunction I/O Loop Card

# Specifications

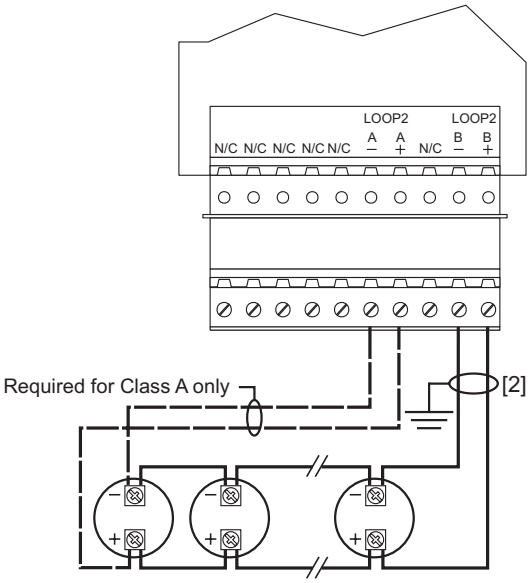
| | 3-EASC-E | 3-EADC-E |
|---|---|---|
| Module Configuration | 1 Addressable Analogue Circuit | 2 Addressable Analogue Circuits |
| Operating Current<br>Standby<br>Alarm | <br>143 mA, plus 765 µA / device /sounder<br>253 mA plus 865 µA / device and 5 mA / loop sounder; Max 500 mA | <br>264 mA, plus 765 µA / device /sounder<br>483 mA plus 86 5 µA / device and 5 mA / loop sounder; Max 500 mA/Loop |
| Standard Compliance | AS7240.2, EN-54 Part 2 and 4 | |
| Addressable Circuit Capacitance | 0.7 µF, max | |
| Addressable Circuit Resistance | 66 Ohms, max | |
| Addressable Circuit Length | 3 km max under any conditions | |
| Addressable Circuit Configuration | Class A (Style 6) or Class B (Style 4) | |
| Addressable Circuit Capacity | A total of 127 Sensors or Modules combined (70 Loop Powered Sounders max.) | |
| Ground Fault Limits | 10K Ohms, min. Fault Identification by loop. | |
| Isolator Limits<br># Isolators per circuit<br># Devices between two isolators<br># Devices between panel & isolator<br># Devices between last isolator & panel (Class A)<br>Max. resistance from device to panel | <br>11 Maximum, Class A configuration<br>40<br>40<br>40<br>66 Ohms | |
| Maximum Wire Size | 2.5 mm² (12 AWG) | |
| Termination | Removable plug-in terminal strip | |
| Operating Environment | 0 °C - 49 °C (32 °F - 120 °F ), 93% RH, Non-condensing | |
| Installation | 1 LRM Space | |

# Typical Wiring

3-EASC-E and 3-EADC-E




3-EADC-E only




Notes

1. All wiring supervised and power-limited

[2] Shields (if used) must be continuous, insulated, and connected to earth ground

# Installation