

# Installation Instructions

**ZeroDT<sup>®</sup>**  
**I/O-24**

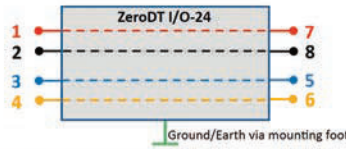
## Overview

The ZeroDT I/O series is intended for the following applications; 24VDC, 4-20mA current loops, RS-232, RS-485 data loops. It provides four independent overvoltage protection lines to be configured as needed (not to exceed 8 amps per line).

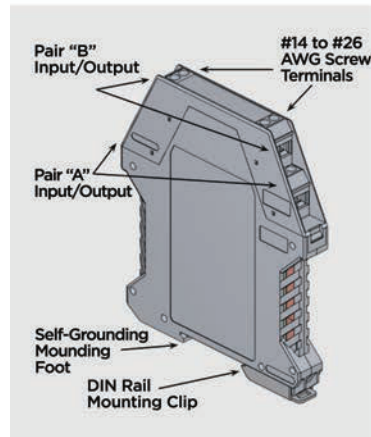
## Installation Procedure

- 1 For maximum overvoltage protection mount the ZeroDT I/O-24 as close as possible to the desired protected equipment.
- 2 The ZeroDT I/O-24 uses a self-grounding mounting foot designed to fit standard 35mm DIN rail. **DIN RAIL MUST BE PROPERLY BONDED TO A LOW RESISTANCE EARTH GROUND FOR PROPER OVERVOLTAGE PROTECTION.**
- 3 The ZeroDT I/O-24 unit is to be installed in accordance with the applicable requirements of the National Electrical Code and the local authorities having jurisdiction.
- 4 Wiring Installation: Terminate either DC power or data/signal loop conductors to the screw terminals provided on the module according to the following legend below:  
(NOTE: Screw terminals are compatible with #14-#26 AWG.)

*The ZeroDT I/O-24 allows either side of the module to be the Input or the Output (module orientation does not matter).*



- 5 When wiring a shielded cable, use feed thru terminal blocks to secure the shield for each loop.
- 6 In the unlikely event that the ZeroDT self-sacrifices, DC power and communications will be interrupted (unit is designed to fail with lines shorted to Ground).



**Maximum Line Current: 8 Amps per line**  
**Maximum Continuous Operating Voltage: 36 Volts DC**  
**Ambient Temperature Range: -40°C to +65°C.**

*This equipment is suitable for use in Class 1, Division 2, Groups A, B, C, or D (T6) as well as in non-hazardous locations.*

**WARNING EXPLOSION HAZARD**  
*Do not disconnect equipment while the circuit is live or unless the area is known to be free of ignitable concentrations.*



Isolated Loop Protector  
E499683

Isolated Loop Circuit Protector  
For Use in Hazardous Locations  
E502612