

ADT139X-M2-AO-DC Deviation Trip / Differential Transmitter

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Non-Smart / Non-uProcessor based, Type A instrument: ✓
- Supply Voltage options: 24Vdc ±10% or 48Vdc ±10%
- Amelec Standard 10 year warranty

Inputs (2 x 4-20mA)

The Active input ports each include the two-wire loop Excitation voltage (24Vdc @22mA) to power the field transmitters.
The inputs share a Common internal 0V reference, so should be isolated from each other at source as std.

Trip-Relay Outputs

Each Trip Relay output is a set of S.P.C.O contacts, rated at 250VAC, 2A, 100VA resistive.
TRIP 1 = A>B High, TRIP 2 = A>B Low, with Deviation set points adjustable via 15-turn blindset potentiometers,
Red LED indication of each relay status: **ON** Energised / healthy, Extinguished in Trip / De-energised state as std.

Environmental Conditions

Storage temperature: -40 to +70°C
Operating ambient: -15 to +55°C
Relative humidity: 5-95 % RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1: 2013 (Controlled EM)

Analogue Output-Retransmission

Any standard process current or voltage signal to represent the input Differential (A-B);

Current source up to 22mA max, with drive voltage 24Vdc
(Current Sink option available on request, 30Vdc max external drive)
Voltage source up to 20V max output
Typical Output: 4-20mA (max load 1200Ω)
or 0-10Vdc (min load 500Ω)

Performance

Isolation: 1000V RMS –
Inputs/Output/Contacts/Contacts/Supply
Accuracy/Linearity: ±0.1%
Trip settability: ±1%
Trip repeatability:- ±0.1%
Deadband: nom 1% span hysteresis
Response time: ≤200mS (0-100% Step)
Input O/C response: Downscale drive as std
Supply consumption: <4VA

Mounting / Dimensions

Din Rail (TS35)
Enclosure: 152w x 137d x 81h mm

Wiring

