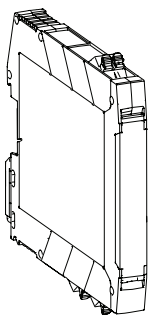
XTD2 Series DIN Rail Mounted Universal Temperature Transmitters - Programmable



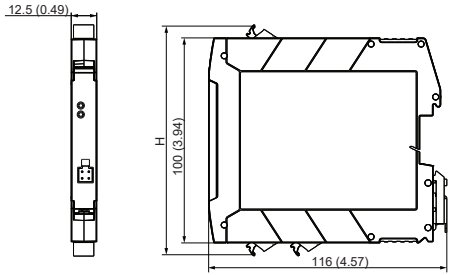
XTD2 Series - Programmable

Installation

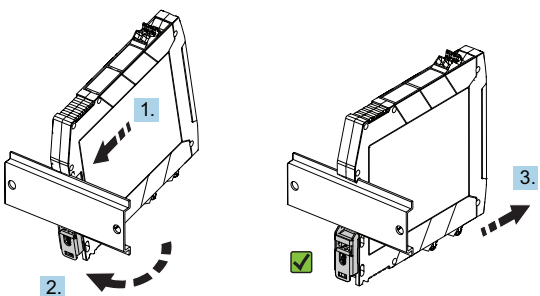
- Ambient Temperature:
  -40 to 185°F (-40 to 85°C)
- Installation area:
  Installation on DIN rail according to IEC 60715, e. g. in control panel
- Measurement deviates from the maximum accuracy rating when a thermocouple is connected and the internal reference junction is used.
  Mount the device vertically and ensure it is oriented correctly!

Dimensions

mm [inches]



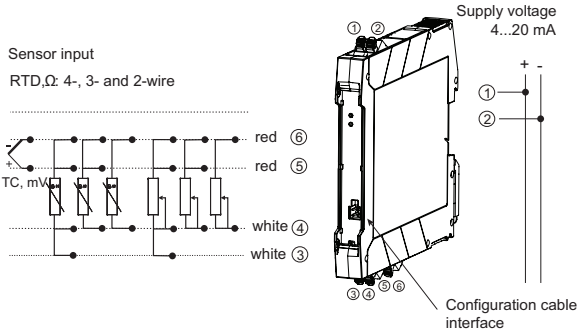
The height of housing H varies depending on the terminal version: screw terminals = 114 mm (4.49 in), push-in terminals = 111.5 mm (4.39 in)



Mounting the DIN rail transmitter

1. Position the top DIN rail groove at the top end of the DIN rail.
2. Slide the bottom of the device over the bottom end of the DIN rail until you can hear the lower DIN rail clip click into place on the DIN rail.
3. Pull gently on the device to check if it is correctly mounted on the DIN rail. If it doesn't move, the DIN rail transmitter is correctly mounted.

Wiring



**** For convenient installation, wiring plugs are removable.***

Note: In the event of a thermocouple (TC) measurement, a 2-wire Pt100 RTD can be connected to measure the reference junction temperature. This is connected to terminals 4 and 6.

Safety instructions:

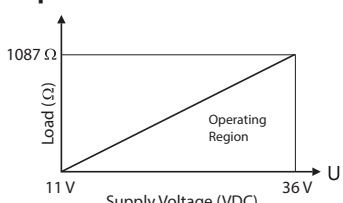
- To comply with UL61010-1 unit must be supplied by class 2 power supply.
- Disconnect power before making connections

Shielding

Please take note when installing the transmitter: The shield on the 4-20 mA signal output must have the same potential as the shield at the sensor connections. When using grounded thermocouples, shielding of the output 4 to 20 mA cable is recommended. In plants with strong electromagnetic fields, shielding of all cables with a low ohm connection to ground is recommended.

Due to the danger of lightning strikes it is recommended that shielded cable be used in installations outside of buildings.

Load Impedance



RLmax = ($V_{powersupply}$-11V) / 0.023A (current output)

e.g. (24V - 11V) / 0.023A = 565.22 Ω

Programming

Transmitter set-up is done using the Field Device Configurator programming software, available as a free download at www.automationdirect.com, and XT-USB configuration cable (purchased separately). The XT-USB configuration cable should be assigned to a windows communication port from COM1 to COM20 to communicate with the universal temperature transmitter.

Note:

The following tables show the structure of the Field Device Configurator programming software configuration parameters:

Basic Configuration Parameters
Sensor type (TC or RTD)
Connection mode (2-, 3-, or 4-wire connection/RTD only)
Units (°C, °F, °K, Ω, mV)
Measurement range start (depends on sensor type)
Measurement range end (depends on sensor type)
Reference junction (internal/external/fixed - TC only)
Failure mode (Min - 3.6 mA, Max 21.5-23 mA)
2-wire compensation (Ω - 2-wire RTD only)

Expert Configuration Parameters
Output (4-20 mA, 20-4 mA)
Damping (0-120 sec)
Offset (°C, °F, °K, Ω, mV)
Current trimming (4mA, 20mA)

Please visit www.automationdirect.com for specifications and additional information.