GX440

Isolating converters

Input and output circuit powered isolating module

- isolation and mutual conversion of 0 to 20mA, 4 to 20mA and 0 to10V signals
- two-wire connection for current signals
- three-wire connection for voltages signals
- isolation electric strength: 4000Vrms
- very low voltage drop across the current input: max. 2.5V
- DIN 35 rail-mounted design
- conversion error < 0,1%
- low cost (no auxiliary power supply built-in)

The module is designed to provide isolation and conversion of standard range currents or voltages signals, namely 0 to 20mA, 4 to 20mA and 0 to 10V. The module comprises no built-in power supply. The converter input and output circuits are therefore powered from the sources of the voltages/currents fed into the input/output terminals.

Current input and output of the converter are two-wire connected. The input circuit is powered from the measured current loop, loading it with a voltage drop of maximum 2.5V. The current output circuit behaves as a variable resistance. From the external power supply, it is controlled a current which is directly proportional to the input signal.
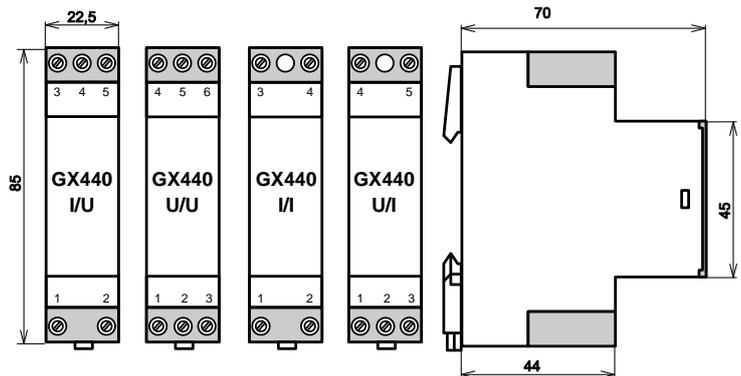
The voltage input and output require three-wire connection. The minus poles of both the external power supply and the signal circuit are connected to the GND terminal.

Instrument specifications:

- operating temperature range: -25...+ 70°C
- storage temperature range: -40...+ 80°C
- three-wire input supply voltage: 5…30V DC
          output:supply voltage: 12…30V
- three-wire input supply consumption: max. 2.5mA
          output:supply consumption: max. 1.5mA
- voltage drop across current input: max. 2.5V
- current output supply voltage: 3,5…30V DC
- max. conversion error: < 0.1%
- temperature induced error: < 0.01%/°C
- test voltage: 4000Vef
- input-to-output capacitance: 10pF
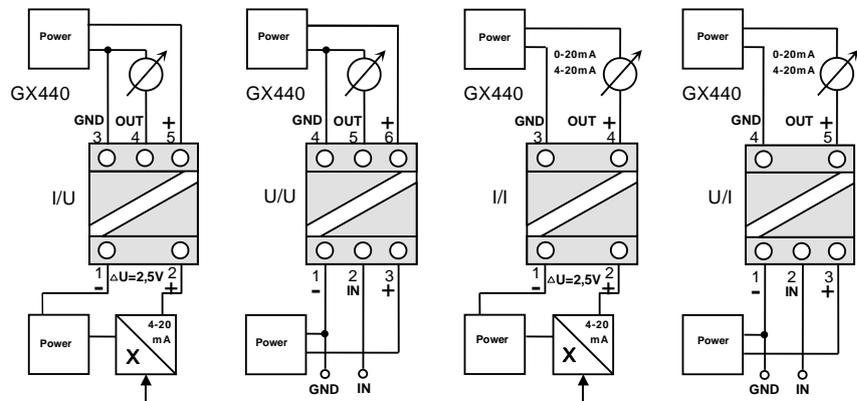- time constant: < 0.1s
- weight: 90g

Type tests:

General type test: to ČSN EN 60770-1
EMC: to ČSN EN 61326-1
Safety: assessed acc. to ČSN EN 61010-1

Terminal connection:

The terminal connection is apparent from the module application block diagrams.

Ordering instructions:

Your purchase order should include the following:
- converter type
- input range
- output range
- quantity (number of pieces)

Dimension drawing:

Isolating module application variants: