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ISOLATED CONVERTER OF DC CURRENT OR VOLTAGE

- PX24 loop powered 4- 20mA
- PXN auxiliary power supply

- measures and separates input DC current and voltage
- allows bipolar input and output signal
- input, output and supply circuits are isolated (4000V_{RMS} tested)
- designed for DIN 35 rail mounting
- conversion accuracy < 0.1%
- time constant typ.1ms, for order up to 300ms

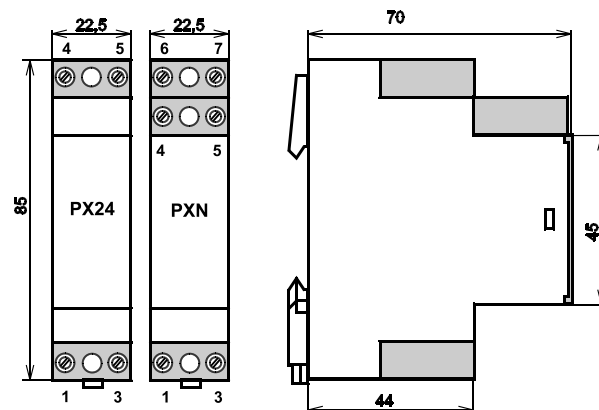
The module has been designed to convert DC current ($\pm 50\mu A \dots \pm 10A$) or voltage ($\pm 10mV \dots \pm 1000V$) from shunt resistors and sensors into a series of unified ranges (0..10V, 0..20mA, 4..20mA, 0..± 20mA, 0..±10V). The converter output-to-input response is linear. The converter is particularly well-suited for heavy electromagnetic interference environment operation and features input-to-output isolation.



Electrical specifications:

- operating temperature range: -25...+ 70°C
- storage temperature:: -40...+ 80°C
- supply voltage: PX24: 12..30V DC
- PXN: 19-300VDC 90-250VAC
- for order: 20 – 60VAC
- consumption: max. 1,5VA
- input signal: voltage from $\pm 10mV$ to $\pm 1000V$
- current from $\pm 50\mu A$ to $\pm 10A$
- output signal: PX24: 4..20mA
- PXN: 0..20mA, 4..20mA, 0..10V
- 0..±20mA, 0..±10V
- output voltage amplitude: min. 15V
- voltage output load: max. 10mA
- input resistance of voltage input: typ. 100kohm / V, max.13Mohm
- voltage drop of current input:: < 0,54V for 20mA, 5mV for 10A
- output current limit: typ. 30mA (electronic fuse)
- measurement error: < 0,1%
- linearity error: < 0,1%
- temperature induced error: < 50ppm /°C
- time constant: 1ms , for order up to 300ms
- enclosure (casing / terminal board): IP40 / IP20
- weight: 90g
- working environment: pollution level 2
- max.working voltage across isolation isolation level:
- overvoltage category instalation basic reinforced
- I up 1000V up 1000V
- II up 1000V up 600V
- III up 600V up 300V

Converter dimensions:



Terminal designation:

- 1,3...input signal (3 is +)
- 4,5..output signal (5 is +)
- 6,7.. auxiliary power supply without polarity

Type tests:

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

Connections: The terminals accept wires with 2,5mm². We recommend using a cable with a minimal cross 0,5mm². In the interfering environments use shielded or twisted cable.

Ordering instructions:

- Your order should include:
- module type
 - quantity
 - input and output signal
 - time response (if it is different from 1ms)



Likvidaci po ukončení životnosti provést odděleným sběrem.
Rawet s.r.o. je členem sdružení RETELA www.retela.cz

Application variants:

