

## Transducer for measurement DC current or voltage

- analog transmission with one setting range
- measured and galvanically isolated the input DC current or voltage signal
- allows bipolar input and output signal
- directly current measurements up to 5A, voltage up to 1000V DC
- input-output-power supply isolation: 4000Vrms
- auxiliary power supply in wide range 19 to 300VDC and 90 to 250VAC
- DIN 35 rail-mounted design
- conversion accuracy: < 0,1%
- time response: 1ms without transmission delay

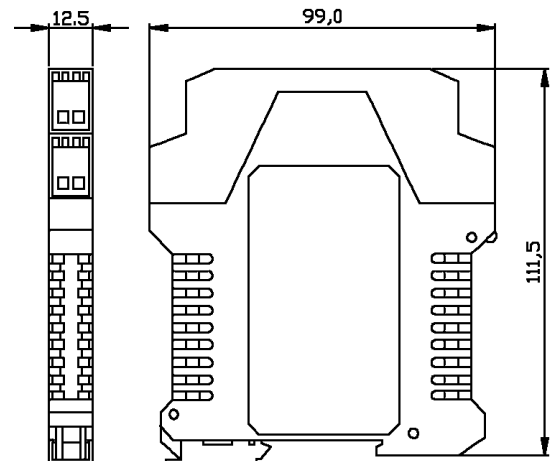
The module is designed to measure and galvanic isolation of input unipolar and bipolar signals from shunt resistors, voltage dividers and other sources of DC signals. Signal is modulated and optically transmitted to the output amplifier. The output of the converter is active bipolar or unipolar standard signal isolated from the input and the auxiliary power supply.

### Elektrical specifications:

- |  |   |            |
|--|---|------------|
| - operating temperature range:         | -25...+ 70°C                                    |            |
| - storage temperature range:           | -40...+ 80°C                                    |            |
| - auxiliary power supply               | standard: wide range 19 – 300VDC a 90 – 250 VAC |            |
|  | to order: 20 – 60VAC                            |            |
| - power consumption:                   | max. 1,5VA                                      |            |
| - input range:                         | from ±50uA to ± 5A DC                           |            |
|  | from ± 10mV to ± 1000V DC                       |            |
| - output range:                        | 4..20mA   |            |
|  | 0..20mA 0..± 20mA                               |            |
|  | 0..10V 0..± 10V                                 |            |
| - output voltage amplitude:            | 15V / Iout ( ohm )                              |            |
| - voltage output load:                 | max. 10mA                                       |            |
| - input resistance of voltage input:   | min. 100kohm/V, max. 13Mohm                     |            |
| - drop in current input:               | 0,54V for 20mA, 5mV for 10A                     |            |
| - output current limit:                | typ. 25mA (electronic cut-out)                  |            |
| - transfer function maximum error:     | < 0,1%  |            |
| - linearity error:                     | < 0,05%   |            |
| - temperature induced error:           | < 50ppm /°C                                     |            |
| - output signal ripple:                | < 10mV RMS                                      |            |
| - input to output capacity:            | 20pf  |            |
| - time response:                       | typ. 1ms  |            |
| - enclosure                            | casing / terminal board:<br>IP30 / IP20         |            |
| - weight:                              | 90g   |            |
| - working environment:                 | pollution level 2                               |            |
| - max.working voltage across isolation | isolation level:                                |            |
| overvoltage category installation      | basic   | reinforced |
| I                                      | up 1000V  | up 1000V   |
| II                                     | up 1000V  | up 600V    |
| III                                    | up 600V   | up 300V    |



Dimensional drawing:

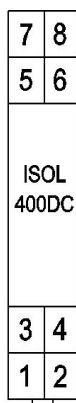


### Type test:

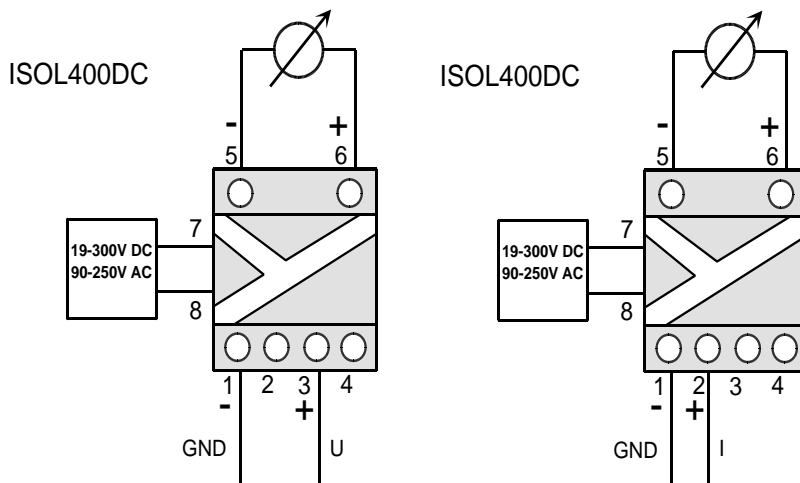
- |                     |                                |
|---------------------|--------------------------------|
| Standard type test: | to ČSN EN 60770-1ed.2          |
| EMC:                | to ČSN EN 61326-1              |
| Safety:             | assessed acc. to ČSN EN61010-1 |

### Terminals connection:

- 1...minus pole for input
- 2...plus pole for current signal
- 3...plus pole for voltage signal
- 4
- 5,6..output (6 is +)
- 7,8..auxiliary power supply without polarity



### Exmples of using the module:



### Ordering instructions:

Your order should include:

- module type ISOL400/DC
- input range
- output range
- number of peaces

### Ordering examples:

- ISOL400/DC 0..100mA / 0..10V = range 0..100mA/0..10V
- ISOL400/DC 0..±500V / 4-20mA = range 0..±500V/4..20mA ( input 0V corresponds to 12mA of output )

### Installation:

The terminals accept wires up to 2.5 mm<sup>2</sup>. We recommend using a cable with a cross section of 0.5mm<sup>2</sup>. Mechanically, the transducers are mounted on 35 mm DIN rail. After hanging to the rail has to be the bottom of the unit pushed to the rail. The latch on the bottom of the unit snaps it to the rail.

Demounting is done with a screwdriver. After releasing the latch you can removed unit from the rail.

### Replacing the converter:

The converter allows a very simple device replacement without removing the wires. Push by screwdriver under the original clips see figure 1 and 2, replace the unit and slide the clamps back.

Fig.1



Fig.2



Likvidaci po ukončení životnosti provést odděleným sběrem.  
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rev.5