

Isolation Amplifier HE 501



Features

- Input:
0(4) - 20 mA / 0 - 10 V DC, selectable
- Output:
0(4) - 20 mA / 0 - 10 V DC, selectable
- Input, output and mains galvanically separated
- Modular design
- Housing for DIN rail mounting 12-pole, 82 x 22.5 x 98.8 mm (h x w x d)

Brief Description

The active universal isolating amplifier HE 501 serves for the galvanic separation of measuring circuits, which are on different potential.

The galvanic isolation is performed between input, output and auxiliary energy (24 V DC). The HE 501 processes input signals within the range of 0 - 20 mA, 4 - 20 mA or 0 - 10 V. With two switches at the top side of the device the input value is defined.

The output signal is available at the same time as voltage signal (0 - 10 V) and current signal. With a switch in the front, the output current can be switched between 0 - 20 mA and 4 - 20 mA. The modular structured device allows a clear allocation of measuring circuits and corresponds to the EMV guidelines EN 50081 (Part 1) and EN 50082 (Part 2).

Technical Data

Input 0 - 20 mA, 4 - 20 mA or 0 - 10 V DC, selectable with S2, S3

Output 0 - 10 V DC and
0 - 20 mA or 4 - 20 mA switchable with S1

Linearity Error: < 0.2 % of span

Temperature Drift: < 100 ppm/K of span

Cut-Off Frequency: 500 Hz

Insulation Test Voltage: Input / Output
Input / Auxiliary Power
Output / Auxiliary Power } 500 V

Insulation Test Voltage: 2000 V

Mains Supply: 24 V DC (19 - 30 V)

Ambient Temperature: 0 - 50 °C

Housing: DIN rail housing 12-pole, 82 x 22.5 x 98.8 mm (h x w x d)

Class of Protection: Housing IP 40, Terminals IP 20

Standards: EN 50081 Part 1, EN 50082 Part 2

Input

| | |
|---|----------------------------|
| 1 | 0 ...10 V |
| 2 | 0 V switchable with S2, S3 |
| 3 | 0(4)...20 mA |

Output:

| | |
|---|--------------------------------|
| 7 | 0 ...10 V |
| 8 | 0 V |
| 9 | 0(4)...20mA switchable with S1 |

Auxiliary Energy:

| | |
|----|----------------------|
| 10 | 0 V |
| 12 | +24 V DC (19 - 30 V) |



Subject to technical Alterations !