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KSG I/U

Galvanic separator and signal converter
analog current signal
0/4-20mA for analogue voltage signal 0-10V
in a housing for a DIN rail

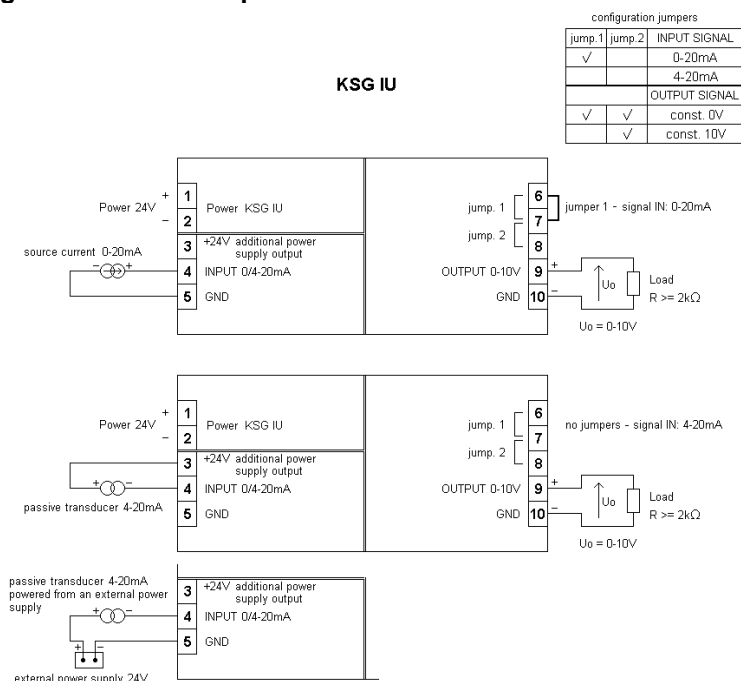


KSG I / U is primarily used to provide galvanic separation between two analogue signal circuits. In addition, it converts a 0-20mA or 4-20mA analog current signal into a 0-10V analog voltage signal.

The device can work with an input signal of 0-20mA or 4-20mA converting it into a 0-10V voltage signal. It is also possible to force an analog output to a constant 0V or 10V signal regardless of the current input signal value. There are therefore 4 modes of operation of the device, which are selected using two jumpers.

The analog input can also be connected to a 2-wire passive transducer of any physical size (eg temperature, pressure) operating in the standard of 4-20mA.

Connection diagram of KSG I/U separator.



Technical data KSG I/U.

Power supply:

- power supply voltage: **24V +/-10%**
- power consumption:
 - **30mA max, with an unloaded auxiliary power supply output**
 - **60mA max, using additional power supply**
 - **80mA max, when the auxiliary power supply is shorted to ground and shorted voltage output to ground**

The additional power supply output:

- power supply voltage: **24V +/-10% unstabilized**
- voltage drop: **max 3V at the output current 20mA**
- current limit: **30mA - protection against short circuit to ground**
- level of ripple: **+/-0.2V**

Current input:

- voltage drop at the entrance: **5V max, at 20mA (corresponds to the input resistance 250Ω)**
- current limit: **30mA - protection against applying too high voltage - max 30V**

Voltage output:

- load resistance: **2kΩ or more**
- short-circuit protection: **30mA - protection against short circuit to ground**

- accuracy of analog signal processing: **+/- 0.2%**
- response / conversion time (10-90%): **0.3sek**
- separation (U/In/Out): **1kV, 50Hz, 1 min**
- operating temperature range: **0-65 °C**
- relative humidity range: **0-90% (without condensation)**
- level of security: **IP20**
- work position: **any**
- housing dimensions: **17.5 x 94 x 65 mm**
- assembly: **in a housing for a DIN rail (TS35)**