



Model Number

K23-SSI/R2/IU-C

Signal converter SSI/Analog

Features

- Suitable for the connection of sensors and absolute encoders with SSI interface
- Analog output 0/4 mA ... 20 mA
- RS 232/RS 485-Interface for serial readout of sensor information
- SSI: Master or slave operation
- Specified option for arbitrary linearization characteristics
- Additional functions such as z. B. bit masking, concentricity function
- Supply 18 V DC ... 30 V DC

Technical data

Electrical specifications

Rated operating voltage	U_e	18 ... 30 V DC
Rated operating current	I_e	≤ 170 mA at 18 V DC (5.5 V not connected) ≤ 120 mA at 30 V DC
Supply		Encoder: 5.5 V ± 5 %, max. load 150 mA

Input 1

Input type	SSI
Input format	Gray code, binary code
Resolution	13, 21, or 25 bit
Input frequency	100 Hz ... 1 MHz

Input 2

Input type	Set
Signal voltage	
High	≥ 10 V
Low	≤ 3 V
Internal resistor	5 k Ω

Output

Number/Type	analog
Output rated operating current	0/4 ... 20 mA ($< 270 \Omega$) at ± 10 V DC (> 5 k Ω)

Ambient conditions

Ambient temperature	0 ... 45 °C (32 ... 113 °F)
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Mechanical specifications

Connection	screw terminals, max. core cross-section 0.34 ... 2.5 mm ²
Mass	approx. 190 g

Function

The K23-SSI/R2/IU-C is a small and favourably priced, but extremely powerful converter for industrial applications, which will convert sensor and encoder information, which is available in the SSI format into an analog signal or into a serial RS 232/RS 485 format. The device is supplied in a compact housing for standard rail mounting and has 12 screw terminal connections and a 25-pin and also a 9-pin Sub-D socket.

Applicable sensors and encoders

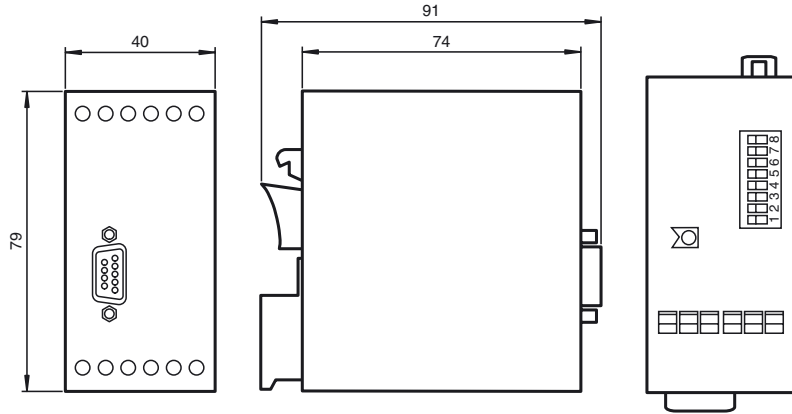
Singleturn or multiturn absolute encoders and all comparable sensors with SSI interface (6 ... 25 bit Binary or Gray-Code), either in the Master mode (the device generates the clock signal itself), or in the Slave mode (the device switches to an available clock signal).

Note on resolution:

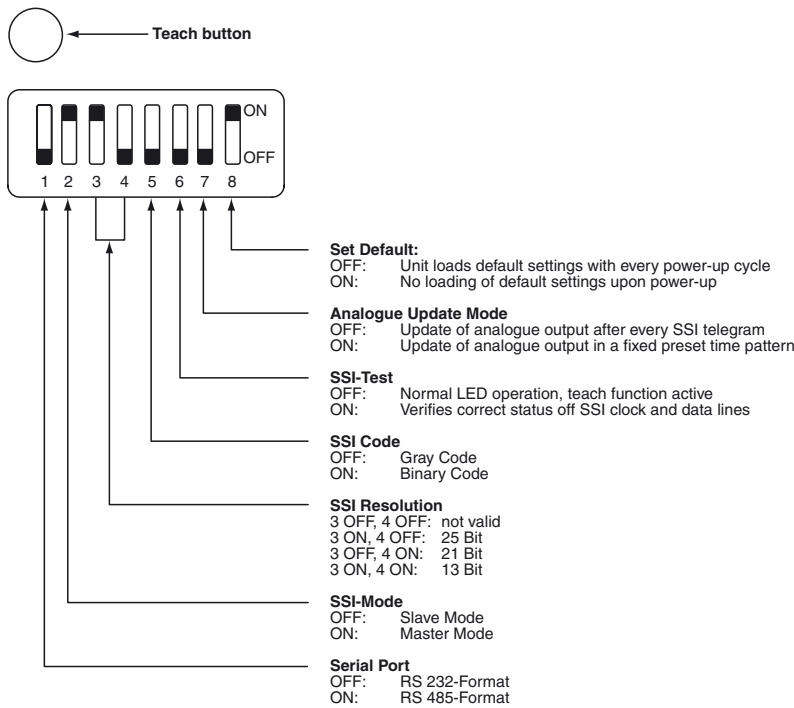
The device provides only for setting options for the standard resolutions 13 bit, 21 bit and 25 bit. For sensors with other resolutions the respective next highest value must be set (e.g. 21 bit for use with a 16-bit sensor).

Depending on the make and version of the sensor in question, it may be necessary in an individual case to mask out the surplus bits using the bit blanking function. However, in the routine case the device operates without fault and without further measures when the next highest resolution value is assigned.

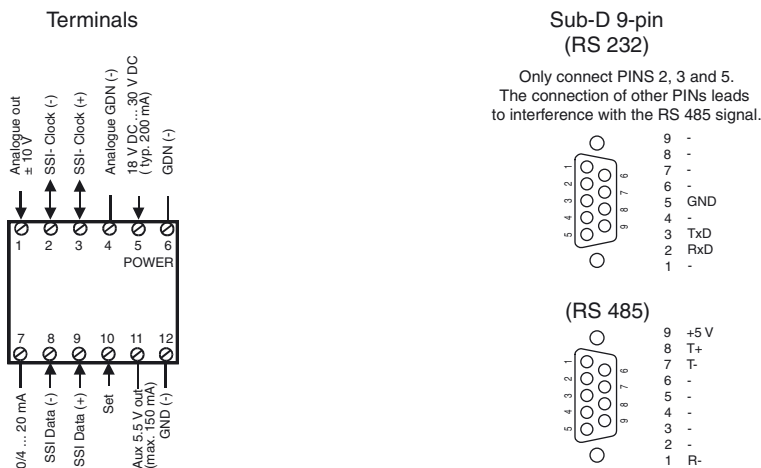
Dimensions



Indicators / Operating means



Electrical connection



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