

## Application

Conversion of a standard voltage signal into a standard current signal



The Type 6151 u/i Module converts a DC voltage of 0 or 2 V to 10 V into a current signal of 0 or 4 mA to 20 mA. An auxiliary power of 24 V DC is required.

Type 6151 u/i Module is suitable for attachment to devices with an electrical connection according to DIN EN 175301-803. The standard body connector, as shown in Fig. 1, or a special device connector for different versions can be used.

## Installation

For attachment to devices with a connector in accordance with DIN EN 175301-803, simply plug on the Type 6151 u/i Module. Connection is established using a cable socket according to DIN EN 175301-803.

The following SAMSON devices without device connector corresponding to DIN EN 175301-803 can be adapted to the u/i module:

SAMSON device	Device connector for	
	M 20 x 1.5	Case mounting
Positioner		
Type 3730-0/-1/-2	x	
Type 3760	x	
Type 3761	x	
Type 3767	x	
Type 4763	x	
Control valve V2001		
V2001-IP		x
i/p Converter		
Type 6111		x <sup>1)</sup>
Type 6116	x	

<sup>1)</sup> Type 6111 i/p Converter in special version

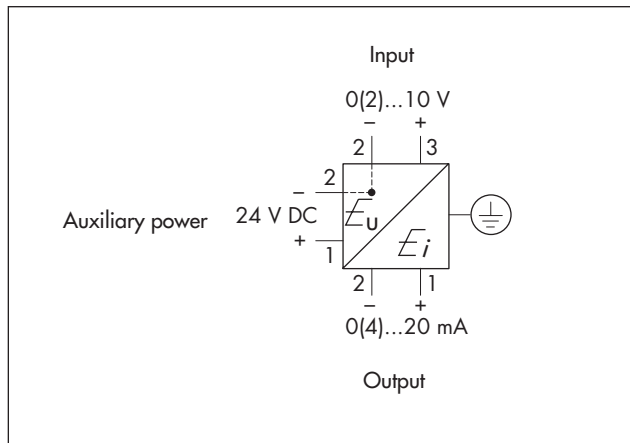


Fig. 1 · Type 6151 u/i Module

**Table 1 · Technical data**

Input	0 (2) to 10 V
Maximum values	-15 V / +27 V
Static destruction limit	-20 V / +32 V (± 32 V for short period)
Input resistance	50 kΩ at $U_e = 0$ to 10 V · 1 kΩ at $U_e < -0.3$ V or $U_e > 11$ V
Output	0 (4) to 20 mA
Maximum load	$R = \frac{U_H - 10V}{20mA}$ · e. g. 700 Ω at power supply of $U_H = 24$ V
Auxiliary power	16 to 30 V DC
Permissible ripple	Within the given limits
Static destruction limit	± 32 V DC
Reverse polarity protection	Up to -32 V DC
Supply current	Max. 22 mA, independent of supply voltage
<b>Characteristic</b>	
Characteristic	Linear, maximum deviation 0.2 %
Temperature effect	Zero: < 0.1 %/10 K · Span: < 0.1 %/10 K
Auxiliary power effect	< 0.05 % within the given limits
Operating temperature	-25 °C to +85 °C
Degree of protection	IP 65 when installed
Electromagnetic compatibility	EN 50081 Parts 1 and 2
Body material	Polyamide

**Electrical connection**



**Ordering text**

u/i Module Type 6151

Input 0 to 10 V or 2 to 10 V

Output 0 to 20 mA or 4 to 20 mA

Additional versions for input 0 to 10 V and output 4 to 20 mA are available.

On ordering modules for devices without DIN EN 175301-803 connectors, also specify the positioner or converter type as given overleaf.

Specifications subject to change without notice.

**Dimensions**

