



Type 6151 u/i Module



Application

Conversion of a standardized voltage signal into a standardized current signal



Fig. 1: Type 3372 Electropneumatic Actuator with Type 6151 u/i Module

The u/i module can be used with the following SAMSON devices (example):

Table 1: Application

SAMSON device	Device connector according to DIN EN ...	
	Replaces the M20x1.5 cable gland	Already exists
Positioner		
Type 3725	x ¹⁾	
Types 3730-0/-1/-2	x ¹⁾	
Type 3760	x ¹⁾	
Type 3761	x ¹⁾	
Type 3767	x ¹⁾	
Type 4763	x ¹⁾	
Series V2001 Valves with Type 3372 Electropneumatic Actuators		
Type 3321-IP		x ²⁾
Type 3323-IP		x ²⁾
Type 3531-IP		x ²⁾
Type 3535-IP		x ²⁾
i/p converter		
Type 6111		x ³⁾
Type 6116	x ¹⁾	

- 1) u/i module in 6151-03x version required
- 2) Series V2001 Valves in version with integrated positioner and plug connector
- 3) Type 6111 i/p Converter in version with male angle connector

Special features

The device converts a DC voltage of 0 or 2 V to 10 V into a current signal of 0 or 4 mA to 20 mA.

Design and principle of operation

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

Installation

For attachment to devices with a device connector and cable socket according to DIN EN 175301-803 (e.g. Type 3372 Pneumatic Actuator or Type 6111 i/p Converter in the version with male angle connector), simply plug on the Type 6151 u/i Module. The connector is connected to the cable socket. For devices without device connector and cable socket according to DIN EN 175301-803, the M20x1.5 cable gland is replaced by a device connector to install the u/i module.

Electrical connection

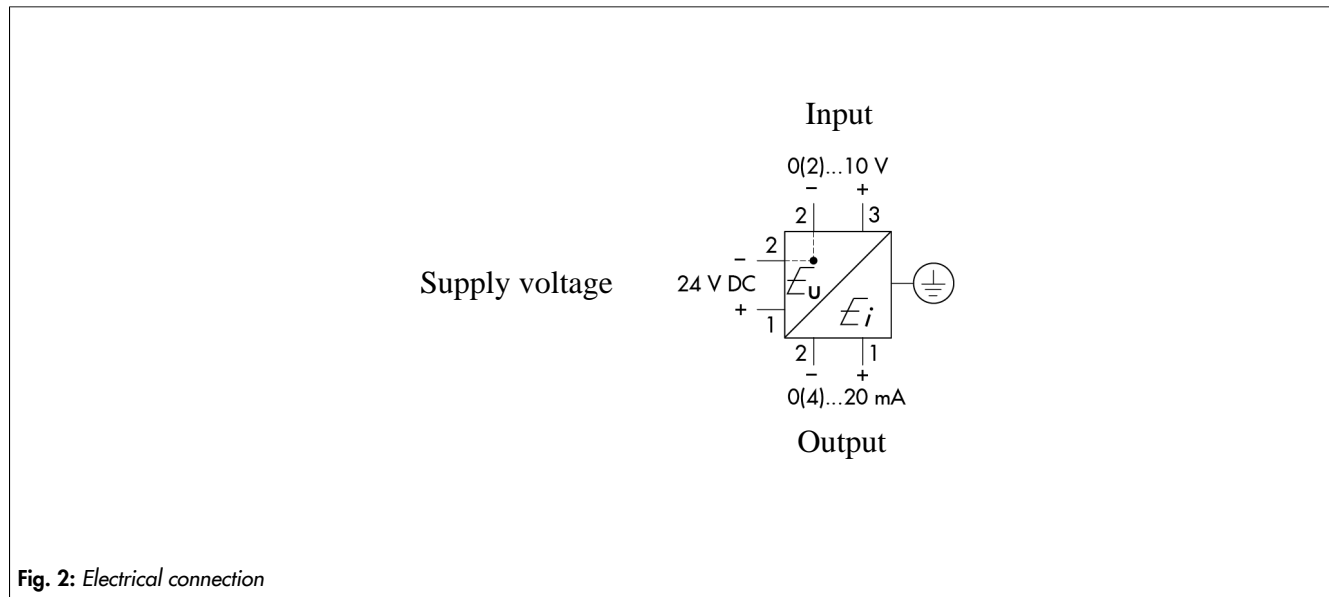
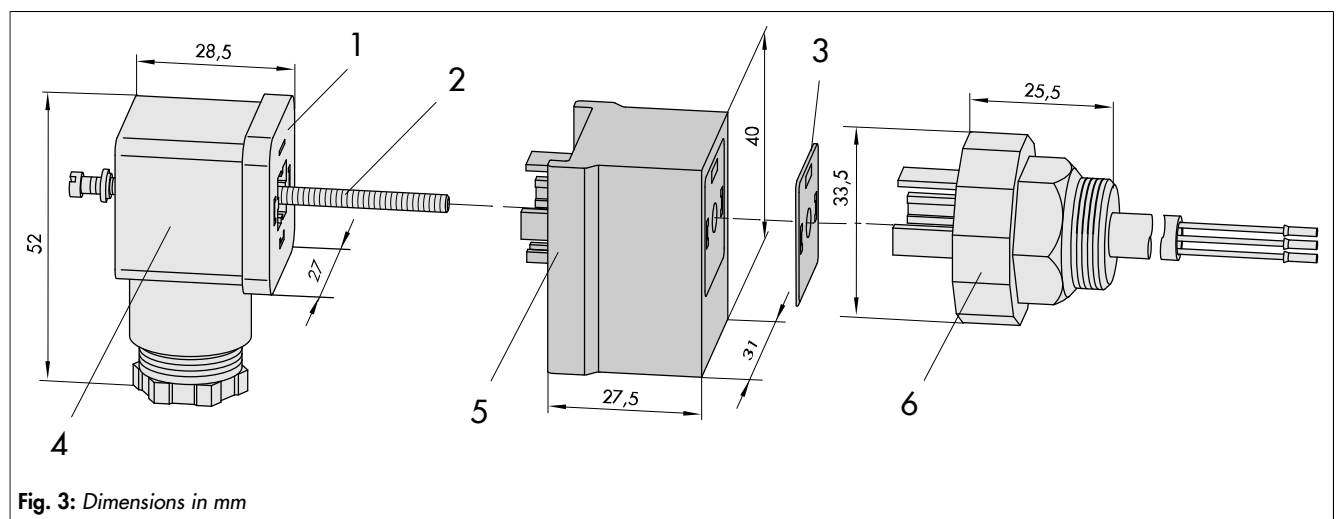


Table 2: Technical data

Type 6151	
Input signal	0/2 to 10 V
Maximum values	-15/+27 V
Static destruction limit	- 20/+32 V (briefly ±32 V)
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, also available with 0 to 10 V input, 4 to 20 mA output
Maximum load	$R = \frac{U_H - 10 \text{ V}}{20 \text{ mA}}$ (e.g. 700 Ω with supply voltage U _H = 24 V)
Supply voltage	16 to 30 V DC
Perm. ripple	Within the given limits
Static destruction limit	±32 V DC
Reverse polarity protection	Down to - 32 V DC
Supply current	Max. 22 mA, regardless of the power supply
Characteristic	
Characteristic	Linear, deviation from terminal-based linearity 0.2 %
Temperature influence on zero	<0.1 %/10 K
Measuring span	<0.1 %/10 K
Influence of supply voltage	0.05 % within the specified limits
Temperature range	
Operation	-25 to +85 °C
Material	
Housing	Polyamide
Degree of protection	IP65 when installed
EMC	According to EN 61000-6-2, EN 61000-6-3 and EN 61326-1
RoHS compliance	According to EN 50081-1 and EN 50081-2
Conformity	CE

Dimensions



- 1 Seal for cable socket
- 2 M3x60 with sealing washer
- 3 Seal for device connector
- 4 Cable socket according to DIN EN 175301-803
- 5 Type 6151 u/i Module
- 6 Device connector according to DIN EN 175301-803 (replacing the M20x1.5 cable gland)

Disposal



SAMSON is a producer registered at the following European institution ► <https://www.ewrn.org/national-registers/national-registers>.
WEEE reg. no.: DE 62194439/FR 025665

- ⇒ Observe local, national and international refuse regulations.
- ⇒ Do not dispose of components, lubricants and hazardous substances together with your other household waste.

i Note

SAMSON can provide you with a recycling passport according to PAS 1049 on request. Simply e-mail us at aftersaleservice@samsongroup.com giving details of your company address.

Tip

On request, SAMSON can appoint a service provider to dismantle and recycle the product as part of a distributor take-back scheme.

Ordering text

Complete order number as required

Order no.	Type 6151-...		
Explosion protection	Without	0	
Design	Only module with seal and M3x60 screw	1	
	Module with cable socket, seal and M3x60 screw	2	
	Module with cable socket, M20x1.5 device connector, seal and M3x60 screw	3	
	Module with cable socket, device connector according to DIN EN 175301-803, seal and M3x60 screw	4	
Signal	0/2 to 10 V input, 0/4 to 20 mA output		0
	0 to 10 V input, 4 to 20 mA output		1

Associated Information Sheet

- System 6000 ▶ T 6000
 - Electropneumatic Converters (Proportional Valves)
 - Electronic process controllers
 - Signal converters

