# DATA SHEET

**T 6151 EN**

## Type 6151 u/i Module

CE

### 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.

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## 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

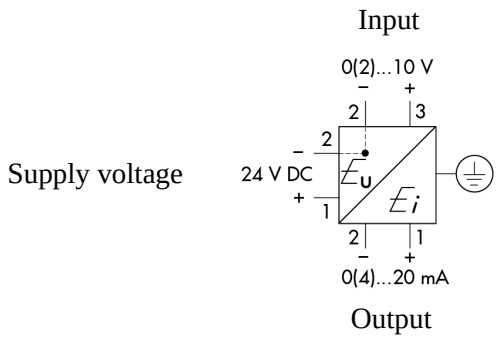



**Fig. 2:** *Electrical connection*

**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 | $R = \frac{U_H - 10\ V}{20\ mA}$ (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 |

| Type 6151 | |
|---|---|
| RoHS compliance | According to EN 50081-1 and EN 50081-2 |
| Conformity | CE |

## Dimensions

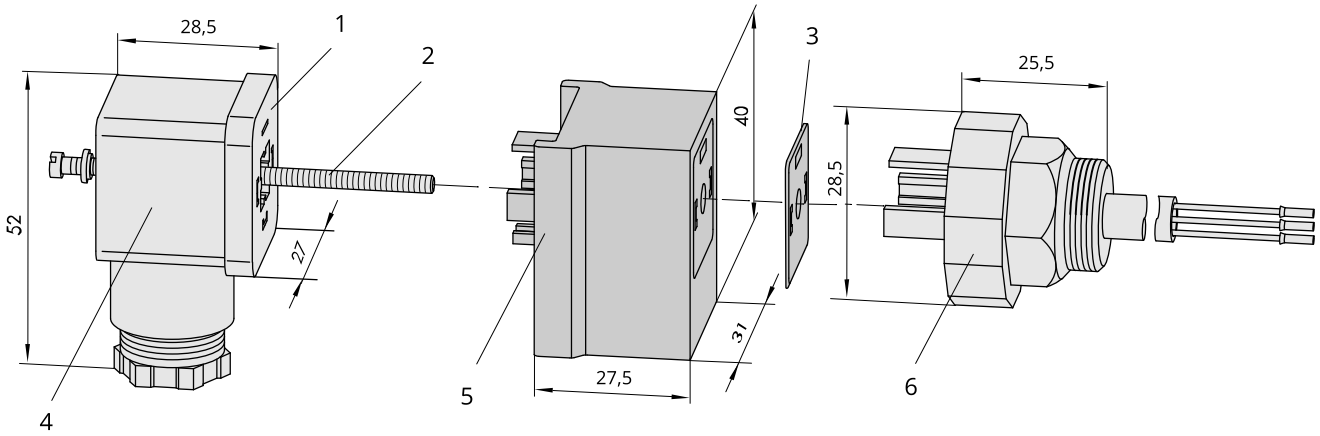



**Fig. 3:** *Dimensions in mm*

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 in Europe, agency in charge
▶ www.samsongroup.com > About SAMSON > Environment, Social & Governance > Material Compliance > Waste electrical and electronic equipment (WEEE)
WEEE reg. no.: DE 62194439

Information on substances listed as substances of very high concern (SVHC) on the candidate list of the REACH regulation can be found in the document “Additional Information on Your Inquiry/Order”, which is added to the order documents, if applicable. This document includes the assigned SCIP number, which can be entered into the database on the European Chemicals Agency (ECHA) website to find out more information on the SVHC ▶ https://www.echa.europa.eu/scip-database.

**i *Note***

*SAMSON can provide you with a recycling passport on request. Simply e-mail us at aftersalesservice@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.*

⇨ Observe local, national and international refuse regulations.

⇨ Do not dispose of components, lubricants and hazardous substances together with your other household waste.

## 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