

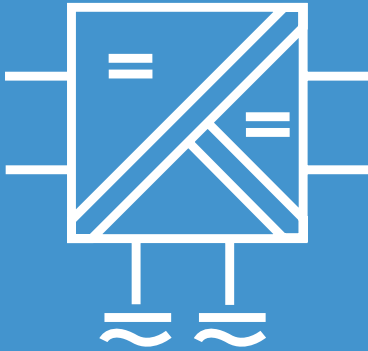
IsoAmp® 7000/8000

**Universal models
up to $I_1 = 3000\text{ V}$ and
 $I_1 = 5\text{ A}$**

The IsoAmp® 7000/8000 DC isolation amplifiers work bipolar as active amplifiers with transformer isolation between the input and sequential circuit. A special winding technique in conjunction with continuous Kapton insulation allows high isolation voltages.

At the same time the switching technology and device construction ensure excellent transmission values that are reflected, among other things, in the zero stability, linearity, long-term stability and frequency response.

Extensive optional equipment allows special applications for input voltages of 200 V to 3000 V or input current of 50 mA to 5 A to be implemented.



Warranty
5 years!

Defects occurring within 5 years from delivery are remedied free of charge at our plant (carriage and insurance paid by sender).

Product line

Devices	Order no.
Free wiring, with current output	7001 A1
Free wiring, with voltage output	8001 A1
Power supply	
230 V AC	
24 V, $\pm 15\%$, 48 ... 62 Hz, approx. 2 VA	06
110 V, $\pm 15\%$, 48 ... 62 Hz, approx. 2 VA	63
11.5 ... 15.5 V DC or 20.5 ... 27.5 V DC, switchable, approx. 1.5 W	74
60 V DC, $\pm 15\%$, approx. 1.5 W	213
110 V DC, $\pm 15\%$, approx. 1.5 W	243
Options	
Gain adjustment to customer requirements in the range $V_1 > 200 \text{ V} \leq 800 \text{ V}$ or $I_1 > 50 \text{ mA} \leq 5 \text{ A}$ ¹⁾	155
Gain adjustment to customer requirements in the range $V_1 > 800 \text{ V} \leq 1000 \text{ V}$ ¹⁾	156
Gain adjustment to customer requirements in the range $V_1 > 1000 \text{ V} \leq 3000 \text{ V}$ ¹⁾	414
Zero offset to customer requirements ¹⁾	50
Unipolar input, output 4 ... 20 mA, live zero, additional error $\pm 10 \mu\text{A}$ at output	55
Output 20 mA, 20 V, unipolar	59
8000 A1: Output voltage unipolar $\leq 20 \text{ V}$	189
7000 A1: Rectifier in signal path	152
Test voltage 7 kV AC input against output/power supply	179
Silicone emission free	253
Increased shock, vibration and moisture resistance	255

1) Please indicate required setting when ordering

Specifications, continued

Standards and approvals

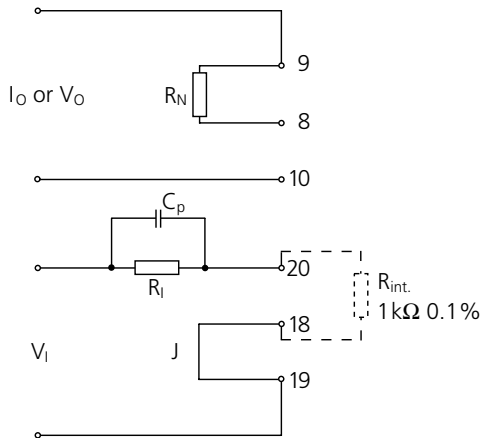
EMC	EMC directive 89/336/EEC
-----	--------------------------

Other data

Ambient temperature	-10 ... +70 °C
Enclosure	See dimension drawings for further measurements, screw clamps
Protection class	Case IP 40, terminals IP 20
Mounting	With snap-on mounting for 35 mm standard rail according to EN 46277 or screw mounting max. M5, see dimension drawing for conductor cross section
Weight	Approx. 400 g

Wiring examples

Voltage input:
Range settings with series resistor for any input voltages



Model 7001:	$R_N = 5 \Omega$
Model 7001, Opt. 55:	$R_N = 6.25 \Omega$
Model 8001:	$R_N = 207 \Omega$

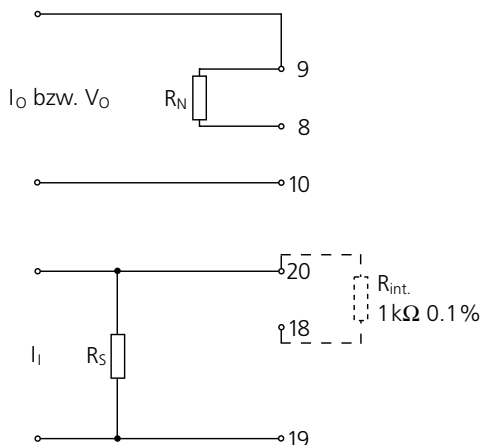
$$R_I = \frac{V_I}{0.1 \text{ mA}} - 1 \text{ k}\Omega$$

Input current: 0.1 mA

$$C_P = \frac{47 \text{ nF} \cdot 1 \text{ k}\Omega}{R_I}$$

Input resistance: $R_I + 1 \text{ k}\Omega$
See Specifications for cut-off frequency
 V_I in mV

Current input:
Range setting with shunt resistor R_S (voltage drop at R_S : 100 mV)

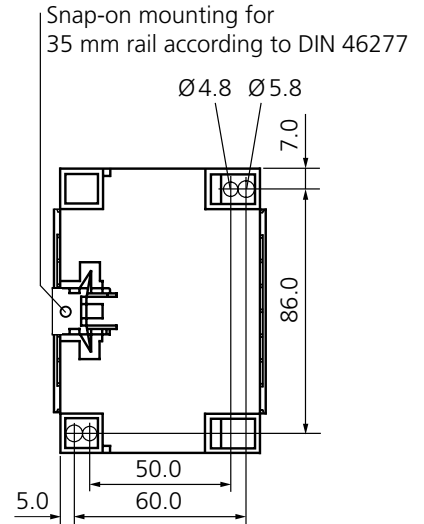
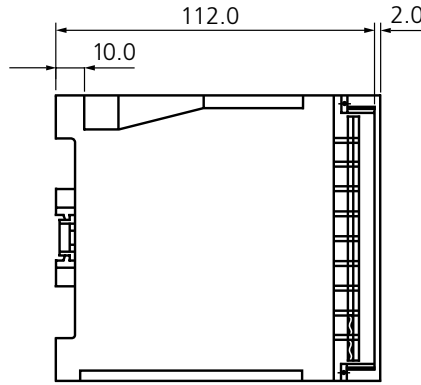
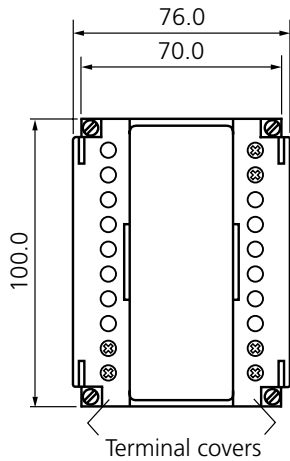


Model 7001:	$R_N = 5 \Omega$
Model 7001, Opt. 55:	$R_N = 6.25 \Omega$
Model 8001:	$R_N = 207 \Omega$

$$R_S = \frac{100 \text{ mV}}{I_I}$$

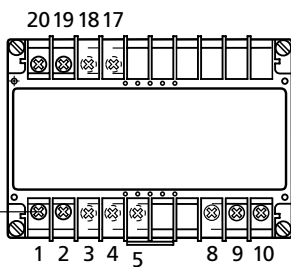
I_I in mA
Voltage drop at R_S : 100 mV
See Specifications for cut-off frequency

Dimension drawings and terminal assignments



All dimensions in mm.

View without terminal covers



Flat-type terminals with self-releasing clamping pieces to DIN 46206 and DIN 57609/VDE 0609, conductor cross section up to 2 x 2.5 mm², min. 1 or 2 x 0.2 mm²

Terminal assignments

- 1 Power supply -
 - 2 Power supply +
 - 3 Jumper 11.5 ... 15.5 V
 - 4
 - 4 Jumper 20.5 ... 27.5 V
 - 5
- } Opt. 74
- 9 Output ±
 - 10 Output 0
 - 17 Input ± (V_I > 200 V)
 - 19 Input ± (V_I ≤ 200 V)
 - 20 Input 0

Models 7001/8001 without Opt. 155/156/414

- 8 Negative-feedback resistor R_N
- 9 resistor R_N
- 17 n. c.
- 18 Jumper for 1 kΩ R_{int}.
- 19