

AC Isolation Amplifier

AD-TV 511 GS

AD-TV 551 GS

Description

The isolation amplifiers of type AD-TV 511 GS and AD-TV 551 GS serve as registry of sine wave alternating currents of sizes 0-1A AC and 0-5A AC. The alternating current is galvanically separated and converted to an impressed OC-standard signal. The alternating currents are supplied to the unit via high current connectors, external shunts are therefore obsolete. The output signals are amplified and are independent of the connected load up to a maximum value. The signals can be adapted to the application via a frontal trimmer.

Application

Adaptation of current transformer signals to DC standard signals by simultaneous galvanic isolation and amplification.



Business data

Order number

AD-TV 511 GS

Eingang 0 ... 1 A AC

AD-TV 551 GS

Eingang 0 ... 5 A AC

Technical specifications

Input

Measuring range	0 ... 1 A AC / 0 ... 5 A AC ¹⁾
Input frequency	40 ... 400 Hz
Overload temporary	+ 100 % (3 s)
Overload permanent	+ 50 %

Output

Max. output range	0/4 ... 20 mA ¹⁾
Max. burden	500 Ohm
Max. output range	0 ... 10 V ¹⁾
Min. burden	1 kOhm

Transmission behaviour

Linearity error	0,5 % of full scale
Rise time (90%)	700 ms
Temperature influence	+/- 100 ppm/K

Supply

Supply voltage	20 ... 253 V DC / 50 ... 253 V AC
Max. power consumption	1,7 W / 3,5 VA

Housing

Manner of fastening	DIN rail 35mm (EN 50022)
Type of protection	IP 20
Connector cross section	max. 2,5 mm ²
Bolting torque screw terminals	0,5 Nm
Weight	ca. 110 g

Environmental conditions

Ambient temperature	0 ... 50 °C
Storage and transport	-10 ... 60 °C

EMC

Product family standard	EN 61326
Emitted interference	EN 55011, CISPR11 Cl. B

Electrical safety requirements

Product family standard	EN 61010-1
Overvoltage category	II
Pollution degree	2
Safety measurement	EN 61010-2-030
Measurement category	CAT III

Galvanic isolation, test voltages

Input/output	4 kV (1 min)
Input/power-supply	4 kV (1 min)
Output/power-supply	3 kV (1 min)

¹⁾ Values must be advised by order

²⁾ During electromagnetic disturbance minor changes in output signal are possible.



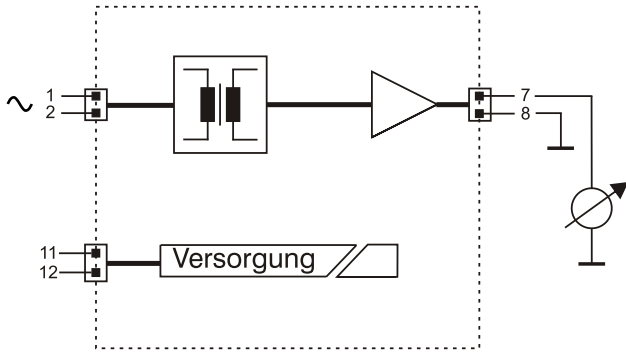
ADAMCZEWSKI
Elektronische Messtechnik GmbH

AC Isolation Amplifier

AD-TV 511 GS

AD-TV 551 GS

Block and wiring diagram



Dimensions

