

Description

The bipolar high-current isolation amplifier AD-TV 350 GVF is used for the galvanic isolation, transformation and amplification of bipolar current or voltage signals. The device allows the transmission of direct as well as alternating current signals up to a high frequency range. The high-current output can supply currents up to 200 mA. Thanks to the integrated 3-way isolation, the input, output and supply voltage are high electrically isolated from each other. The efficient wide-range power supply of the AD-TV 350 GVF allows operation in a wide supply voltage range.

Application

Detection, transformation and amplification of fast changing bipolar signals (current or voltage). Directly controlling e.g. Control valves through the high current output.

**Specific characteristics**

- bipolar input
- bipolar high current output
- wide-range power supply

Business data**Article number**

AD-TV 350 GVF

Please specify input and output data.
Example. E: +/- 20 mA; A: +/- 200 mA

Technical specifications**Input current**

Measuring range	+/- 20 mA
Input resistance	ca. 25 Ohm

Input voltage

Measuring range	+/- 10 V
Input resistance	ca. 100 kOhm

Output current

Output range	+/- 200 mA
Max. burden	40 Ohm @ 200 mA
Residual ripple	300 µAss @ 200 mA

Output voltage

Output range	+/- 10 V
Min. burden	100 Ohm @ 10 V
Residual ripple	40 mVss @ 10 V

Supply

Voltage range AC	50 ... 253 V AC, 50/60 Hz
Nominal voltage AC	230 V AC
Voltage range DC	20 ... 253 V DC
Nominal voltage DC	24 V DC
Power consumption AC / DC	5 VA / 3 W

Transmission behaviour

Basic accuracy	< 0,2 %
Temperature influence	70 ppm/K
Cut-off frequency	ca. 1,5 kHz (-3 dB)
Phase shift I/O	ca. 7,5 °
Power-on drift	ca. 0,1 %

Housing

Dimensions (WxHxD)	33x110x134 mm
Type of protection	IP 20
Connection method	detachable terminal clamp
Terminals, wire cross section	2,5 mm ² flex wire / 4 mm ² one wire
Bolting torque terminals	0,5 Nm
Weight	~ 200 g
Manner of fastening	35 mm DIN rail 35mm

Environmental conditions

Ambient temperature	0 ... 50 °C
Storage and transport	-10 ... 70 °C (no condensation)

EMC

Product family standard	EN 61326 ¹⁾
Emitted interference	EN 55011, CISPR11 Cl. B

Electrical safety requirements

Product family standard	EN 61010-1
Overvoltage category	II
Pollution degree	2

Galvanic isolation, test voltages

Signal / supply unit	3 kV, 50 Hz (1 min.)
Input / output	2,5 kV, 50 Hz (1 min.)

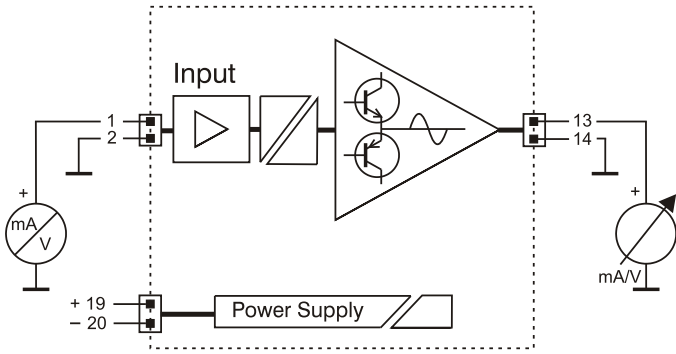
Protection circuits

Input	electrical surge protection
Output	electrical surge protection
Power supply	electrical surge and reverse current protection

¹⁾ During checking, slight signal deviations are possible.



Block and wiring diagram



Dimensions

