

Description

The VARIO isolation amplifier AD-TV 30 GL serves to galvanically separate, convert and amplify DC current signals and voltage signals (0/4...20 mA and 0/2...10V DC). The signal sizes are adjustable at the front. The output signal follows the input size linear and is independent of the connected load up to a limiting value. Input, output and the supply voltage are galvanically separated from each other with a high degree of insulation. A highly efficient, integrated electronic wide-range power pack enables operation with 20...253 V DC or 50...253 V AC. There is no possibility of cross polarity of the connection voltage. A high packing density is achieved due to its narrow build.

Application

Conversion, load amplification and galvanic decoupling of impressed DC current signals and voltage signals.

**Business data**

Order number AD-TV 30 GL

Technical specifications**Input current**

Measuring range 0/4 ... 20 mA
Input resistance 85 Ohm

Input voltage

Measuring range 0/2 ... 10 V
Input resistance > 100 kOhm

Output current

Output range 0/4 ... 20 mA
Max. burden 500 Ohm
Residual ripple 50 µAss

Output voltage

Output range 0/2 ... 10 V
Min. burden > 10 kOhm
Residual ripple 50 mVss

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 2,3 VA / 1W

Transmission behaviour

Basic accuracy < 0,2 %
Temperature influence 100 ppm/K
Response time ~ 20 ms

Housing

Dimensions (WxHxD) 18x78x103 mm
Type of protection IP 20
Connection method screw clamp
Terminals, wire cross section 2,5 mm² flex wire / 4 mm² one wire
Bolting torque terminals 0,5 Nm
Weight ~ 100 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

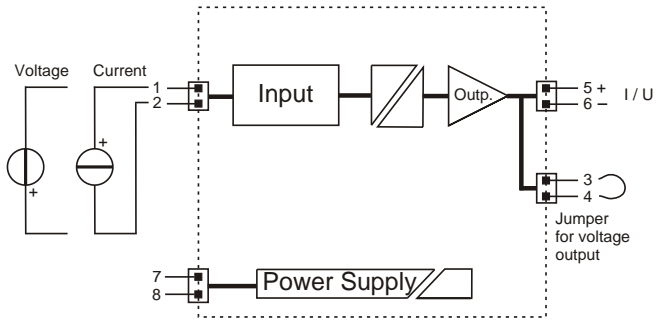
Input / output 3,75 kV, 50 Hz (1 min.)
Signal / supply unit 4 kV, 50 Hz (1 min.)

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

