

Description

The separation amplifier AD-TV 22 GL serves the galvanic separation and amplification of DC-current signals (0/4-20 mA). The output signal follows linear the input dimension and is independent of the connected burden up to a limiting value. Input, output and supply voltage are galvanically separate from each other with high insulation. An integral electronic power pack with a high degree of effectiveness prevents strong heating and allows high output loads. A high packing density is achieved in combination with a narrow type of construction.

Application

Burden amplification and galvanic decoupling of active DC-current signals in a cost-effective build-up.



Specific characteristics

- Supply buffer amplifier for 3-way separation of 0/4-20 mA signals (output follows input 1:1)
- 18 mm narrow housing

Business data

Order number AD-TV 22 GL

Technical specifications

Input current

Measuring range 0 ... 20 mA; 4 ... 20 mA
Input resistance 50 Ohm

Output current

Output range 0 ... 20 mA; 4 ... 20 mA
1:1 to the input signal
Max. burden 400 Ohm
Residual ripple <25 μ Ass

Transmission behaviour

Basic accuracy < 0,2 %
Temperature influence < 100 ppm/K

Supply

Supply voltage 20 ... 253 V DC / 50 ... 253 V AC
Nominal voltage 24 V DC / 230 V AC
Power consumption 0,9 W / 2 VA

Housing

Dimensions (WxHxD) 18x81x103mm
Type of protection IP 20
Connection method Schraubklemmen
Terminals, wire cross section 2,5 mm² flex wire / 4 mm² one wire
Bolting torque terminals 0,5 Nm
Manner of fastening DIN rail 35mm (EN 50022)
Weight ca. 100 g

Environmental conditions

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

EMC

Product family standard EN 61326-1 ¹⁾
Emitted interference EN 55011, CISPR11 Cl. B
¹⁾During electromagnetic disturbance minor changes in output signal are possible.

Electrical safety requirements

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

Functional safety

Safety integrity level SIL 2 (IEC 61508)

Galvanic isolation, test voltages

Input/output 3,75 kV RMS (1 min.)
Signal/auxiliary voltage 3 kV RMS (1 min.)

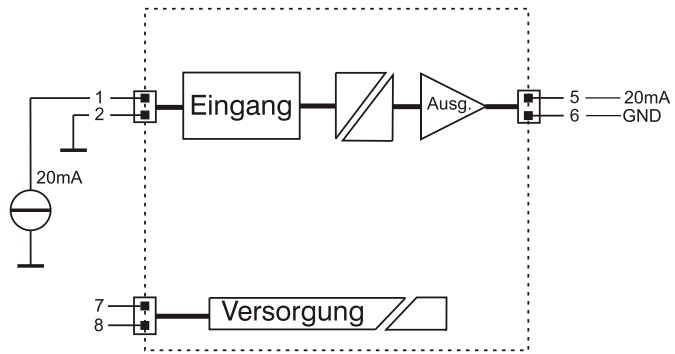
Protective systems

Input/output electrical surge protection
Power supply electrical surge and reverse current protection

Isolation Amplifier

AD-TV 22 GL

Block and wiring diagram



Dimensions

