

Description

The VARIO-isolation amplifier AD-TV 32 GL serves the galvanic separation, conversion and amplification of DC current and voltage signals (0/4-20 mA and 0/2-10 V DC). The signal dimensions are adjustable at the front. The starting and end values can here be adjusted independent of each other. Input, output and the supply voltage are separate from each other with high insulation. An integral electronic wide range power pack with a high degree of effectiveness allows operation in a supply range of 20...253 V DC or 50...253 V AC. Additionally, a nominal value can be specified via switch at the front at the output. The input measuring signal is decoupled and without influence during this. The nominal value at the output, which can be activated and adjusted via a potentiometer at the front.

Application

Conversion, burden amplification and galvanic decoupling of active DC-current and voltage signals with additional manual / automatic operation via a nominal value specification, which can be activated.



Specific characteristics

- Front panel switch for switching between manual and automatic operation
- Value setting for manual operation by front-face potentiometer

Business data

catalog number AD-TV 32 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

Setpoint setting

Front mounted potentiometer 0 ... 100 %

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 thawing)

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

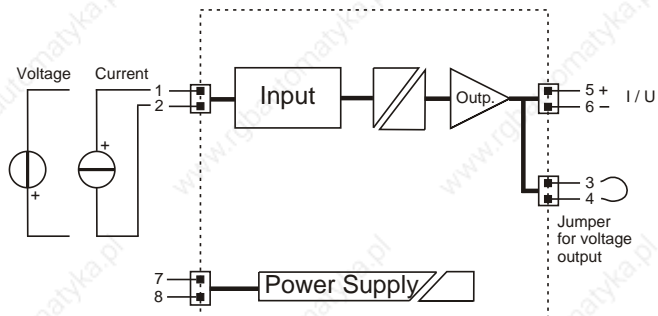
Input / output 3,75 kV, 50 Hz (1 min.)
Signal / supply unit 4 kV, 50 Hz (1 min.)

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**