

Description

The multiplier separation amplifier AD-TV 452 GS serves the galvanic separation, amplification and conversion or adaption of analogue measuring signals and, at the same time, the multiplication of the input signal. The compact housing contains two synchronous output channels. All output channels are galvanic separated from each other, from the input and from the supply voltage. The type of signal can be freely selected at the input and the signal is multiplied onto the two outputs. The standard signal combinations can be selected via the connector terminals at the side of the unit. Additionally, the separation amplifier has a highly efficient electronic power pack, which admits high loads at the two outputs and causes low heat development.

Application

Galvanic separation or conversion of analogue standard signals with simultaneous multiplication.



Specific characteristics

- narrow 23mm type of construction
- two galvanic separated, synchronous current outputs

Business data

Order number AD-TV 452 GS

Technical specifications

Input

Range current input	0 ... 20 mA
Input resistance current	50 Ohm
Range voltage input	0 ... 10 V
Input resistance voltage	100 kOhm

Current outputs

Output range	0...20 mA
Max. burden	400 Ohm

Voltage outputs

Output range	0...10 V
Min. burden	4 kOhm

Accuracy

Accuracy	< 0,2 %
Linearity error	< 0,2 %
Max. residual ripple	50 mVss
Temperature influence	100 ppm/K
Max. response time	100 ms

Supply

Voltage range	20...253 VDC / 50...253 VAC
Rated frequency	50...60 Hz
Power consumption	max. 1,3 W / 2,5 VA

Housing

Dimensions (WxHxD)	23x78x103 mm
Type of protection	IP 20
Connection method	screw clamp
Terminals, wire cross section	2,5 mm ² flex wire / 4 mm ² one wire
Bolting torque terminals	0,5 Nm
Weight	ca. 200 g
Manner of fastening	35 mm DIN rail

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	2,5 kV (1 min.)
Signal / supply unit	3 kV (1 min.)

Protection circuits

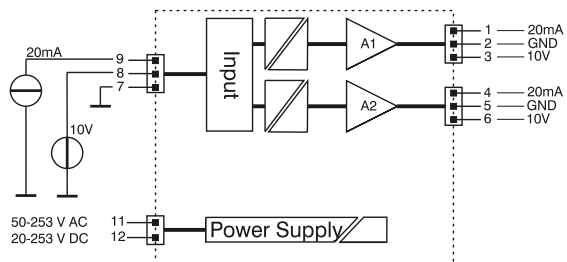
Input	electrical surge protection
Output	electrical surge protection
Power supply	electrical surge and reverse current protection

¹⁾ During electromagnetic disturbance minor changes in output signal are possible.

Isolation Amplifier

AD-TV 452 GS

Block and wiring diagram



Dimensions

