

Description

The measuring transducer transforms the position of a remote transmitter (potentiometer) into a proportional output signal. All remote transmitter can be used with the full-scale values of 100 ohms up to 100 kohms. Precision calibration trimmer for zero and full scale are included in the amplifier. The output signal is independent of the connected load up to maximum resistance. It can be selected between current or voltage output. Due to the highly efficient integrated wide range power supply high output loads are achieved with low power consumption.

Application

Continuous indication of height level sensors, manometers, position sensors etc. with remote transmitter as potentiometer.

**Specific characteristics**

- Scanning of potentiometers of 100 ohms to 100 ohms
- Zero and span trimmer for wire calibration
- Current or voltage output
- Wide range power supply

Business data

Order number AD-MV 110 GS

Technical specifications**Potentiometer-input**

Measuring range 0 ... 100 Ohm up to 0 ... 100 kOhm
Feeding voltage ~ 1V DC

Output current

Output range 0 ... 20 mA, 4 ... 20 mA¹⁾
Max. burden 500 Ohm
Residual ripple 20 µAss

Output voltage

Output range 0 ... 10 V, 2 ... 10 V¹⁾
Min. burden 500 Ohm
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 2,2 VA / 1,1 W

Transmission behaviour

Accuracy < 0,2 %
Temperature influence 50 ppm/K
Response time ~ 200 ms

Housing

Dimensions (WxHxD) 23x78x103 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 61326²⁾
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 4 kV (1 min.)

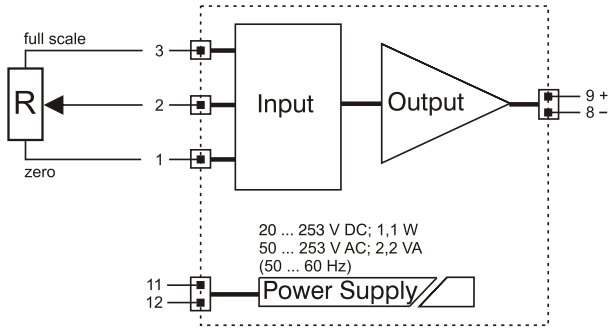
Protection circuits

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

¹⁾ Signal range according to customer data.

²⁾ During electromagnetic disturbance minor changes in output signal are possible.

Block and wiring diagram



Dimensions

