

Description

The measuring contactor AD-MK 330 GS serves the switching of limiting values to analogue signals or standard signals. The device has an 0..20 mA, 4..20 mA input and an 0..10 V input, which can be used alternatively. With its two potential-free change-over contacts, the AD-MK 330 GS can switch maximal two independent limiting values. The switching thresholds can be set at the front with the aid of the integral key coding switch in percent steps. The status of the relevant relay is indicated via an LED at the front. The AD-MK 330 GS has two different operating modes, which can be selected via the function keys. Either two independent limiting values can be switched, whereby here one key coding switch per relay is effective. The switching hysteresis is in this case 1 percent. In operating mode hysteresis, both relays are synchronous. Here, the upper and lower switching point (switch-on point and switch-off point) can be selected separately with the two key coding switches. The relays can work in the operating current principle or the closed-circuit current principle in both operating modes. This can also be selected at the function keys. The efficient wide range power pack allows the supply with all established supply networks or voltage levels. Input, output and supply voltage are separated from each other galvanically with high isolation.

Application

Switching of limiting values on active standard signals, which correspond to, for instance, flows, height levels or temperatures.



Specific characteristics

- analog inputs for current and voltage
- two potential-free changeover
- simple point setting using coded key
- wide range power supply
- no software
- status LED

Business data

Order number AD-MK 330 GS

Technical specifications

Current inputs

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

Input voltage

Measuring range	0 ... 10 V
Input resistance	400 kOhm

Relay outputs A/B

Contact type	potential free changeover
Max. AC-breaking capacity	250 V AC, 2 A AC, 50Hz
Max. DC-breaking capacity	50 V DC, 2 A DC
Switching operations	
Mechanical	10 ⁷
AC: 230V / 2A, cos(phi)=1	6 * 10 ⁵
AC: 230V / 2A, cos(phi)=0,4	2 * 10 ⁵
DC: 24V / 1A	2 * 10 ⁵

Transmission behaviour

Setting accuracy	1 % (1 Digit)
Accuracy switching threshold	max. +/- 1 % from end value
Temperature influence	+/- 100 ppm/K of full scale
Factory switching hysteresis	Switching threshold - 1 % of end value
Response time	~ 100 ms

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 / 1,5 W

Housing

Manner of fastening	DIN rail 35mm (EN 50022)
Type of protection	IP 20
Connector cross section	max. 2,5 mm ²
Connection method	screw clamp
Bolting torque terminals	0,5 Nm
Weight	~ 200 g

Environmental conditions

Ambient temperature	-10 ... 50 °C
Storage and transport	-10 ... 60 °C (no condensation)

EMC

Product family standard ¹⁾	EN 61326-1
Emitted interference	EN 55011, CISPR11 Cl. B, Gr. 1

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

Galvanic isolation, test voltages

Input/relays	4 kV (1 min)
Input/power-supply	3 kV (1 min)
Relays/power supply	4 kV (1 min)
Relays with each other	3 kV (1 min)

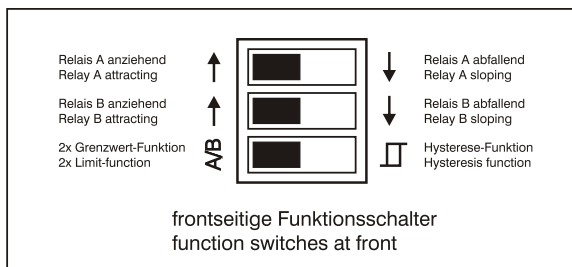
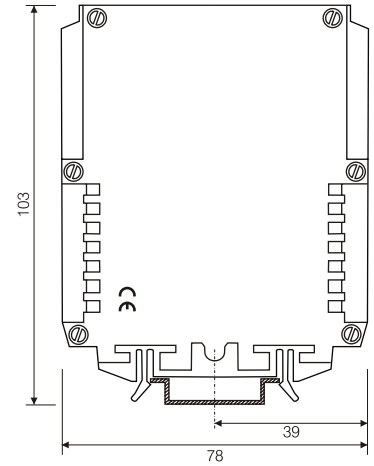
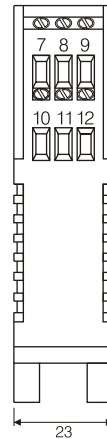
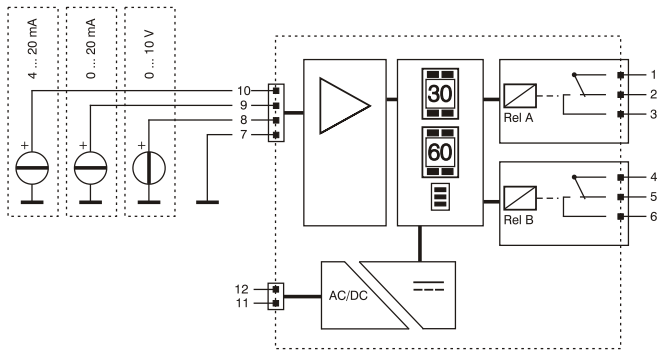
Protective systems

Input	overvoltage
Power supply	Overvoltage, overtemperature



Block and wiring diagram

Dimensions



Circuit examples

