Limit Switch

# Limit-switch For Standard Signals

AD-MK 330 GS

## 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

## Information

**Downloads**

| | |
|---|---|
| Tender text | mk330gs.zip |

## 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 mm² |
| 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 |





ADAMCZEWSKI
Elektronische Messtechnik GmbH
Felix-Wankel-Str. 13
Tel. +49 (0)7046-875
vertrieb@ad-messtechnik.de
74374 Zaberfeld
Fax +49 (0)7046-7678
www.adamczewski.com

# Limit-switch For Standard Signals

AD-MK 330 GS

## Technical specifications

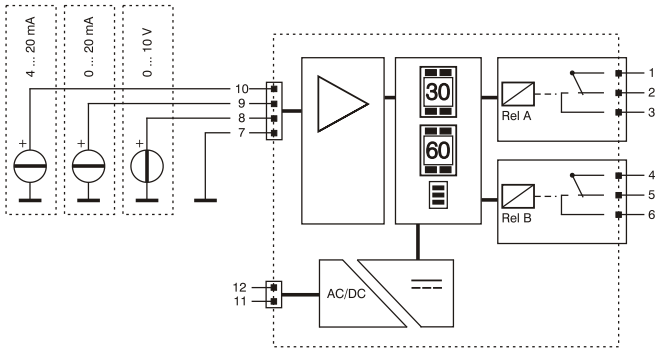
**Galvanic isolation, test voltages**

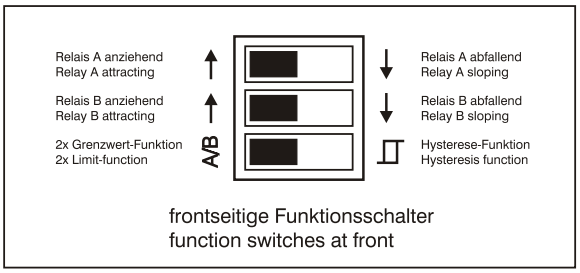
| | |
|---|---|
| Input/relays | 4 kV (1 min) |
| Input/power-supply | 3 kV (1 min) |
| Relays/power supply | 4 kV (1 min) |
| Relays with each other | 3 kV (1 min) |

**Protective systems**

| | |
|---|---|
| Input | overvoltage |
| Power supply | Overvoltage, overtemperature |

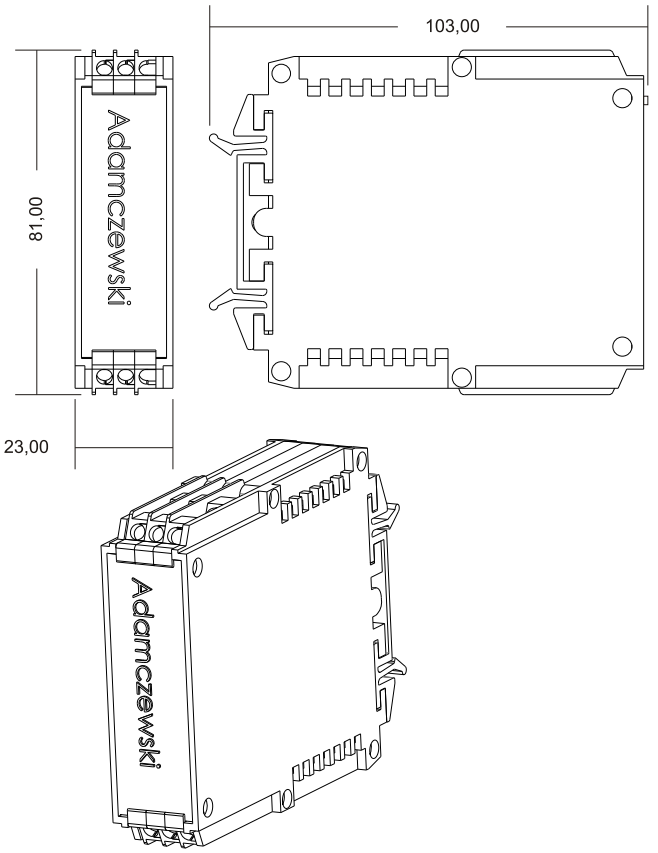
## Block and wiring diagram




frontseitige Funktionsschalter
function switches at front

## Dimensions



# Limit-switch For Standard Signals

AD-MK 330 GS

## Circuit examples