

Description

The E-T-A Voltage Monitor E-1079 is designed to monitor DC voltages. The MAX and/or MIN limit value can be directly set by means of the digital switches provided on the front of the housing. Voltage falling below, or rising above, the preset limit causes the integral relay (change-over contact) to de-energise.

The switching delay to compensate for short duration voltage fluctuations may be set between 0.2 and 30 s by means of the potentiometer. The monitors operate on the closed-circuit principle, i.e. voltage failure has the same effect as an incorrect voltage level. LEDs provide indication of relay status, operating voltage and adjustment errors (LEDs extinguish when there is a fault).



Typical applications

- Monitoring of limit values for standard signals (e.g. 0...10 V)
- Monitoring of operating voltages

Features

- Digital limit value preselection
- Permanent limit value indication
- Adjustable response delay

Technical data

| | |
|----------------------|--|
| Voltage ratings | AC 115 V 50/60 Hz (90...135 V) AC 230 V 50/60 Hz (200...244V) |
| Power consumption | 2 VA |
| Measuring ranges | DC 199 mV Ri = 20 kΩ DC 1.99 V Ri = 100 kΩ DC 19.9 V Ri = 100 kΩ |
| Accuracy | 1% ± 2 digits |
| Hysteresis | 1 digit |
| Min/Max difference | 5 digits (MIN/MAX version only) |
| Response delay | may be set between 0.2 and 30 s |
| Temperature range | 0 ... +50 °C (without condensation) |
| Relay output | AC 250 V/5 A change-over contact DC 30 V/5 A |
| Degree of protection | IP 50 housing IP 20 terminals |
| Connection | 2x2.5 mm² screw terminals |
| Mounting | 35 mm rail to DIN EN 50022 |
| Dimensions | 45 x 74 x 125 mm (W x H x D) |

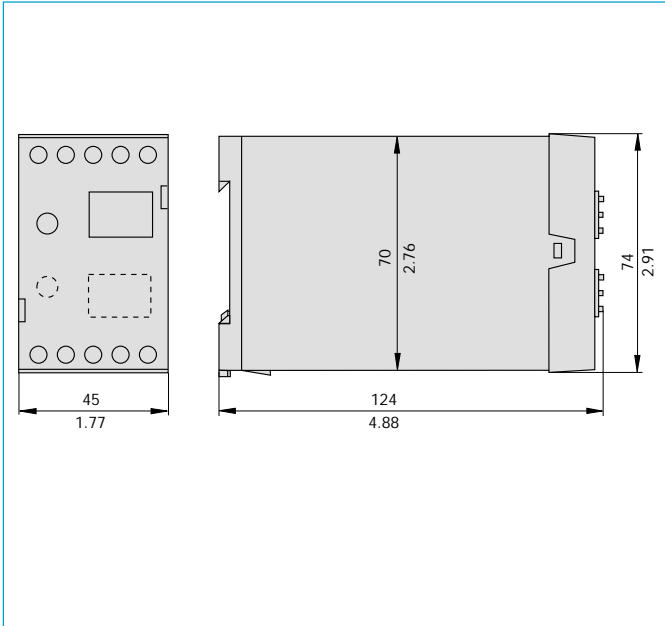
Other measuring ranges and screw-less connectors to Wago licence are available to special order.

Ordering information

| | |
|-------------------------|---------------------|
| Type No. | |
| E-1079 | Voltage Monitor |
| Function | |
| 31 | MAX limit value |
| 41 | MIN limit value |
| 51 | MIN/MAX limit value |
| Voltage rating (supply) | |
| AC 115 V | (90...135 V) |
| AC 230 V | (200...244 V) |
| Measuring range | |
| DC 199 mV | |
| DC 1.99 V | |
| DC 19.9 V | |

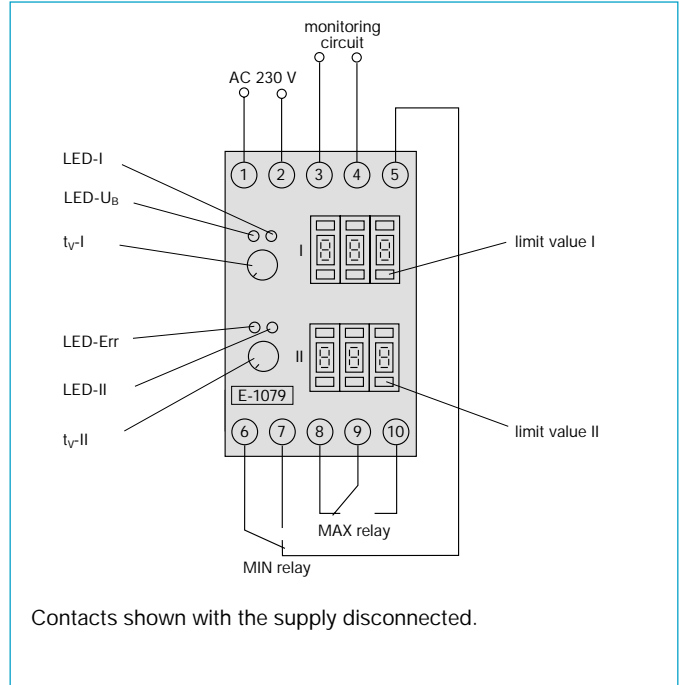
E-1079 - 31 - AC - [] ordering example

Dimensions



This is a metric design and millimeter dimensions take precedence ($\frac{\text{mm}}{\text{inch}}$)

Connection diagram



Function of digit switches and relay terminal assignment

| Version | Switches | | Outputs (terminals) | | Signalisation | |
|--------------------------------------|---------------|----------------|---------------------|-----------|---|---|
| | limit value I | limit value II | MAX relay | MIN relay | LED I | LED II |
| E-1079-31 Max Voltage Monitor | MAX | N/A | 8 / 9 / 10 | N/A | extinguishes when MAX limit is exceeded | |
| E-1079-41 MIN Voltage Monitor | MIN | N/A | N/A | 5 / 6 / 7 | extinguishes when voltage falls below MIN limit | |
| E-1079-51 MIN-MAX Voltage Monitor | MAX | MIN | 8 / 9 / 10 | 5 / 6 / 7 | extinguishes when MAX limit is exceeded | extinguishes when voltage falls below MIN limit |

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t_v -I response delay of limit value I, may be set between 0.2 and 30 s.

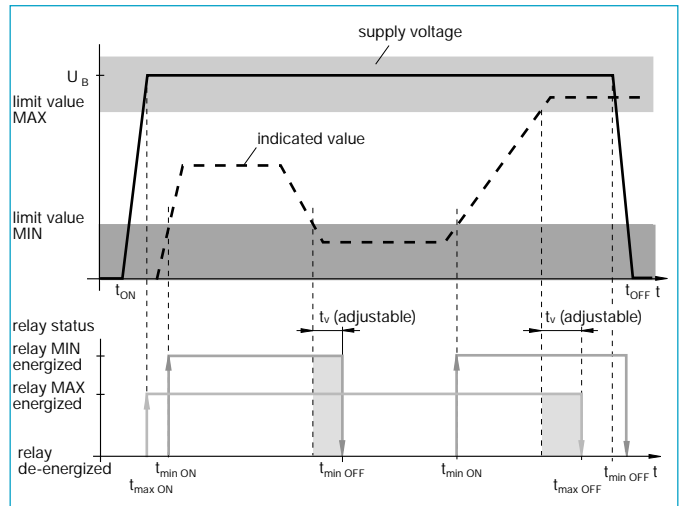
LED-U_B lights when operating voltage is applied

only with version E-1079-51:

t_v -II response delay of limit value II, may be set between 0.2 and 30 s.

LED-Err extinguishes upon adjustment error
limit value I < (limit value II + 5 digits)

Typical time / voltage characteristics



All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.