

Description

The electronic E-T-A Voltage Monitor E-1079-60. is designed to monitor DC or AC voltages against falling below, or rising above, preset tolerance limits. Two LEDs indicate relay status or overlimits; an opto coupler output provides a physically isolated signal. The device is available either with a (non-conducting) N/O or a (conducting) N/C contact. It is powered by the measuring signal so that there is no need for an additional power supply.



E-1079-600-...

Features

- Voltage under and over limit monitoring (tolerance window)
- For DC and AC voltages between 5 V and 230 V
- DC and AC voltage output
- N/O or N/C contact
- Status indication by red and green LEDs
- No need for separate power supply
- Reverse polarity protection
- Compact design (plug-in housing)
- 12 mm wide housing

Technical data

Input voltage U_E Voltage rating U_N	Tolerance	Tolerance range $U_{min} \dots U_{max}$
DC 12 V	± 25%	(9 ... 15 V)
DC 24 V	± 25%	(18 ... 30 V)
DC 48 V	± 25%	(36 ... 60 V)
DC 110 V	+10%/-15%	(93.5 ... 121 V)
DC 220 V	+10%/-15%	(187 ... 242 V)
AC 115 V	+10%/-15%	(97.8 ... 126.5V)
AC 230 V	+10%/-15%	(195.5 ... 253 V)

Load current 3 mA DC and AC
Dielectric strength 260 V DC and AC
Reverse polarity protected

Output U_A/I_A
MOSFET output
Max. load current 80 mA DC and AC
Max. load voltage 250 V DC and AC
Voltage drop < 2.0 V with 80 mA load
< 0.8 V with 10 mA load

Free-wheeling diode for non-resistive loads in-built
Polarization optional
Response time 200 mA

Signalling
green LED voltage within set tolerance limits
red LED voltage outside set tolerance limits

Accuracy
Undervoltage $U_{min} - 10\%U_N \dots U_{min}$
Overvoltage $U_{max} \dots U_{max} + 10\%U_N$

Environmental conditions
Temperature range 0 ... +60 °C (without condensation)
Degree of protection to DIN 40050/IEC 529 IP 20
Dielectric strength (IEC 664) 4 kV_{rms}
EMC to EN50081-1 and prEN50082-2

Housing plug-in ultramid housing
Terminals 6.3 mm blade terminals to DIN 46244 to plug into E-T-A socket 17-P10-Si

Mounting attitude optional, no air gap between devices required

Mass 28 g

Ordering information

Type No.	Electronic Voltage Monitor
Output	
600	signal output as N/O contact
601	signal output as N/C contact
Voltage rating	
	DC 12 V
	DC 24 V
	DC 48 V
	DC 110 V
	DC 220 V
	AC 115 V
	AC 230 V

E-1079 - 600 - DC 24 V ordering example

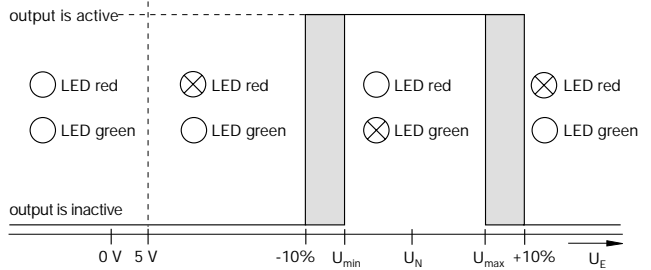
Function

The operating voltage applied at the input terminals is monitored for upper and lower limits. When the input signal is within tolerance limits, the green LED will indicate and the output will be activated: the contact is closed when it is an N/O contact (-600) and open when it is an N/C contact (-601).

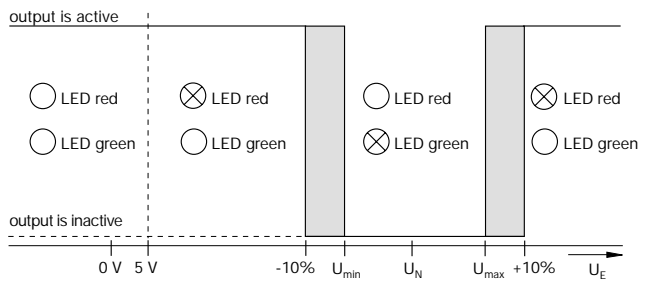
From approx. 5 V to the lower tolerance limit the red LED will indicate; it also indicates when the upper tolerance limit has been exceeded. The output will change its operating status.

Functional diagram

E-1079-600

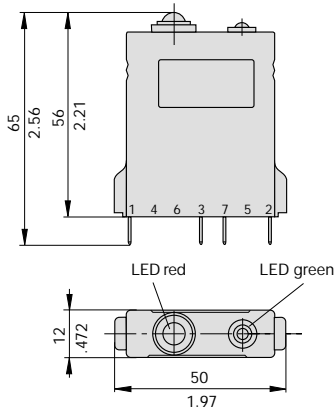


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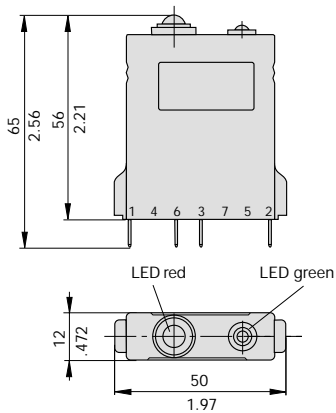


Dimensions

E-1079-600



E-1079-601



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

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.

Connection diagram

