

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.

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 (MOSFET)
- 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

Ordering information

Type No.	
E-1079	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



Technical data

Input voltage U_E		
Voltage rating U_N	Tolerance	Tolerance range $U_{min}...U_{max}$
DC 12 V	$\pm 25\%$	(9...15 V)
DC 24 V	$\pm 25\%$	(18...30 V)
DC 48 V	$\pm 25\%$	(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...126.5 V)
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	> 5 V signal voltage voltage within set tolerance limits	
red LED	voltage outside set tolerance limits	
Accuracy		
Undervoltage	$U_{min} -10\% U_N...U_{min}$	
Overvoltage	$U_{max}...U_{max} +10\% U_N$	
Environmental conditions		
Temperature range	0...60 °C (without condensation)	
Degree of protection to DIN 40050/IEC 529	IP20	
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	

Function

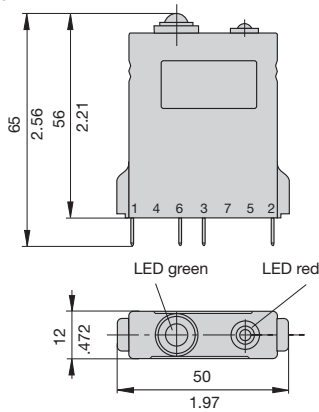
The operating voltage applied at the input terminals is monitored for upper and lower limits. When the input signal is within tolerance limits, the green LED will indicate and the MOSFET of the signal output has the following operating status:

- N/O contact (-600): MOSFET is active
- N/C contact (-601): MOSFET is inactive

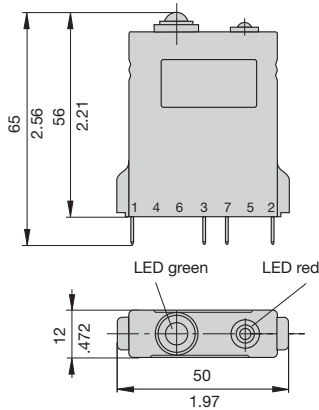
From approx. 5 V to the lower tolerance limit the red LED will indicate. It also indicates when the upper tolerance limit has been exceeded. The output will change its operating status.

Dimensions

E-1079-600

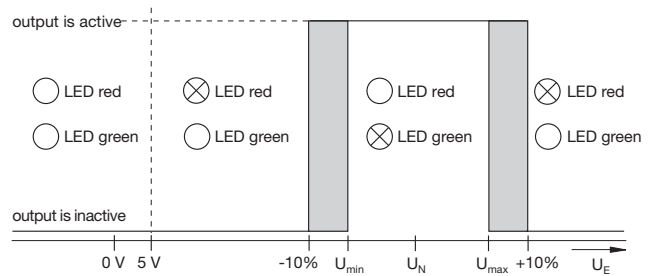


E-1079-601

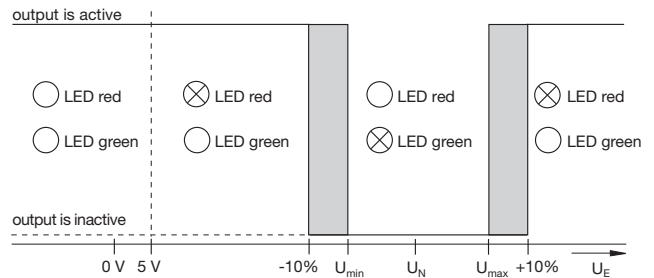


Functional diagram

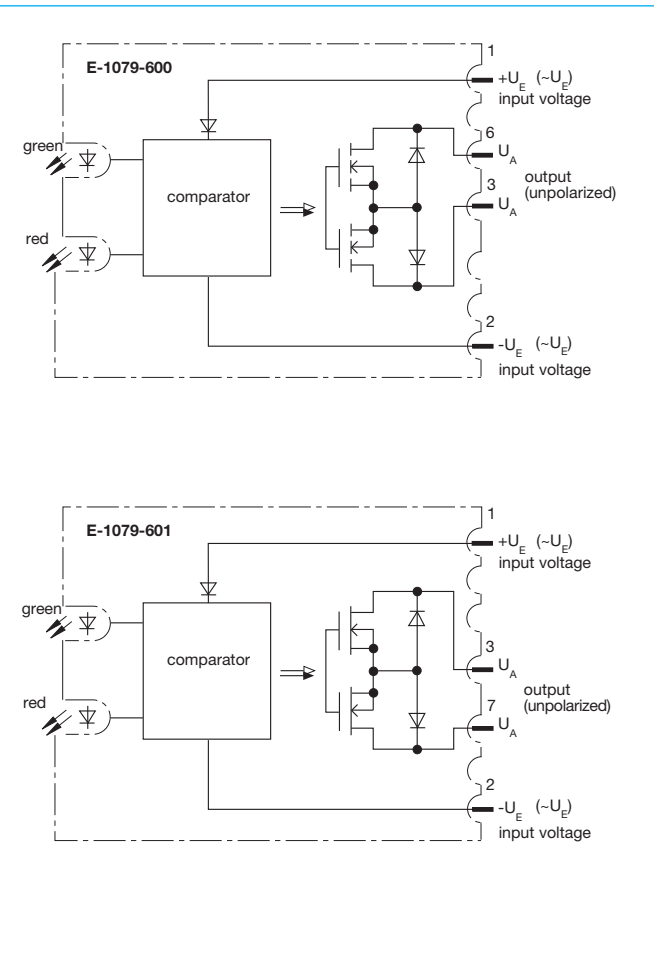
E-1079-600



E-1079-601



Connection diagram



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

Accessories for E-1079-600/601

Single mounting sockets

(up to 16 A max. load)

17-P10-Si

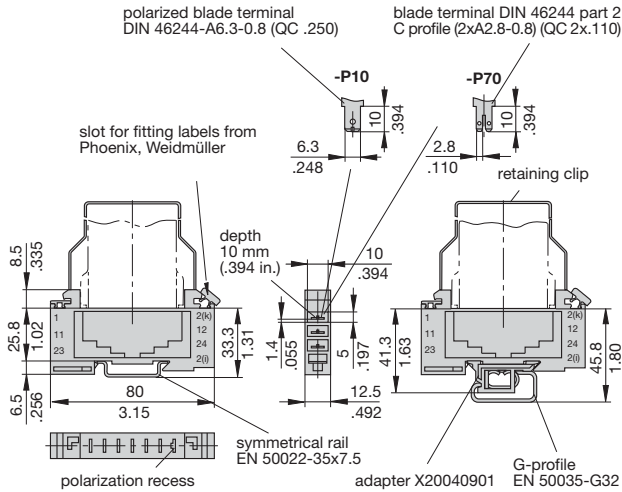
17-P70-Si

(retaining clip Y 300 581 11 available on request)

(with adapter)

17-P10-Si-20025

17-P70-Si-20025



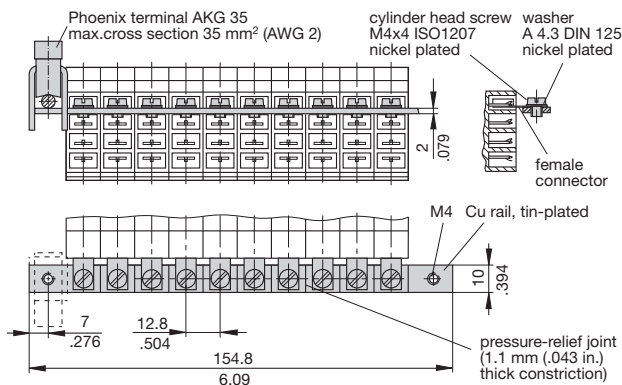
Busbar (10-way) (supplied as a complete package)

for type 17 socket

(for max. 100 A continuous load),
more positions available on request

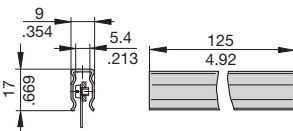
X 211 157 01 with terminal

X 211 157 02 without terminal



Insulating sleeving for busbar (10-way)

Y 303 824 01



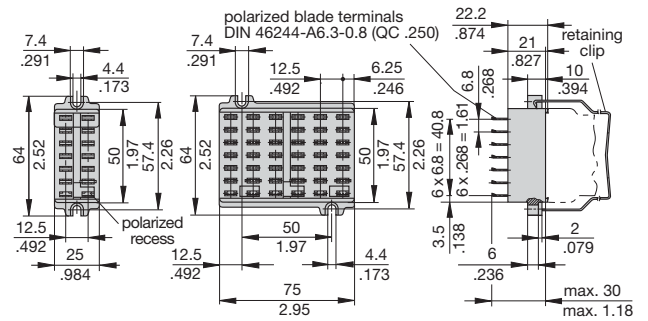
2-way mounting socket

23-P10-Si

(retaining clip Y 300 581 03 available on request)

6-way mounting socket

63-P10-Si



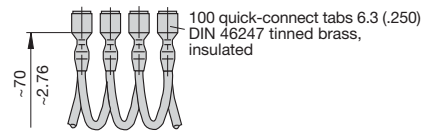
Connector bus links -P10

X 210 588 01/ 1.5 mm², (AWG 16), brown (up to 13 A max. load)

X 210 588 02/ 2.5 mm², (AWG 14), black (up to 20 A max. load)

X 210 588 03/ 2.5 mm², (AWG 14), red (up to 20 A max. load)

X 210 588 04/ 2.5 mm², (AWG 14), blue (up to 20 A max. load)

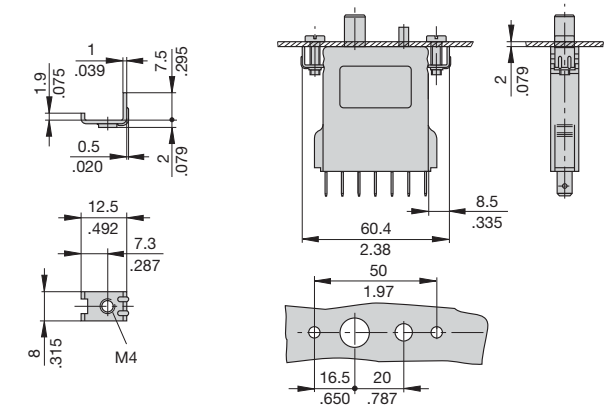


2 mounting clips

Y 300 504 02

Installation drawing with

mounting clips Y 300 504 02



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

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.