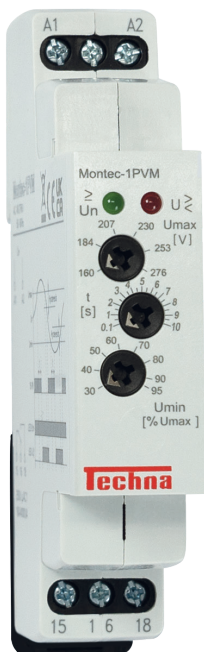


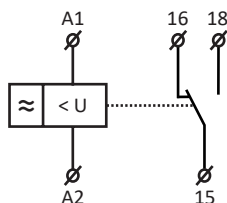
Montec-1PVM

Voltage Monitoring Relay



The Montec-1PVM Voltage Monitoring Relay monitors the supply voltage and turns off if it detects an overvoltage or undervoltage, according to the set parameters.

- Monitors voltage in the range AC 48Vac - 276Vac
- Umax and Umin can be monitored independently
- Adjustable time delay is 0 - 10s (to eliminate short voltage drops or peaks)
- Voltage Umin adjusted as % of Umax
- 3-state indication - LEDs indicate normal state and 2 fault states
- Relay is powered from the line it is monitoring (does not require a separate source)
- 1-module, DIN-Rail mounting



Order Code

Montec-1PVM

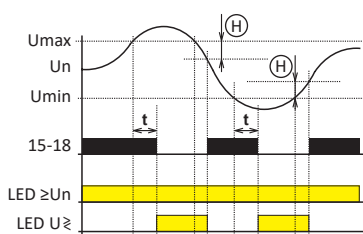
Montec-1PVM Technical Specification

Supply Terminals	A1 - A2
Voltage Range	AC 48Vac - 276Vac (50 - 60Hz)
Power Input	AC max. 1.2VA / 0.5W
Max. Dissipated Power (Un + Terminals)	4W
Upper Level (Umax)	160Vac - 276Vac
Bottom Level (Umin)	30 - 95% Umax
Max. Continuous Voltage	AC 276Vac
Peak Overload Voltage < 1ms	AC 290Vac
Time Delay	Adjustable, 0 - 10s
Setting Accuracy (Mechanical)	5%
Repeat Accuracy	< 1%
Dependance on Temperature	< 0.1% / °C
Tolerance of Limit Values	5%
Hysteresis (from Fault to Normal)	2 - 6% of Adjustable Value
Changeover Contacts	1 x Changeover / SPDT (AgNi / Silver Alloy)
Rated Current	16A / AC1
Breaking Capacity	4000VA / AC1, 384W / DC
Inrush Current	30A / < 3s

Montec-1PVM Technical Specification

Switching Voltage	250Vac / 24Vdc
Output Indication	Red / Green LED
Mechanical Life	15,000,000 Cycles
Electrical Life (AC1)	35,000 Cycles
Operating Temperature	-20°C to 55°C
Storage Temperature	-30°C to 70°C
Electrical Strength	4kV (Supply Output)
Operating Position	Any
Mounting	DIN-Rail EN 60715
Protection Degree	IP40 from Front Panel / IP20 Terminals
Overvoltage Category	III
Pollution Degree	2
Max. Cable Size (mm ²)	Solid Wire max. 1x 2.5 or 2x 1.5 / Stranded Wire with Ferrule max. 1x 2.5 (AWG 12)
Dimensions	90 x 17.6 x 64mm
Weight	62g
Standards	EN 60255-6, EN 61010-1

Montec-1PVM Function



Umax - Upper adjustable level of voltage
 Un - Measured voltage
 Umin - Bottom adjustable level of voltage
 15-18 - Switching contact of output relay
 LED $\geq U_n$ - Green indicator light
 LED $U \leq$ - Red indicator light
 H - Hysteresis

The relay monitors voltage in single-phase ac circuits. The monitored voltage also provides the supply voltage to the relay. It is possible to set two independent levels (overvoltage and undervoltage). In the normal operating state, the output relay is closed. It switches off when there is an overvoltage or undervoltage. To eliminate short transients in the supply voltage, it is possible to set a time delay (0 - 10s) before the relay output opens. The time delay has no effect when changing from faulty to normal state, but hysteresis (1 - 6 % depending on the voltage setting) does apply.