

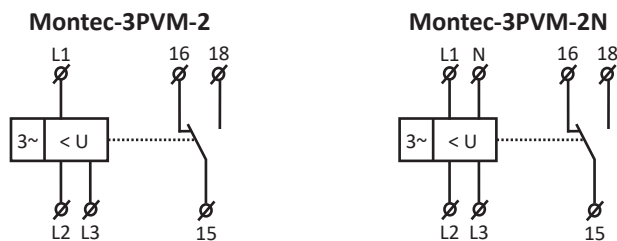
# Montec-3PVM-2/2N

## 3 Phase Voltage Monitoring Relay



These relays monitor overvoltage and undervoltage in 3 Phase AC systems (they do not monitor phase sequence and phase failure). The Montec-3PVM-2 draws its supply from 3 live phases, which means that the relay remains functional even if one phase is lost. The Montec-3PVM-2N draws its supply from L1, L2, L3 and N, so the relay also monitors loss of the neutral.

- It is possible to set the upper and lower levels of monitored voltage independently
- Adjustable time delay allows short voltage transients to be ignored
- The relay draws its supply from the source being monitored
- A faulty state is shown by a red LED and opening of the output relay contact
- Output contact: 1 x changeover / SPDT 8A / 250V AC1
- If the supply voltage falls below 60% Un (U<sub>OFF</sub> lower level) the relay opens immediately ignoring the set time delay
- 1-module, DIN-Rail mounting



### Montec-3PVM-2/2N Technical Specification

	Montec-3PVM-2	Montec-3PVM-2N
Supply Terminals	L1, L2, L3	L1, L2, L3, N
Supply / Measured Voltage Un	3x 400V (50 - 60Hz)	3x 400V / 230V (50 - 60Hz)
Power Input	AC max. 2VA / 1W	
Max. Dissipated Power (Un + Terminals)	2W	
Adjustable Umax	105 - 125% Un	
Adjustable Umin	75 - 95% Un	
Hysteresis	2%	
Max. Permanent Voltage Overload	AC 3x 460V	AC 3x 265V
Peak Voltage Overload < 1ms	AC 3x 500V	AC 3x 288V
Time Delay T1	500ms max.	
Time Delay T2	Adjustable, 0.1 - 10s	
Changeover Contacts	1 x Changeover / SPDT (AgNi / Silver Alloy)	
Rated Current	8A / AC1	
Breaking Capacity	2000VA / AC1, 240W / DC	
Inrush Current	10A	

### Montec-3PVM-2/2N Ordering Scheme



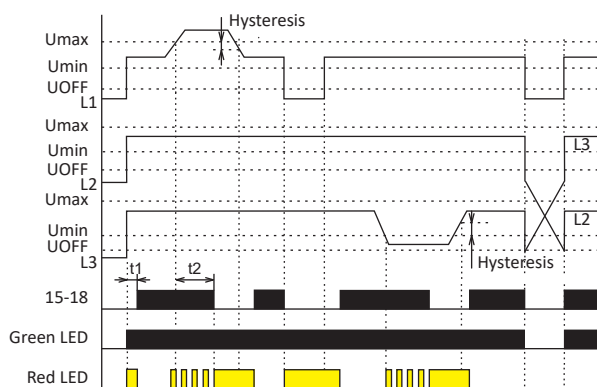
Supply Terminals:  
**2** = L1, L2, L3  
**2N** = L1, L2, L3, N

# Techna MONITORING RELAYS

## Montec-3PVM-2/2N Technical Specification

	Montec-3PVM-2	Montec-3PVM-2N
Switching Voltage	250Vac / 24Vdc	
Output Indication	Red LED	
Mechanical Life	5,000,000 Cycles	
Electrical Life (AC1)	50,000 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 / IP10 Terminals	
Overvoltage Category	III	
Pollution Degree	2	
Max. Cable Size (mm <sup>2</sup> )	Solid Wire max. 2x 2.5 or 1x 4 / Stranded Wire with Ferrule max. 1x 2.5 or 2x 1.5 (AWG 12)	
Dimensions	90 x 17.6 x 64mm	
Weight	62g	63g
Standards	EN 60255-6, EN 61010-1	

## Montec-3PVM-2/2N Function



The relay monitors 3 phase ac supplies. It is possible to set two independent voltage levels to monitor overvoltage and undervoltage independently. In the normal state when voltage is within set levels, the output relay is closed and the green LED illuminates. If the voltage exceeds or falls below the set levels, the output relay opens and the red LED illuminates (red LED indicates a faulty state and also flashes during time delay T2). If the supply voltage falls below 60% Un (U<sub>OFF</sub> lower level) the relay opens immediately without waiting for time delay T2.