



Multifunction
voltage and
frequency
monitoring relays
with NFC
technology
PMV95N

Product designation

Product type designation

General characteristics

Description

Minimum and maximum AC voltage, minimum and maximum frequency, phase loss, neutral loss, incorrect phase sequence and asymmetry relay

Type of system

Three-phase with/without neutral

Power supply

| | | |
|--------------------------------|----|-----------------|
| Auxiliary supply voltage U_s | | Self powered |
| Operating voltage range | | 0.7...1.2 U_e |
| Rated frequency | Hz | 50/60 $\pm 5\%$ |
| Power consumption Max | VA | 30 |
| Power dissipation Max | W | 2.5 |

Control circuit

| | | | |
|---|-----|-----|----------------------|
| Rated voltage to control (U_e) | min | VAC | 380 |
| | Max | VAC | 575 |
| Voltage set-point ($\%U_e$) | min | % | 80...95 |
| | Max | % | 105...115 |
| Asymmetry set-point ($\%U_e$) | | % | 5...15 |
| Frequency set-point ($\%$ rated frequency) | min | % | 90...99 |
| | Max | % | 101...110 |
| Tripping delay | | s | 0.1...30 |
| Resetting time | | s | 0.1...30 |
| Resetting hysteresis | | % | 1...5 |
| Instantaneous tripping for U_e | | | Voltage $< 70\% U_e$ |
| Type of reset | | | Automatic or manual |
| Repeat accuracy | | % | $< \pm 0.1$ |

Relay outputs

| | | |
|------------------|-----|---|
| Number of relays | Nr. | 1 |
|------------------|-----|---|

| | | | |
|---|---|----------|--|
| Relay state | Normally energised De-energises at tripping | | |
| Contact arrangement | 1 changeover SPDT | | |
| Rated operational voltage AC (IEC) | VAC | 250 | |
| Maximum switching voltage | VAC | 400 | |
| IEC Conventional free air thermal current Ith | A | 8 | |
| UL/CSA and IEC/EN 60947-5-1 designation | B300 | | |
| Electrical life (with rated load) | cycles | 100000 | |
| Mechanical life | cycles | 30000000 | |

Functions

| | | | |
|---|-----|--|--|
| Modular version | 2U | | |
| Minimum AC voltage | Yes | | |
| Maximum AC voltage | Yes | | |
| Natural loss | Yes | | |
| Phase loss | Yes | | |
| Incorrect phase sequence | Yes | | |
| Asymmetry | Yes | | |
| Minimum frequency | Yes | | |
| Maximum frequency | Yes | | |
| Programmable via NFC technology and APP | Yes | | |

Indications

| | | | |
|------------|---|--|--|
| Indication | 1 green LED for power and 5 red LEDs for tripping | | |
|------------|---|--|--|

Connections

| | | | |
|---------------------------------|-------|-----------------|-----|
| Terminals type | Screw | | |
| Tightening torque for terminals | max | Nm | 0.8 |
| | max | Ibin | 7 |
| Conductor cross section | | | |
| AWG/Kcmil | min | AWG | 24 |
| | Max | AWG | 12 |
| IEC | min | mm ² | 0.2 |
| | Max | mm ² | 4 |

Insulations

| | | | |
|---------------------------------------|----|-----|--|
| Rated insulation voltage Ui | V | 600 | |
| Rated impulse withstand voltage Uimp | kV | 6 | |
| Operating frequency withstand voltage | kV | 4 | |

Ambient conditions

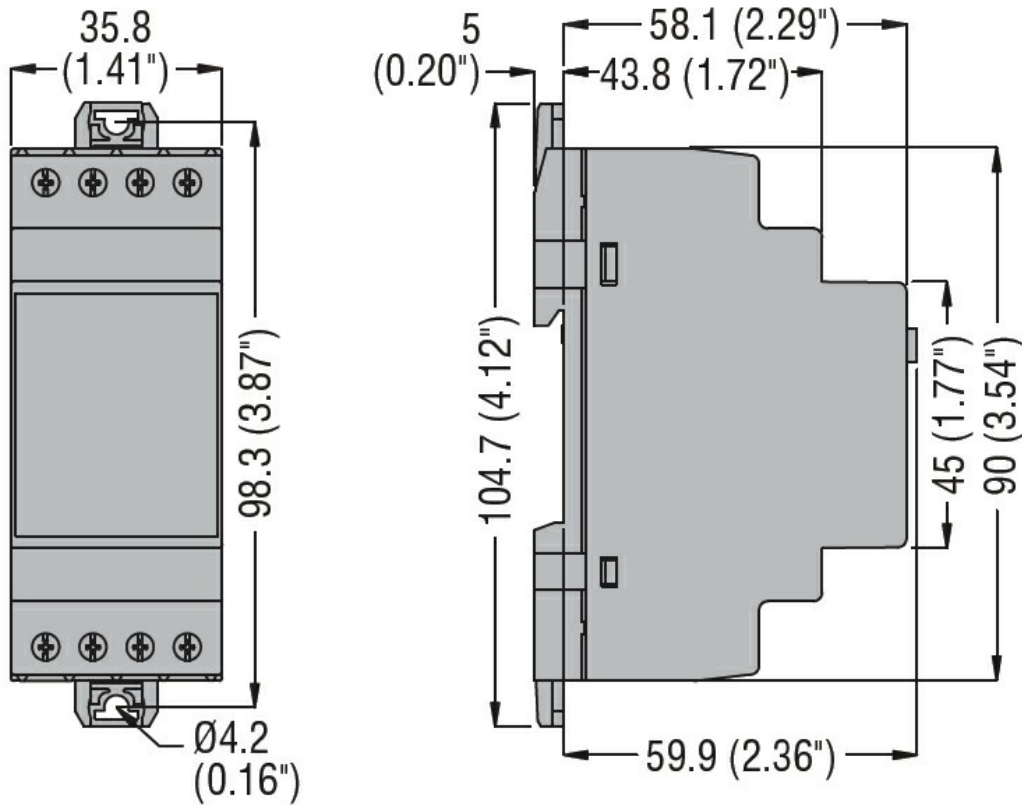
| | | | |
|-----------------------|-----|----|-----|
| Temperature | | | |
| Operating temperature | min | °C | -20 |
| | max | °C | +60 |
| Storage temperature | min | °C | -30 |
| | max | °C | +80 |

Housing

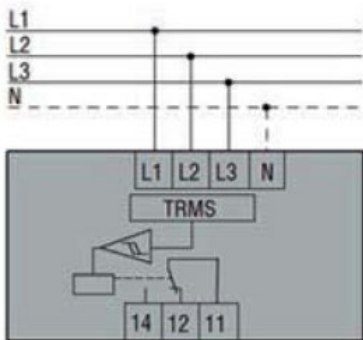
| | | | |
|---------------------------|---|--|--|
| Execution (n° of modules) | 2 | | |
|---------------------------|---|--|--|

| | | |
|--------------------------|----------------------------------|---------------------|
| Material | Self-extinguishing polyamide | |
| Mounting | 35mm DIN rail (IEC/EN 60715) | |
| IEC degree of protection | IP40 on front; IP20 at terminals | |
| Dimensions (W x H x D) | mm | 35.8 x 104.7 x 64.9 |
| Weight | g | 130 |

Dimensions [mm (in)]



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n°14
IEC/EN 60255-26
IEC/EN 60255-27
UL508

Certificates

cULus
EAC

ETIM classification

ETIM 8.0

EC001438 -
Voltage
monitoring relay