



Product designation

Voltage  
monitoring relays  
PMV40

Product type designation

**General characteristics**

Description

Asymmetry,  
phase loss and  
incorrect phase  
sequence relay

Type of system

Three-phase  
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

Asymmetry set-point ( $\%U_e$ )

% 5...15

Tripping delay

s 0.1...20

Resetting time

s 0.1...20 (0.5 at  
power up)

Resetting hysteresis

% 3

Instantaneous tripping for  $U_e$

Voltage  $< 70\% U_e$

Type of reset

Automatic

Repeat accuracy

%  $< \pm 0.1$

Tripping time for phase loss

ms 60

**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  $I_{th}$

A 8

UL/CSA and IEC/EN 60947-5-1 designation

B300

Electrical life (with rated load)

cycles 100000

Mechanical life

cycles 30000000

**Functions**

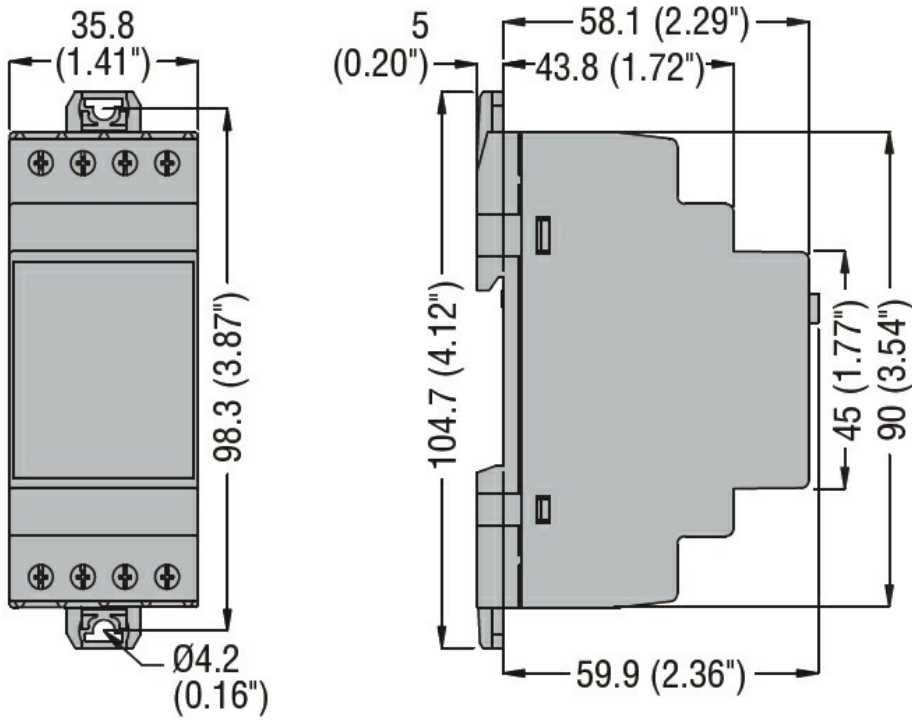
Modular version

2U

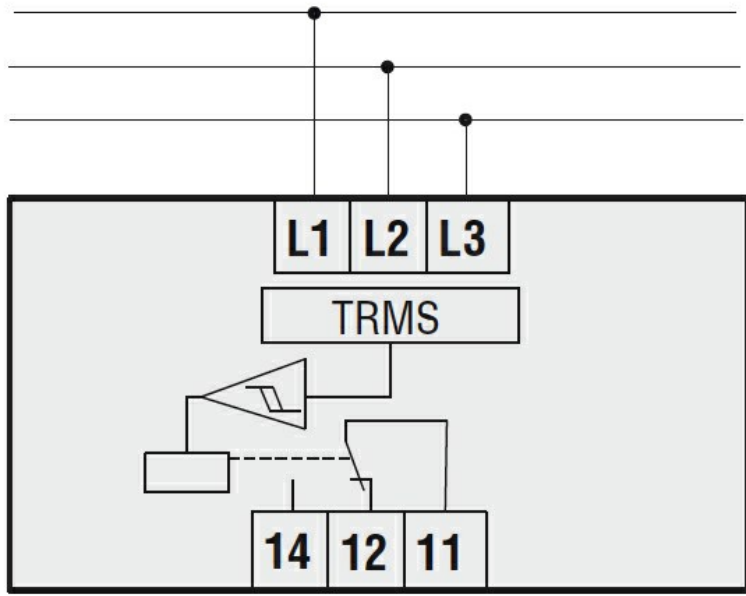
Minimum AC voltage

No

Maximum AC voltage				No
Phase loss				Yes
Incorrect phase sequence				Yes
Asymmetry				Yes
<b>Indications</b>				
Indication				1 green LED for power on and tripping and 1 red LED for tripping
<b>Connections</b>				
Terminals type				Screw
Tightening torque for terminals	max	Nm	0.8	
	max	lbin	7	
Conductor cross section				
AWG/Kcmil	min	AWG	24	
	Max	AWG	12	
IEC	min	mm <sup>2</sup>	0.2	
	Max	mm <sup>2</sup>	4	
<b>Insulations</b>				
Rated insulation voltage Ui			V	600
Rated impulse withstand voltage Uimp			kV	6
Operating frequency withstand voltage			kV	4
<b>Ambient conditions</b>				
Temperature				
Operating temperature	min	°C	-20	
	max	°C	+60	
Storage temperature	min	°C	-30	
	max	°C	+80	
<b>Housing</b>				
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
<b>Dimensions [mm (in)]</b>				



**Wiring diagrams**



**Certifications and compliance**

Compliance

- CSA C22.2 n° 14
- IEC/EN 60255-5
- IEC/EN 61000-6-2
- IEC/EN 61000-6-3
- UL 508

Certificates

- cULus
- EAC

ETIM classification

ETIM 8.0

EC001438 -  
Voltage  
monitoring relay