



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

**Indications**

Indication	1 green LED for power on and tripping and 1 red LED for tripping
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**Connections**

Terminals type	Screw
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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

**Insulations**

Rated insulation voltage Ui	V	600
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Rated impulse withstand voltage Uimp	kV	6
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Operating frequency withstand voltage	kV	4
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**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
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Material	Self-extinguishing polyamide
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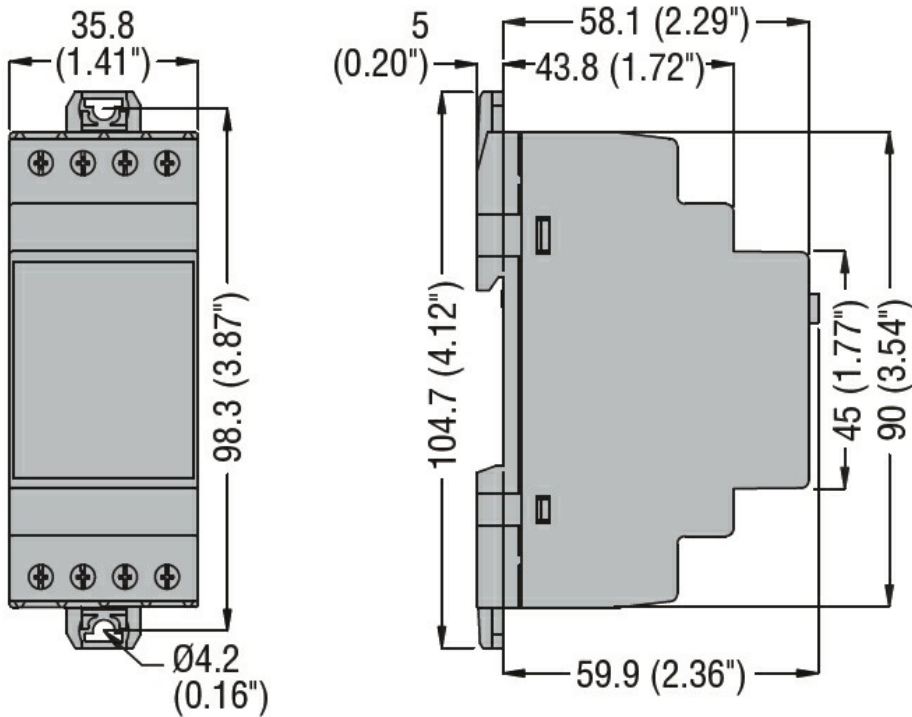
Mounting	35mm DIN rail (IEC/EN 60715)
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IEC degree of protection	IP40 on front; IP20 at terminals
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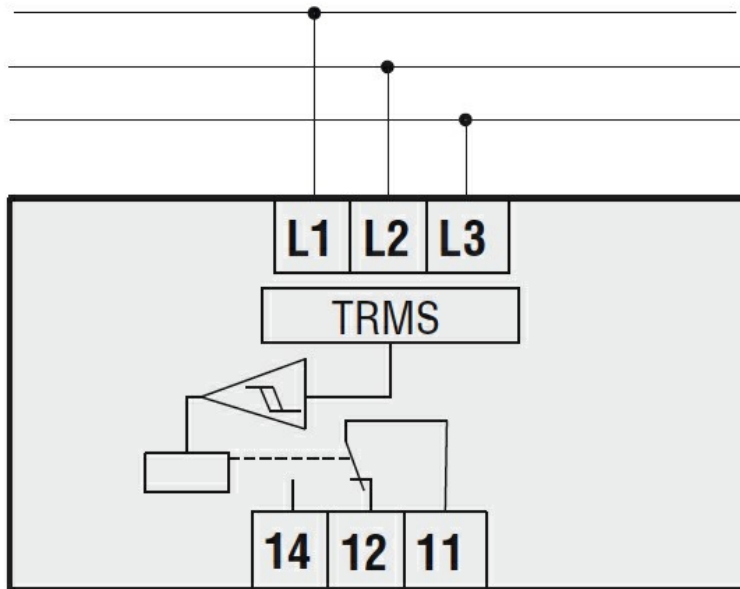
Dimensions (W x H x D)	mm	35.8 x 104.7 x 64.9
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Weight	g	130
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**Dimensions**



**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