



Product designation

Product type designation

Voltage  
monitoring relays  
PMV40

### 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 Max	VAC VAC	380 575
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		%	$\leq \pm 0.1$
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
------------	------------------------------------------------------------------

#### Connections

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

#### Insulations

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

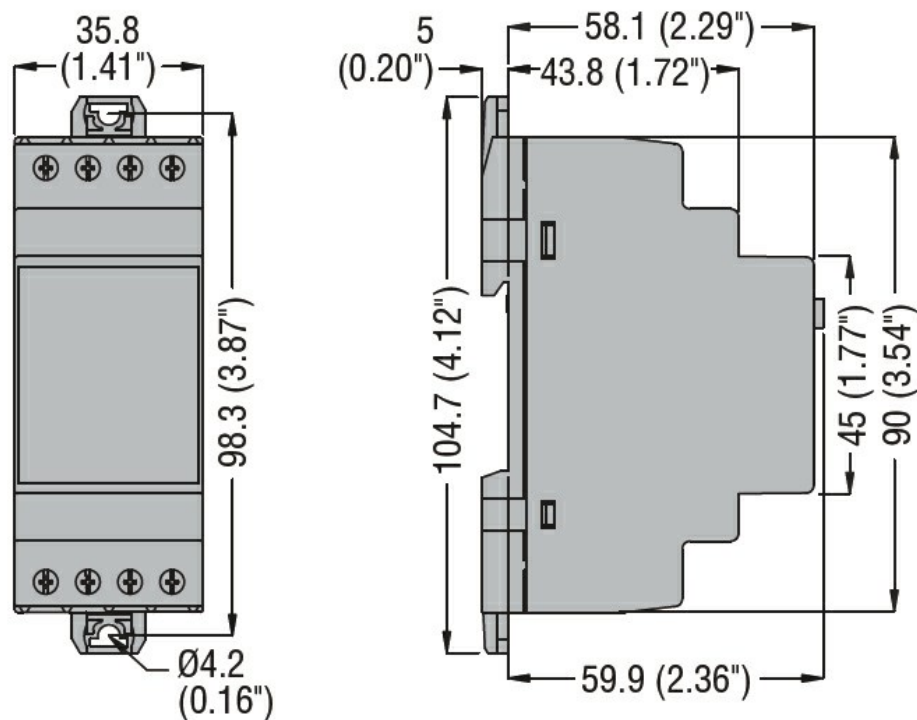
#### Ambient conditions

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

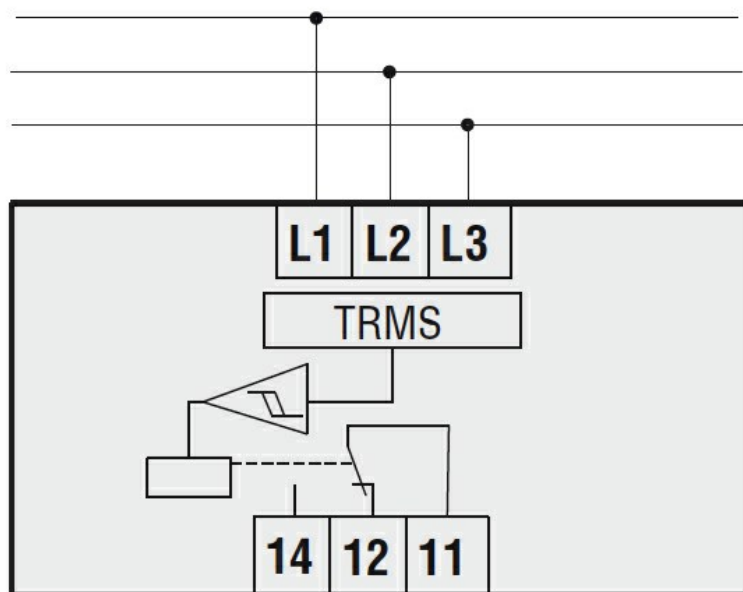
#### Housing

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



#### 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