



Product designation

Product type designation

Voltage  
monitoring relays  
PMV70

### General characteristics

Description

Minimum and  
maximum AC  
voltage, phase  
loss, incorrect  
phase sequence  
and asymmetry  
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

Voltage set-point ( $\%U_e$ )

	min	%	80...95
	Max	%	105...115

Asymmetry set-point ( $\%U_e$ )

Tripping delay

Resetting time

Resetting hysteresis

Instantaneous tripping for  $U_e$

Type of reset

Repeat accuracy

Tripping time for phase loss

Relay outputs

Number of relays

Relay state

Normally  
energised De-  
energises at  
tripping

Contact arrangement

1 changeover  
SPDT

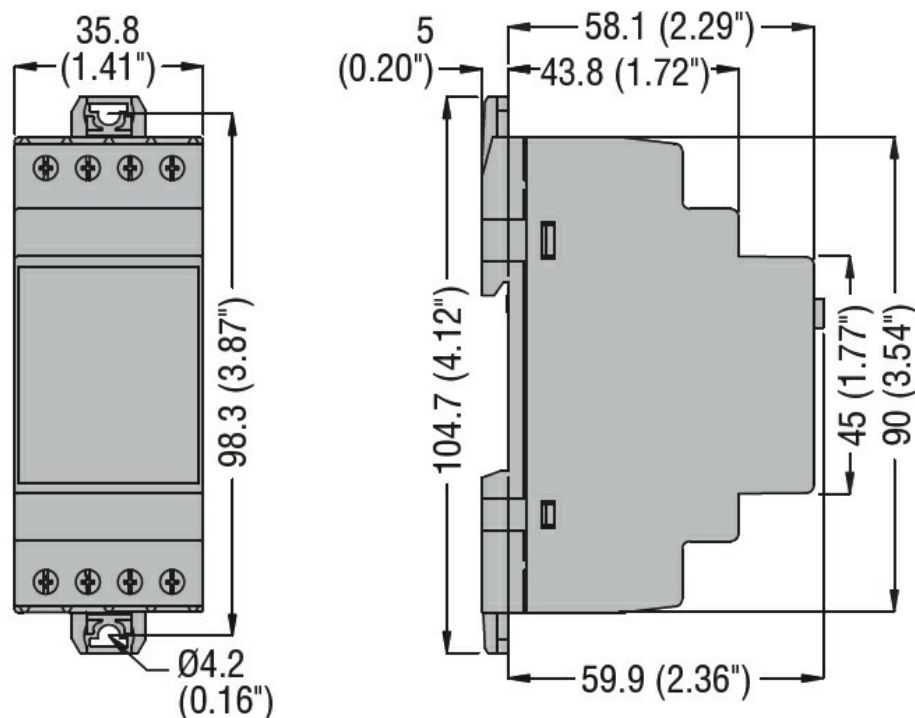
Rated operational voltage AC (IEC)

Maximum switching voltage

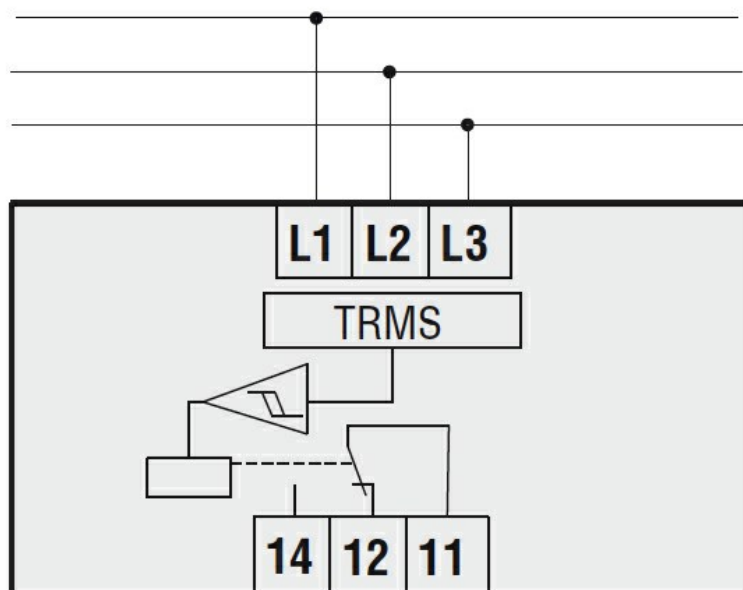
IEC Conventional free air thermal current  $I_{th}$

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

Electrical life (with rated load)	cycles	100000
Mechanical life	cycles	30000000
<b>Functions</b>		
Modular version		2U
Minimum AC voltage		Yes
Maximum AC voltage		Yes
Phase loss		Yes
Incorrect phase sequence		Yes
Asymmetry		No
<b>Indications</b>		
Indication		1 green LED for power on and tripping and 3 red LEDs for tripping
<b>Connections</b>		
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 <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</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