



Product designation

Product type designation

Voltage  
monitoring relays  
PMV20

### General characteristics

Description

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

0.85...1.1  $U_e$

Rated frequency

Hz 50/60  $\pm 5\%$

Power consumption Max

VA 28

Power dissipation Max

W 2.5

### Control circuit

Rated voltage to control ( $U_e$ )

min	VAC	208
Max	VAC	575

Tripping delay

s 0.06

Resetting time

s 0.5

Resetting hysteresis

% 5

Instantaneous tripping for  $U_e$

Voltage  $< 70\% U_e$

Type of reset

Automatic

Repeat accuracy

%  $\leq \pm 1$

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 3000000

### Functions

Modular version

2U

Minimum AC voltage

No

Maximum AC voltage

No

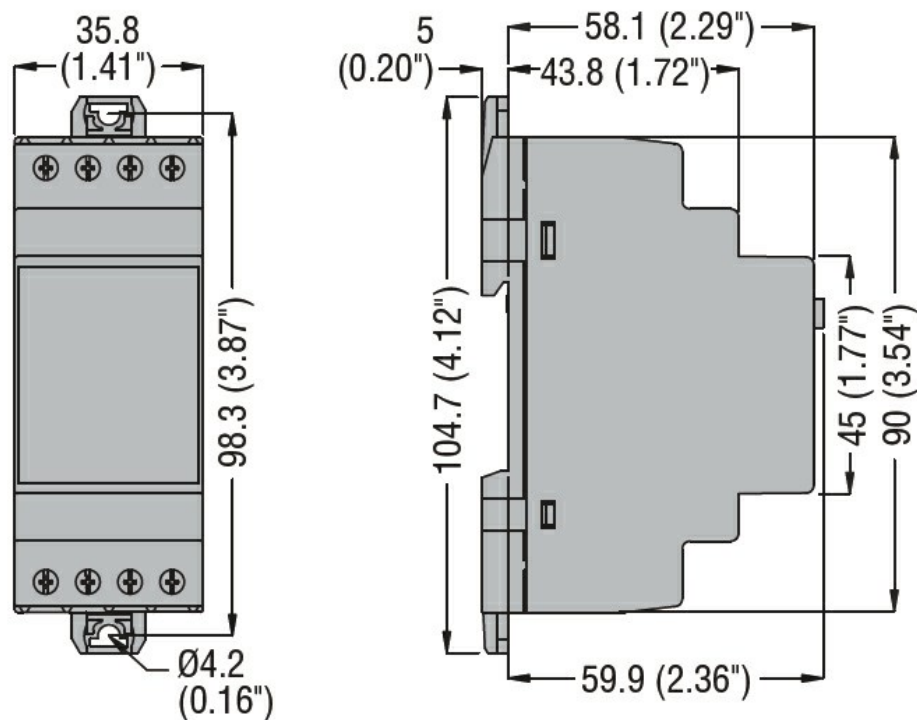
Phase loss

Yes

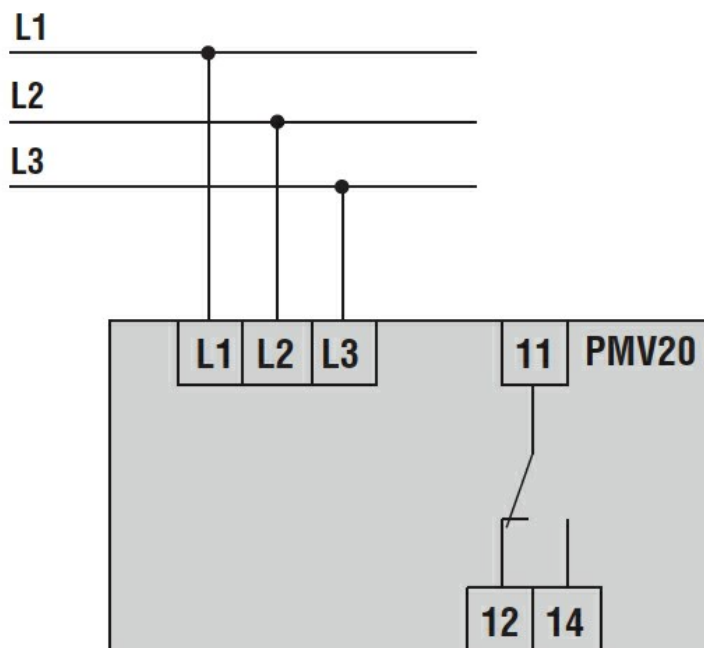
Incorrect phase sequence

Yes

Asymmetry			No		
Indications					
Indication			1 green LED for power on and 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	mm²	0.2
			Max	mm²	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	120	
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