



Product designation

Voltage monitoring relays
PMV50

Product type designation

General characteristics

Description

Minimum and maximum AC voltage, 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

Voltage set-point ($\%U_e$)

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

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

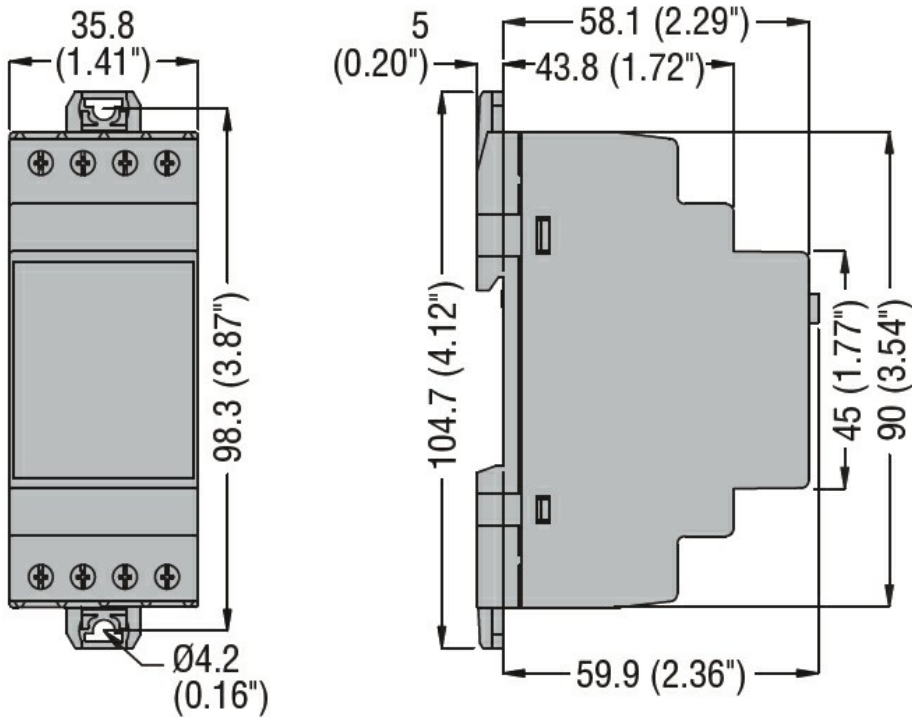
UL/CSA and IEC/EN 60947-5-1 designation

B300

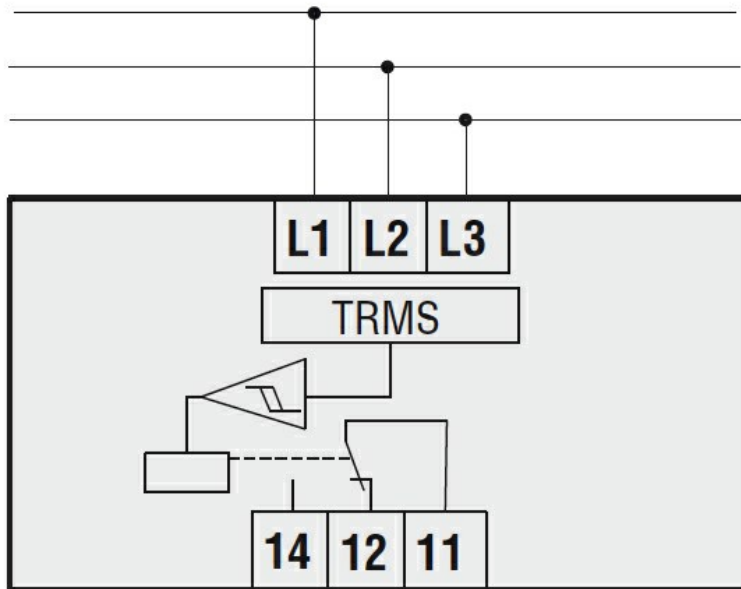
Electrical life (with rated load)

cycles 100000

Mechanical life				cycles	30000000
Functions					
Modular version					2U
Minimum AC voltage					Yes
Maximum AC voltage					Yes
Phase loss					Yes
Incorrect phase sequence					Yes
Asymmetry					No
Indications					
Indication					1 green LED for power on and tripping and 2 red LEDs 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 ²		0.2
		Max	mm ²		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