



Product designation

Product type designation

Voltage monitoring relays
PMV50

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 % ± 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

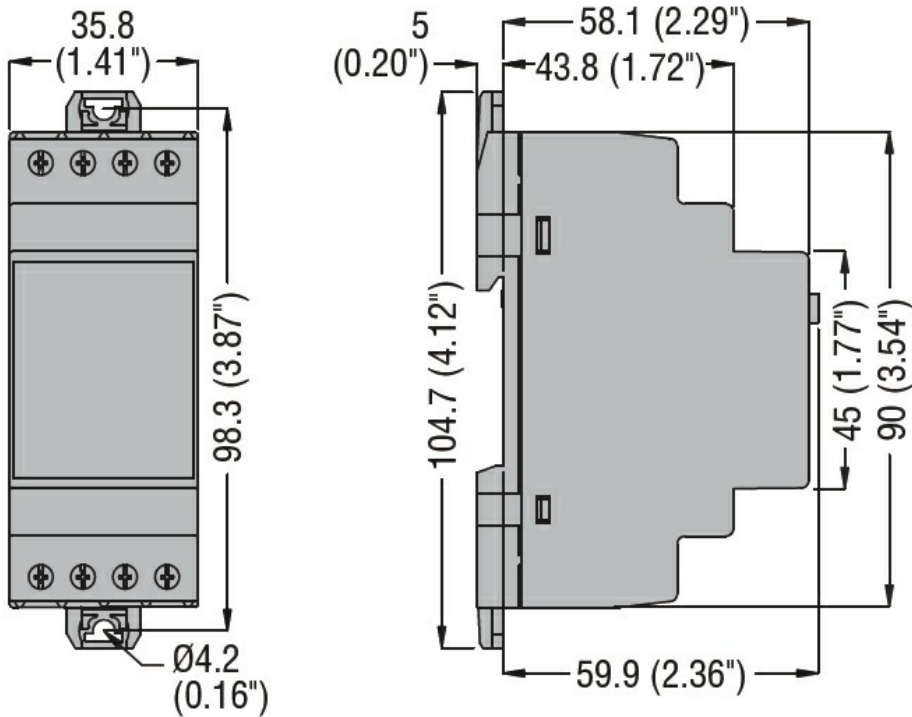
Maximum switching voltage VAC 400

IEC Conventional free air thermal current I_{th} A 8

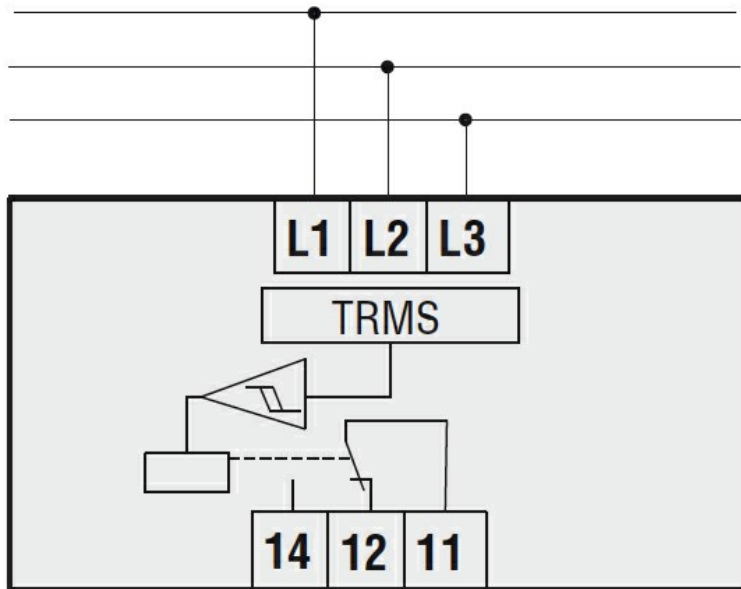
UL/CSA and IEC/EN 60947-5-1 designation B300

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 [mm (in)]					



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