



Product designation

Product type designation

General characteristics

Voltage
monitoring relays
PMV50

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

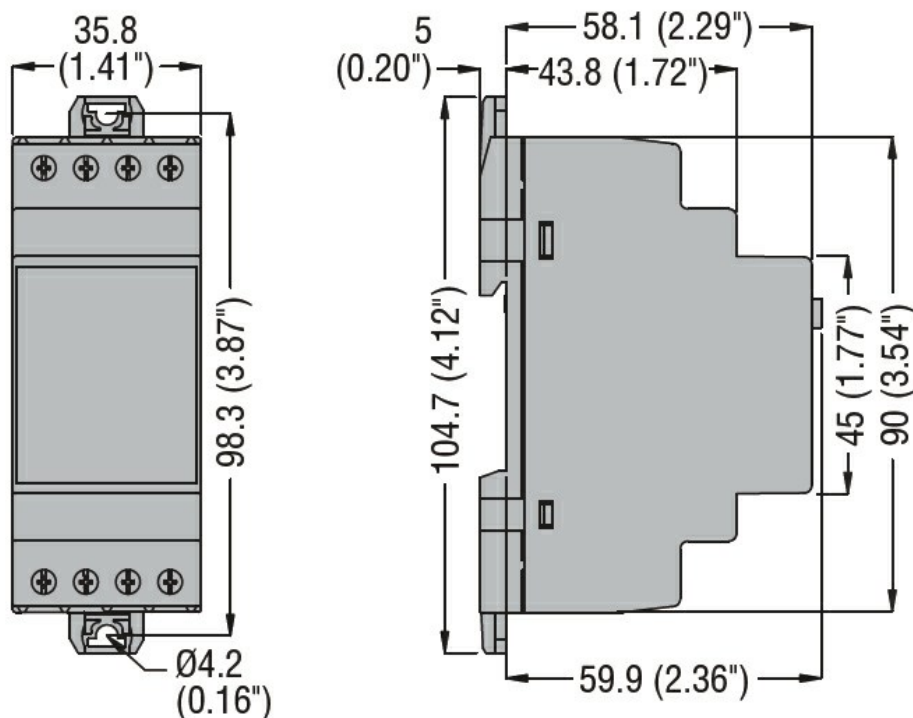
UL/CSA and IEC/EN 60947-5-1 designation

B300

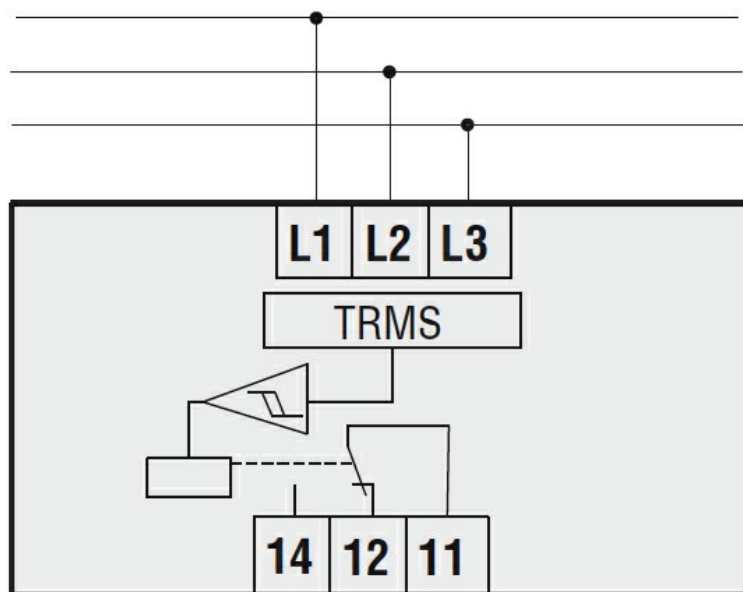
Electrical life (with rated load)

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