



Product designation

Product type designation

General characteristics

Voltage
monitoring relays
PMV50N

Description

Minimum and
maximum AC
voltage, phase
loss, neutral loss
and incorrect
phase sequence
relay

Type of system

Three-phase
with/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 27

Power dissipation Max

W 1.9

Control circuit

Rated voltage to control (U_e)

min	VAC	380
Max	VAC	440

Voltage set-point ($\%U_e$)

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

Tripping delay

s 0.1...20

Resetting time

s 0.1...20

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. 2

Relay state

Normally
energised De-
energises at
tripping

Contact arrangement

2 changeover
SPDT

Rated operational voltage AC (IEC)

VAC 250

Maximum switching voltage

VAC 400

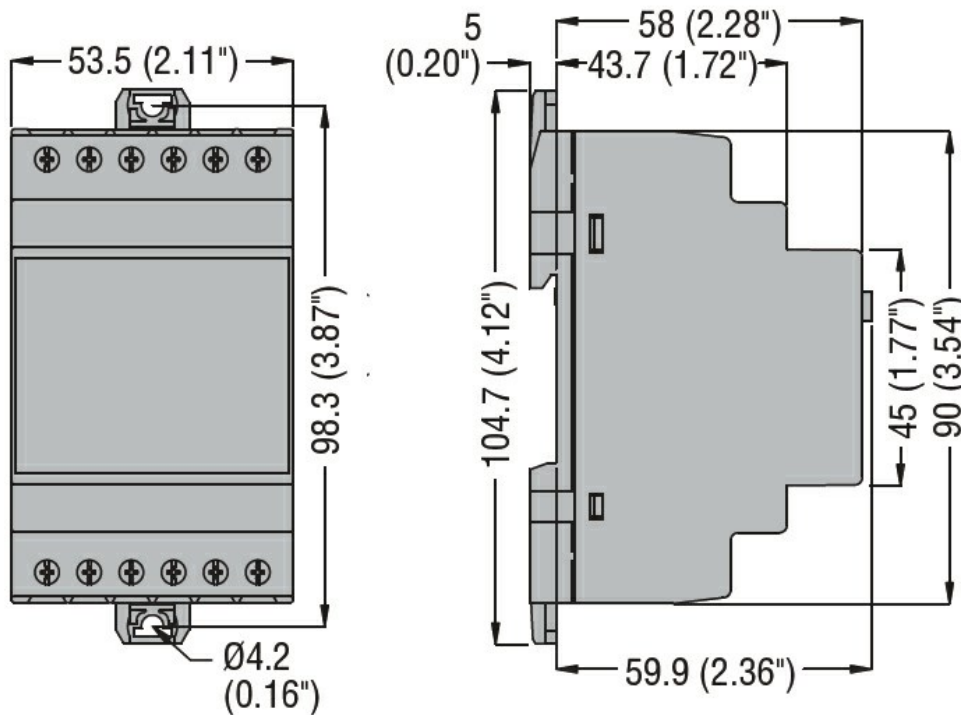
IEC Conventional free air thermal current I_{th}

A 8

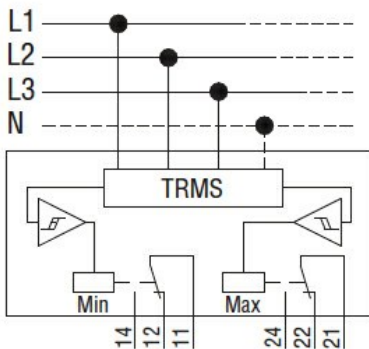
UL/CSA and IEC/EN 60947-5-1 designation

B300

Electrical life (with rated load)				cycles	100000
Mechanical life				cycles	30000000
Functions					
Modular version					3U
Minimum AC voltage					Yes
Maximum AC voltage					Yes
Natural loss					Yes
Phase loss					Yes
Incorrect phase sequence					Yes
Asymmetry					No
Minimum frequency					No
Maximum frequency					No
Programmable via NFC technology and APP					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	Ibin 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)					3
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	53.5 x 104.7 x 64.9
Weight				g	200
Dimensions					



Wiring diagrams



Certifications and compliance

Compliance

IEC/EN 60255-5
IEC/EN 61000-6-2
IEC/EN 61000-6-3

Certificates

EAC

ETIM classification

ETIM 8.0

EC001438 -
Voltage
monitoring relay