



Product designation

Product type designation

Voltage
monitoring relays
PMV80N

General characteristics

Description

Minimum and maximum AC voltage, minimum and maximum frequency, 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	480
Max	VAC	600

Voltage set-point ($\%U_e$)

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

Frequency set-point ($\%$ rated frequency)

min	%	1
Max	%	10

Tripping delay

s 0.1...20s (0.1...5s freq.)

Resetting time

s 0.5

Resetting hysteresis

% 3 (0.5 freq)

Instantaneous tripping for U_e

Voltage $< 70\% U_e$

Type of reset

Automatic

Repeat accuracy

% $< \pm 0.1$

Tripping time for phase loss

ms 60

Relay outputs

Number of relays

Nr. 2

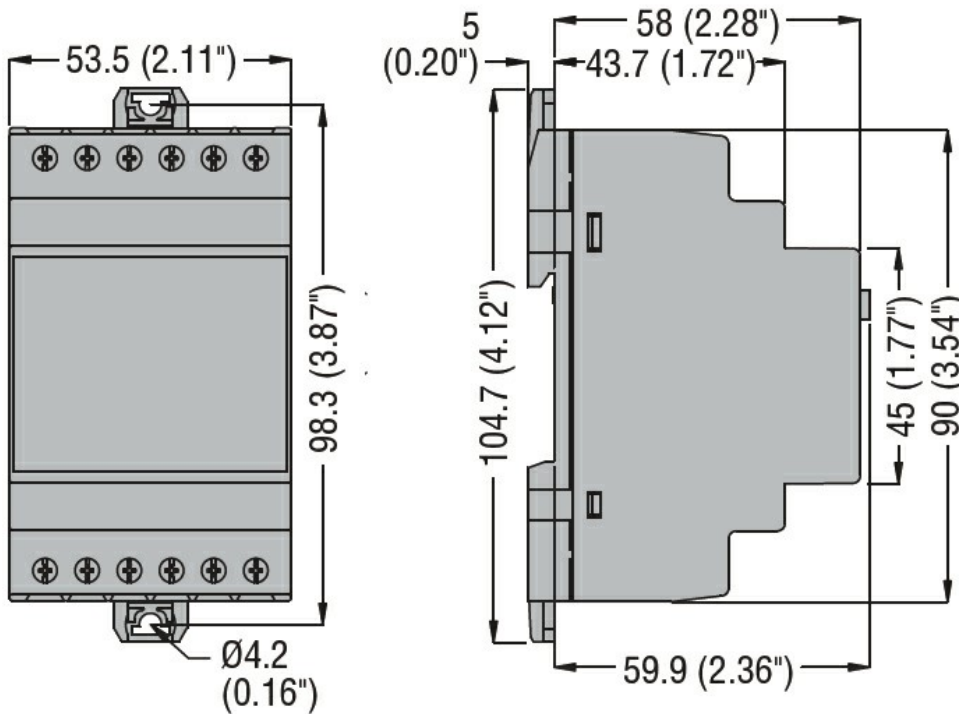
Relay state

Normally energised De-energises at tripping

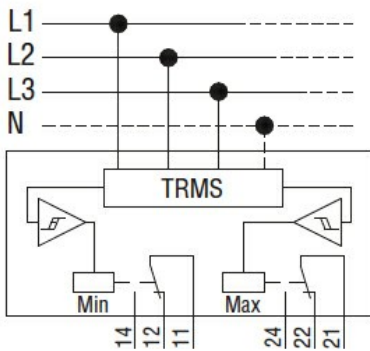
Contact arrangement				2 changeover SPDT
Rated operational voltage AC (IEC)	VAC			250
Maximum switching voltage	VAC			400
IEC Conventional free air thermal current I _{th}	A			8
UL/CSA and IEC/EN 60947-5-1 designation				B300
Electrical life (with rated load)	cycles			100000
Mechanical life	cycles			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				Yes
Maximum frequency				Yes
Programmable via NFC technology and APP				No
Indications				
Indication				1 green LED for power on and tripping and 3 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 U _i	V			600
Rated impulse withstand voltage U _{imp}	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	35.8 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