



Product designation

Product type designation

Voltage
monitoring relays
PMV70N

General characteristics

Description

Minimum and
maximum AC
voltage, phase
loss, neutral loss,
incorrect phase
sequence and
asymmetry 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	208
Max	VAC	240

Voltage set-point ($\%U_e$)

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

Asymmetry set-point ($\%U_e$)

% 5...15

Tripping delay

s 0.1...20

Resetting time

s 0.5

Resetting hysteresis

% 3

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	

Indications

Indication	1 green LED for power on and tripping and 3 red LEDs for tripping		
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Connections

Terminals type	Screw		
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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)	3		
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Material	Self-extinguishing polyamide		
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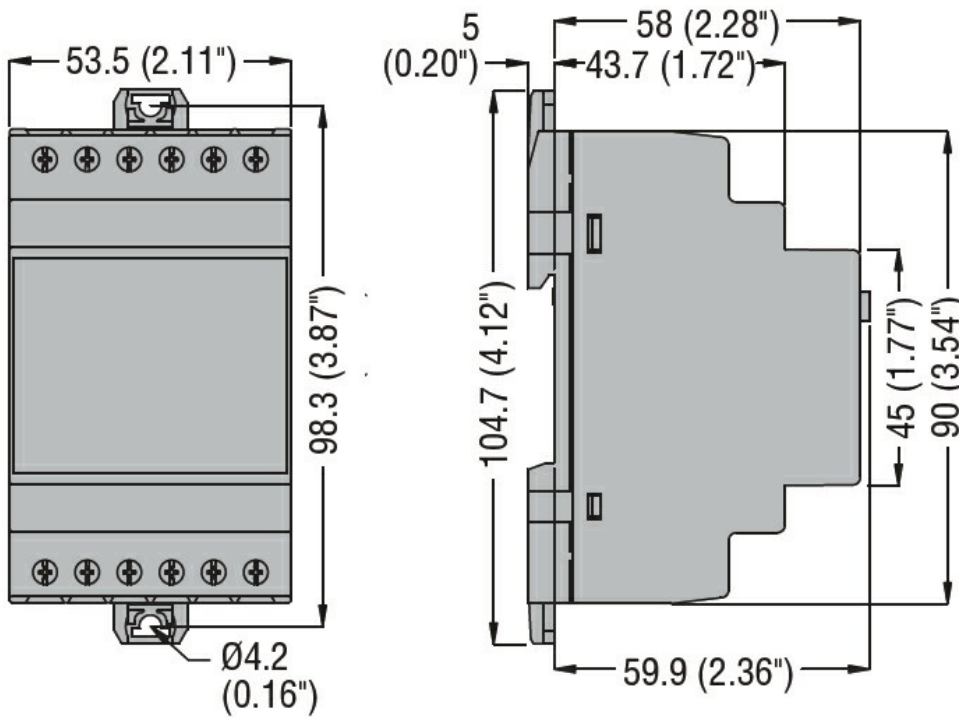
Mounting	35mm DIN rail (IEC/EN 60715)		
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IEC degree of protection	IP40 on front; IP20 at terminals		
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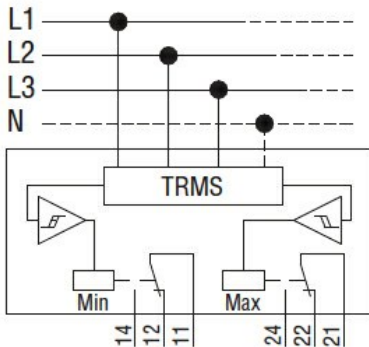
Dimensions (W x H x D)	mm	35.8 x 104.7 x 64.9	
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Weight	g	200	
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Dimensions



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