



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	480
Max	VAC	600

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

% ± 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

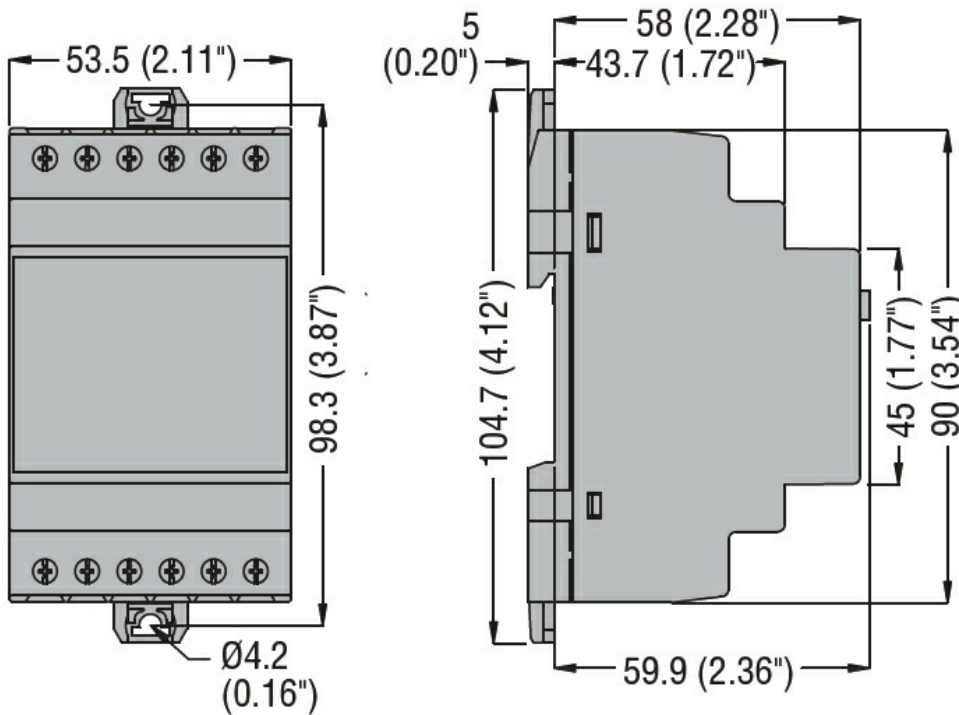
VAC 400

IEC Conventional free air thermal current I_{th}

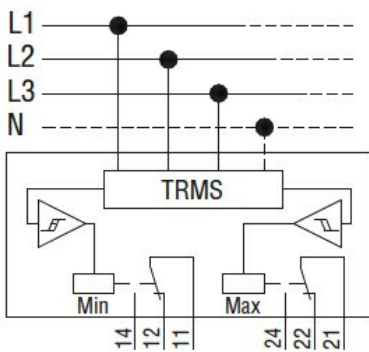
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UL/CSA and IEC/EN 60947-5-1 designation		B300	
Electrical life (with rated load)		cycles	100000
Mechanical life		cycles	30000000
Functions			
Modular version		3U	
Minimum AC voltage		Yes	
Maximum AC voltage		Yes	
Natural loss		Yes	
Phase loss		Yes	
Incorrect phase sequence		Yes	
Asymmetry		Yes	
Minimum frequency		No	
Maximum frequency		No	
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