



Product designation

Product type designation

General characteristics

Voltage
monitoring relays
PMV70N

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	380
Max	VAC	440

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

% $\leq \pm 0.1$

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

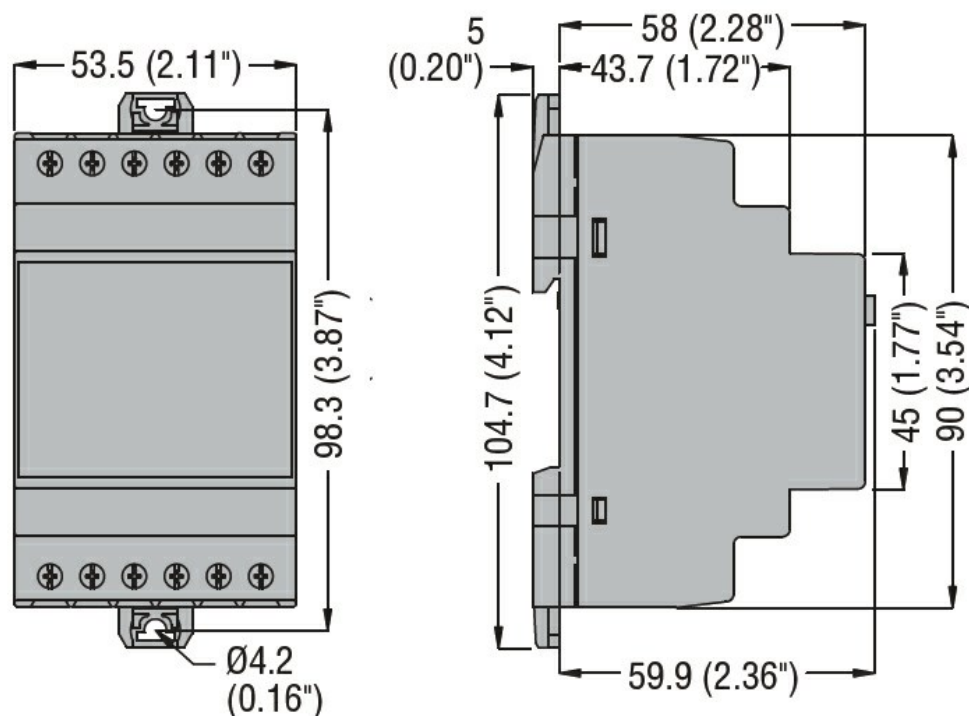
VAC 400

IEC Conventional free air thermal current I_{th}

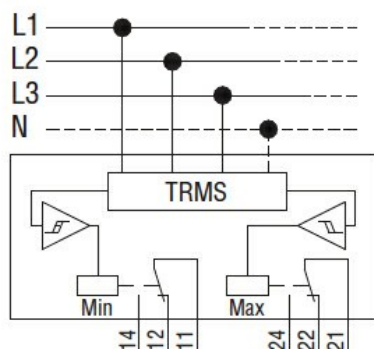
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UL/CSA and IEC/EN 60947-5-1 designation			B300		
Electrical life (with rated load)		cycles	100000		
Mechanical life		cycles	30000000		
Functions					
Modular version			3U		
Minimum AC voltage			Yes		
Maximum AC voltage			Yes		
Natural loss			Yes		
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	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	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