



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

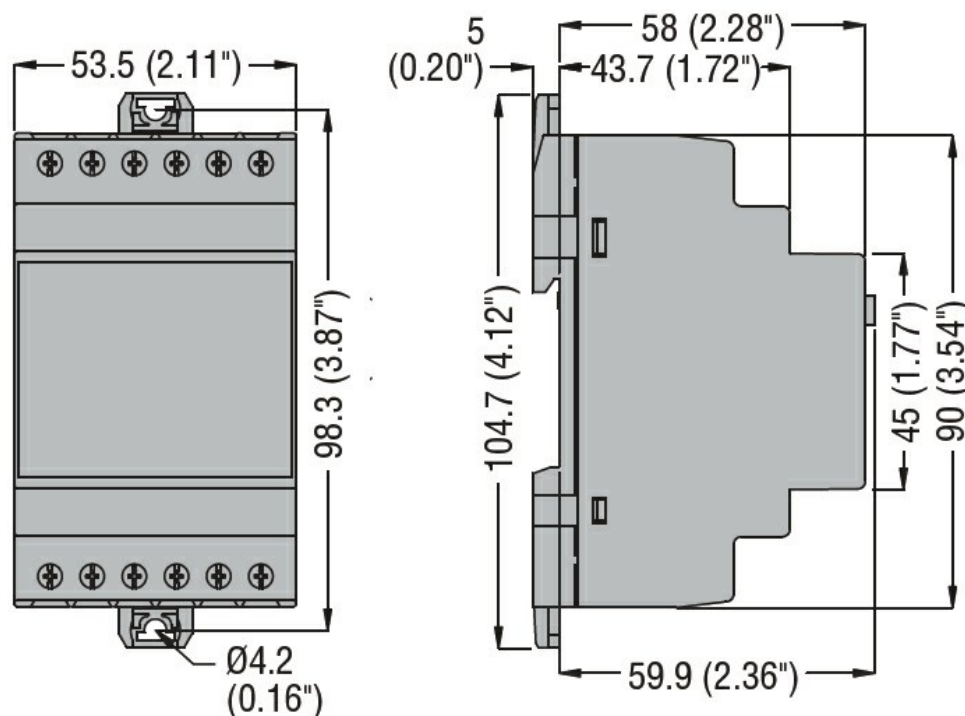
Rated voltage to control (U_e)	min	VAC	208
	Max	VAC	240
Voltage set-point ($\%U_e$)	min	%	80...95
	Max	%	105...115
Asymmetry set-point ($\%U_e$)		%	5...15
Tripping delay		s	0.1...20
Resetting time		s	0.5
Resetting hysteresis		%	3
Instantaneous tripping for U_e			Voltage $< 70\% U_e$
Type of reset			Automatic
Repeat accuracy		%	± 0.1
Tripping time for phase loss		ms	60

Relay outputs

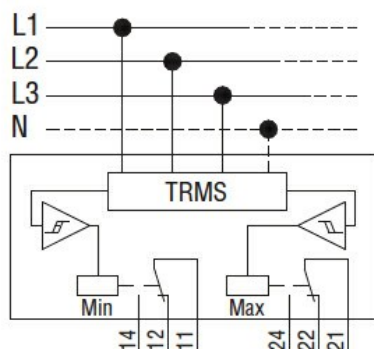
Number of relays	Nr.	2
Relay state		Normally energised De- energises at tripping
Contact arrangement		2 changeover SPDT
Rated operational voltage AC (IEC)	VAC	250
Maximum switching voltage	VAC	400
IEC Conventional free air thermal current I_{th}	A	8

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			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
			max	Ibin
				0.8
				7
Conductor cross section				
AWG/Kcmil			min	AWG
			Max	AWG
				24
				12
IEC			min	mm²
			Max	mm²
				0.2
				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
			max	°C
				-20
				+60
Storage temperature			min	°C
			max	°C
				-30
				+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