



Product designation

Product type designation

Voltage
monitoring relays
PMV70

General characteristics

Description

Minimum and
maximum AC
voltage, phase
loss, incorrect
phase sequence
and asymmetry
relay

Type of system

Three-phase
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	30
Power dissipation Max	W	2.5

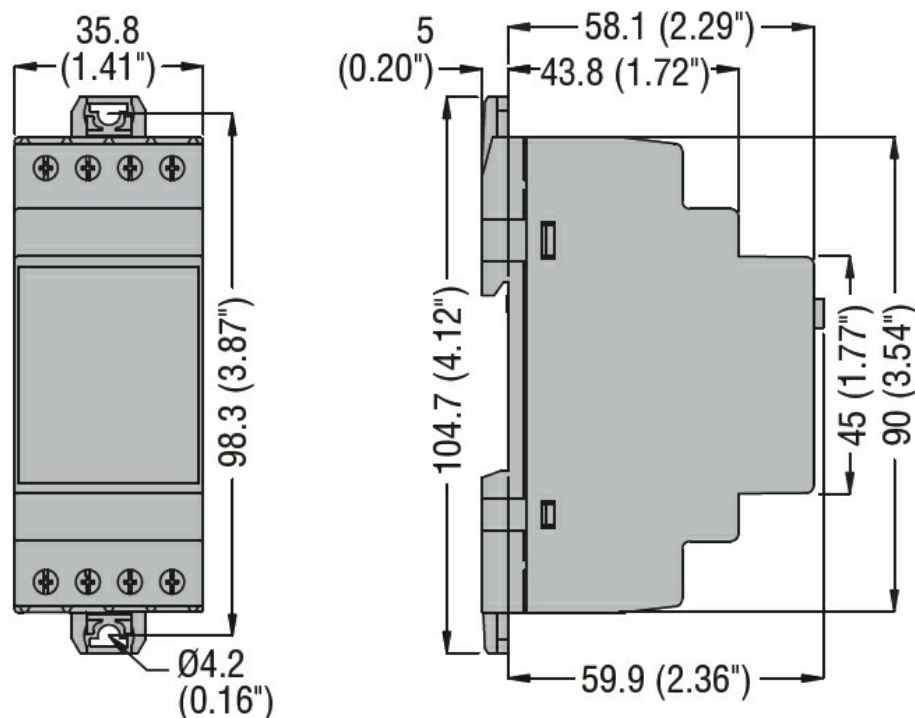
Control circuit

Rated voltage to control (U_e)	min	VAC	380
	Max	VAC	575
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

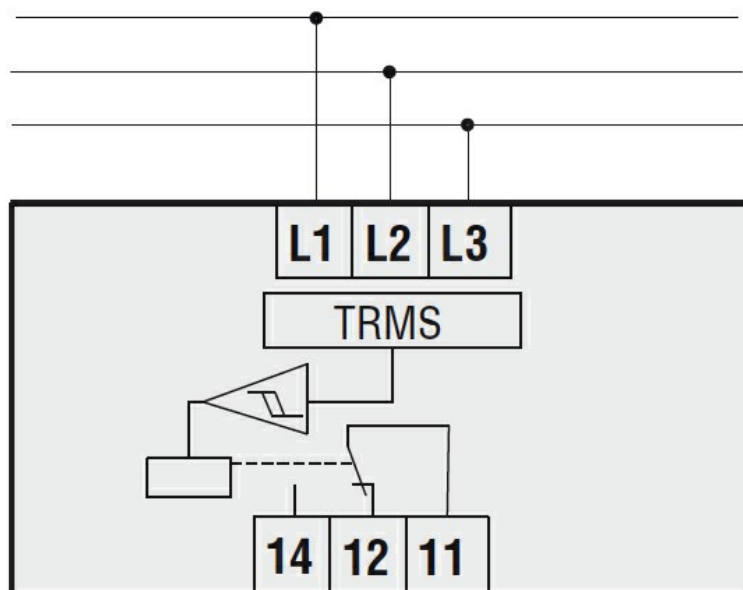
Relay outputs

Number of relays	Nr.	1
Relay state		Normally energised De- energises at tripping
Contact arrangement		1 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		2U
Minimum AC voltage		Yes
Maximum AC voltage		Yes
Phase loss		Yes
Incorrect phase sequence		Yes
Asymmetry		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)		2
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	130
Dimensions		



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 14

IEC/EN 60255-5

IEC/EN 61000-6-2

IEC/EN 61000-6-3

UL 508

Certificates

cULus

EAC

ETIM classification

ETIM 8.0

EC001438 -
Voltage
monitoring relay