



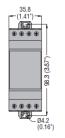
Order code	Rated voltage to control Ue (phase-to-phase)	Qty per pkg	Wt
	[V] 50/60Hz	n°	[kg]

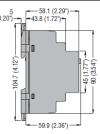
Three-phase system, without neutral.

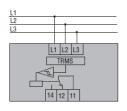
Minimum and maximum AC voltage. Delayed trip.

Phase loss and incorrect phase sequence. Instantaneous trip.

PMV50 A240	208-240VAC	1	0.130
PMV50 A575	380-575VAC	1	0.130
PMV50 A600	600VAC	1	0.130







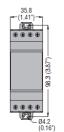
Order code	Rated voltage to control Ue (phase-to-phase)	Qty per pkg	Wt
	[V] 50/60Hz	n°	[kg]

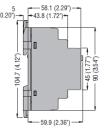
Three-phase system, without neutral.

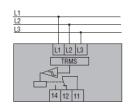
Minimum AC voltage and asymmetry. Delayed trip.

Phase loss and incorrect phase sequence. Instantaneous trip.

PMV60 A240	208-240VAC	1	0.130
PMV60 A575	380-575VAC	1	0.130
PMV60 A600	600VAC	1	0.130









#### **General characteristics**

- Voltage monitoring relay, self powered, for minimum and maximum voltage, phase loss and incorrect phase sequence
- Configurable rated voltage (Ue):
  - PMV50 A240: 208-220-230-240VAC
  - PMV50 A575: 380-400-415-440-460-480-525-575VAC
- High tripping accuracy
- TRMS measurements (True Root Mean Square)
- Control of phase-to-phase voltages
- Phase loss detection if one of the voltages is <70% rated value</li>
- Phase loss tripping time: 60ms
- 1 relay output with 1 changeover contact (SPDT)
- Modular DIN 43880 housing, 2 module
- IEC protection degree: IP40 on front (only when placed in IP40 enclosure or control board); IP20 on terninals.

#### **ADJUSTMENTS**

"V max" Maximum voltage tripping threshold

105-115% Ue

"V min" Minimum voltage tripping threshold

80-95% Ue

"Delay" for each Tripping time 0.1-20s
"Reset delay" Resetting time 0.1-20s.

### **General characteristics**

- Voltage monitoring relay, self powered, for minimum voltage, phase loss and incorrect phase sequence
- Configurable rated voltage (Ue):
  - PMV60 A240: 208-220-230-240VAC
  - PMV60 A575: 380-400-415-440-460-480-525-575VAC
- Excellent tripping accuracy
- TRMS measurements (True Root Mean Square)
- Control of phase-to-phase voltages
- Phase loss detection if one of the voltages is <70% rated value</li>
- Phase loss tripping time: 60ms
- 1 relay output with 1 changeover contact (SPDT)
- Modular DIN 43880 housing, 2 module
- IEC protection degree: IP40 on front (only when placed in IP40 enclosure or control board); IP20 on terminals.

### **ADJUSTMENTS**

"V min" Minimum voltage tripping threshold

80-95% Ue

"Asymmetry" High voltage asymmetry tripping

threshold 5-15% Ue

"Delay" Tripping time 0.1-20s "Reset delay" Resetting time 0.1-20s

# Certifications and compliance

Certifications obtained: EAC; UL Listed for USA and Canada (cULus - File E93601), as Auxiliary Devices. Compliant with standards: IEC/EN 60255-5, IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL 508, CSA C22.2 n° 14.





Order code	Rated voltage to control Ue (phase to phase)	Qty per pkg	Wt
	[V] 50/60Hz	n°	[kg]

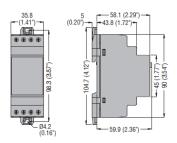
Three-phase system, without neutral.

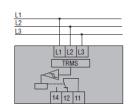
Minimum and maximum AC voltage and asymmetry.

Delayed trip.

Phase loss and incorrect phase sequence. Instantaneous trip.

PMV70 A240	208-240VAC	1	0.130
PMV70 A575	380-575VAC	1	0.130
PMV70 A600	600VAC	1	0.130





### General characteristics

- Voltage monitoring relay, self powered, for minimum and maximum voltage, phase loss, incorrect phase sequence and asymmetry
- Configurable rated voltage (Ue):
  - PMV70 A240: 208-220-230-240VAC
  - PMV70 A575: 380-400-415-440-460-480-525-575VAC
- **Excellent tripping accuracy**
- TRMS measurements (True Root Mean Square)
- Control of phase-to-phase voltages
- Phase loss detection if one of the voltages is <70% rated value
- Phase loss tripping time: 60ms
- 1 relay output with 1 changeover contact (SPDT)
- Modular DIN 43880 housing, 2 module
- IEC protection degree: IP40 on front (only when placed in IP40 enclosure or control board); IP20 at terminals.

### **ADJUSTMENTS**

"V max" Maximum voltage tripping threshold

105-115% Ue

"V min" Minimum voltage tripping threshold

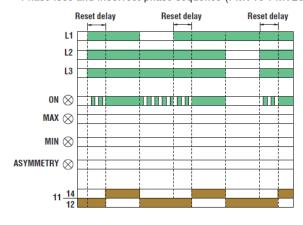
80-95% Ue

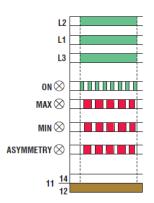
"Delay" for each Tripping delay 0.1-20s

"Asymmetry" High voltage asymmetry tripping

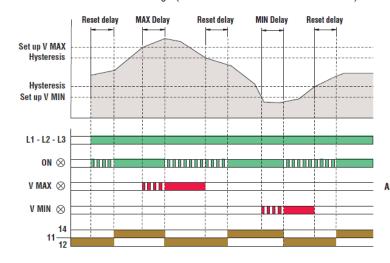
threshold 5-15% Ue.

Phase loss and incorrect phase sequence (PMV10-PMV20-PMV30-PMV40-PMV50-PMV60- MV70)

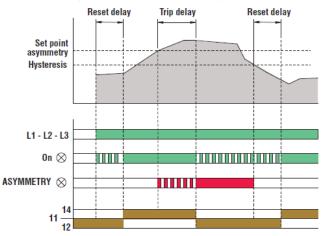




## Maximum and minimum voltage (PMV30 - PMV50 - PMV60 - PMV70)



### Asymmetry (PMV40 - PMV60 - PMV70)







## **ENERGY AND AUTOMATION**

TYPE Single phase				_	_	_
Three phase	PMV50	PMV60	PMV70	<del>-</del>	_	_
Three phase with/without neutral	FINIVOU	FIWIVOU	FINIV/U	PMV50 N	PMV70 N	PMV80 N
		_	_	FINIVOU IN	FINIV /U IN	FIVIVOU IV
DESCRIPTION	Minimum and maximum AC voltage, phase loss and incorrect phase sequence	Minimum AC voltage, phase loss, incorrect phase sequence and asymmetry	Minimum and maximum AC voltage, phase loss, incorrect phase sequence and asymmetry	Minimum and maximum AC voltage, phase loss, neutral loss and incorrect phase sequence	Minimum and maximum AC voltage, phase loss, neutral loss, incorrect phase sequence and asymmetry	Minimum and maximum AC voltage and frequency phase loss, neutral loss ar incorrect phase sequence
CONTROL CIRCUIT		1	1			
Rated voltage	208-240VAC	208-240VAC	208-240VAC	208-240VAC	208-240VAC	208-240VAC
to control (Ue)	380-575VAC	380-575VAC	380-575VAC	380-440VAC	380-440VAC	380-440VAC
	600VAC	600VAC	600VAC	480-600VAC	480-600VAC	480-600VAC
Maximum voltage set-point	105-15% Ue	_	105-115% Ue	105-115% Ue	105-115% Ue	105-115% Ue
Minimum voltage set-point	80-95% Ue	80-95% Ue	80-95% Ue	80-95% Ue	80-95% Ue	80-95% Ue
Asymmetry set-point	_	5-15% Ue	5-15% Ue	_	5-15% Ue	_
Minimum and maximum frequency set-point	_	_	_	_	_	1-10% rated frequency
Tripping time			0.1-20s			0.1-20s 0.1-5s frequ
Resetting time	0.1-20s (0.5s at power up)	0,1-20s (0.5s at power up)	0.5s	0.1-20s	0.5s	0.5s
Resetting hysteresis	3%	3%	3%	3%	3%	3% 0.5% frequ
Instantaneous tripping for Ue			<70% U	e configured		
Repeat accuracy			<:	±0.1%		
POWER SUPPLY						
Auxiliary voltage (Us)			Self	powered		
Operating range				'-1.2Ue		
Frequency	50/60Hz ±5%					
Power consumption (maximum)	11VA (208-240VAC)❶ 27VA max 30VA (380-575VAC)❶ 19VA (600VAC)❶					
Power dissipation (maximum)		2.5W			1.9W max	
RELAY OUTPUTS		2.011			11011 11100	
Number of relays		1			2	
Relay state		<u> </u>		y energised ses at tripping		
Contact arrangement	1 changeover SPDT 2 changeover SPDT					
Rated operational voltage	250VAC					
Maximum switching voltage				00VAC		
Conventional free-air thermal				8A		
current (Ith) UL/CSA and IEC/EN 60947-5-1						
designation	B300					
Electrical life (with rated load)				cycles		
Mechanical life				0 <sup>6</sup> cycles		
Indications	1 green LED for power on and tripping and tripping and tripping 2 red LEDs for tripping 3 red LEDs for tripping			1 green LED for power on and tripping		
CONNECTIONS	Z IEU LEDS	тог ттррпту	3 red LEDs for tripping		2 red LEDs for tripping	
Terminal tightening torque			0.8Nm (7lbin; 7-9lbin per	UL/CSA - PMVN excluded)		
(maximum)  Conductor section min-max	0.2-4.0mm <sup>2</sup> (24-12AWG; 18-12 AWG per UL/CSA - PMVN excluded)					
INSULTION (input-output)						
IEC rated insulation voltage Ui			60	00VAC		
IEC rated impulse withstand voltage Uimp	6kV					
IEC power frequency withstand voltage				4kV		
AMBIENT CONDITIONS						
AMBIENT CONDITIONS						
Operating temperature			-20	+60°C		
Operating temperature				+60°C +80°C		
				+60°C +80°C		