# Protection relays **Voltage monitoring relays**

## For three-phase systems, without neutral

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

Three-phase system, without neutral.

Order

Order code

Instantaneous trip PMV50N A240

PMV50N A440

**PMV50N A600** 

Minimum and maximum AC voltage and asymmetry. Delayed trip. 

Rated voltage

to control Ue

[V] 50/60Hz

Three-phase system, with or without neutral. Minimum and maximum AC voltage. Delayed trip.

208-240VAC

380-440VAC

480-600VAC

(phase to phase)

Phase loss, neutral loss and incorrect phase sequence.

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 Maximum voltage tripping threshold 'V max' 105-115% Lle

"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% Lle

### **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 nº 14.

**Operational diagram** 

See page 18-17.

#### General characteristics

Wt

[kg]

0.150

0.150

0.150

Qty

per

pkg

n°

1

1

- Voltage monitoring relay, self powered, for minimum and maximum voltage, phase loss, neutral loss and incorrect phase sequence
- PMV50N A240: 208-220-230-240VAC (phase-phase) 120-127-132-138VAC (phase-neutral)
  PMV50N A440: 380-400-415-440VAC (phase-neutral)
  PMV50N A600: 480-525-575-600VAC (phase-neutral)
  PMV50N A600: 480-525-575-600VAC (phase-phase) 273-202-230-2470/AC (phase-neutral)
- 277-303-332-347VAC (phase-neutral)
- Excellent tripping accuracy
- TRMS measurements (True Root Mean Square)
- \_ Phase loss detection when one of the voltages is <70% rated voltage
- Phase or neutral loss tripping time: 60ms 2 relay outputs, each with 1 changeover contact (SPDT)
- \_ Modular DIN 43880 housing, 3 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 time 0.1-20s

"Reset Delay" Resetting time 0.1-20s.

## **Certifications and compliance**

Certifications obtained: EAC. Compliant with standards: IEC/EN 60255-5, IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL 508, CSA C22.2 nº 14.

**Operational diagram** 

See page 18-18.

PMV50N...

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For three-phase systems

with or without neutral