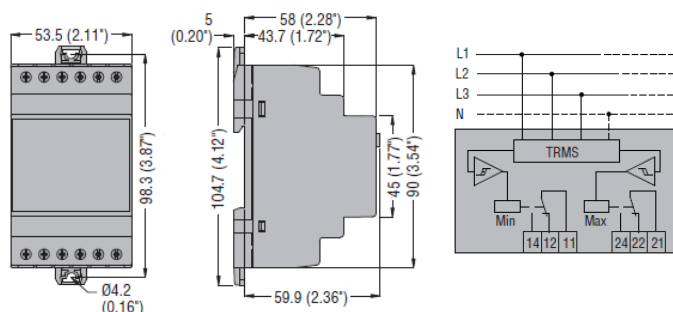


ENERGY AND AUTOMATION

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

Three-phase system, with or without neutral.
Minimum and maximum AC voltage. Delayed trip.
Phase loss, neutral loss and incorrect phase sequence.
Instantaneous trip.

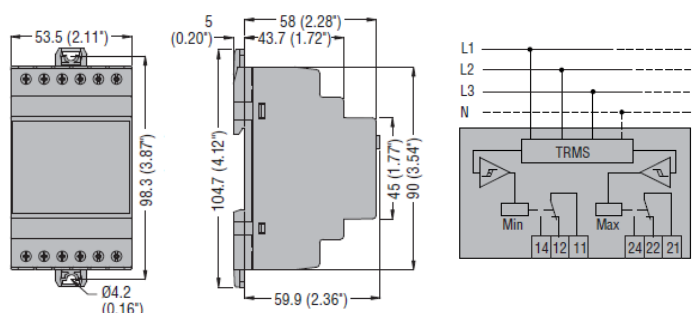
PMV50N A240	208-240VAC	1	0.150
PMV50N A440	380-440VAC	1	0.150
PMV50N A600	480-600VAC	1	0.150



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

Three-phase system, with or without neutral.
Minimum and maximum AC voltage and asymmetry.
Delayed trip.
Phase loss, neutral loss and incorrect phase sequence.
Instantaneous trip.

PMV70N A240	208-240VAC	1	0.150
PMV70N A440	380-440VAC	1	0.150
PMV70N A600	480-600VAC	1	0.150



General characteristics

- Voltage monitoring relay, self powered, for minimum and maximum voltage, phase loss, neutral loss and incorrect phase sequence
- 4 configurable rated voltage (Ue):
 - PMV50N A240: 208-220-230-240VAC (phase-phase) 120-127-132-138VAC (phase-neutral)
 - PMV50N A440: 380-400-415-440VAC (phase-phase) 220-230-240-254VAC (phase-neutral)
 - PMV50N A600: 480-525-575-600VAC (phase-phase) 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.

General characteristics

- Voltage monitoring relay, self powered, for minimum and maximum voltage, phase loss, neutral loss, incorrect phase sequence and asymmetry
- 4 configurable rated voltage (Ue):
 - PMV70N A240: 208-220-230-240VAC (phase-phase) 120-127-132-138VAC (phase-neutral)
 - PMV70N A440: 380-400-415-440VAC (phase-phase) 220-230-240-254VAC (phase-neutral)
 - PMV70N A600: 480-525-575-600VAC (phase-phase) 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 value
- 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.

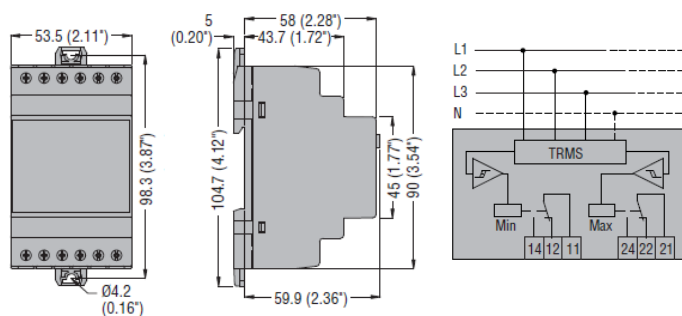
ADJUSTMENTS

- “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
- “Asymmetry” High voltage asymmetry tripping threshold 5-15% Ue.

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

Three-phase system, with or without neutral.
 Minimum and maximum AC voltage, minimum and maximum frequency. Delayed trip.
 Phase loss, neutral loss and incorrect phase sequence.
 Instantaneous trip.

PMV80N A240	208-240VAC	1	0.150
PMV80N A440	380-440VAC	1	0.150
PMV80N A600	480-600VAC	1	0.150



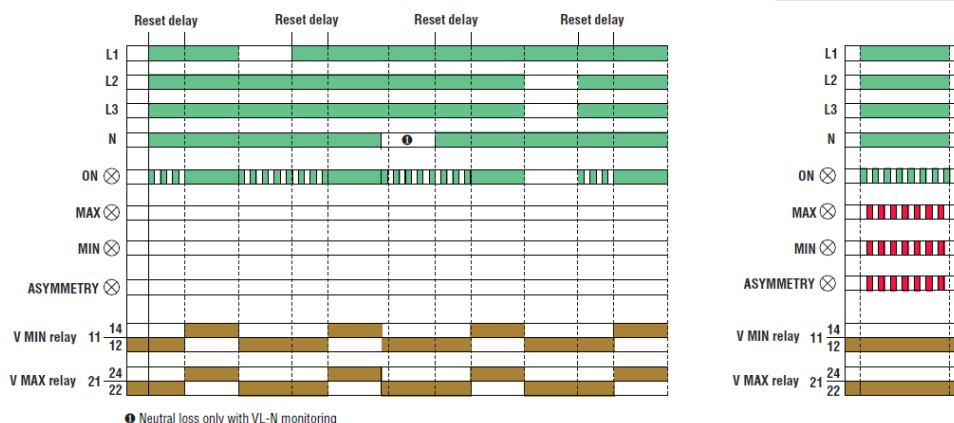
General characteristics

- Voltage monitoring relay, self powered, for minimum and maximum voltage, minimum and maximum frequency, phase loss, neutral loss and incorrect phase sequence
- 4 configurable rated voltage (Ue):
 - PMV80N A240: 208-220-230-240VAC (phase-phase)
120-127-132-138VAC (phase-neutral)
 - PMV80N A440: 380-400-415-440VAC (phase-phase)
220-230-240-254VAC (phase-neutral)
 - PMV80N A600: 480-525-575-600VAC (phase-phase)
277-303-332-347VAC (phase-neutral)
- Excellent tripping accuracy
- TRMS measurements (True Root Mean Square)
- Phase loss detection if one of the voltages is <70% rated value
- Phase or neutral loss tripping time: 60ms
- 2 relay outputs, each with 1 changeover contact (SPDT)
- Modular DIN 43880, 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
- “Hz min/max” Minimum/maximum frequency tripping threshold 1-10%
- “V delay” Tripping time 0.1-20s
- “Hz delay” Tripping time 0.1-5s.

Phase loss and incorrect phase sequence (PMV50N - PMV70N - PMV80N)



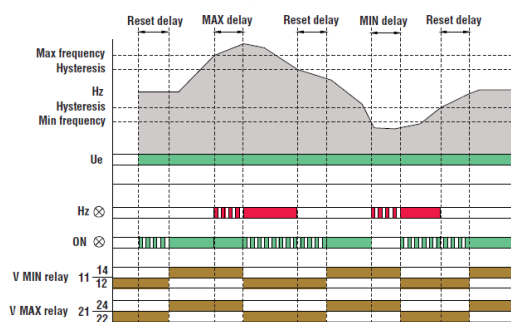
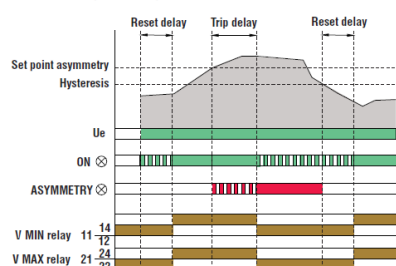
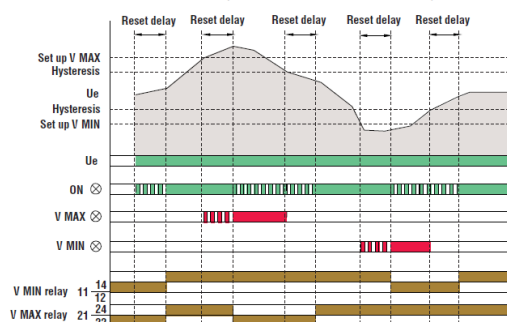
Certifications and compliance

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 n° 14.

Maximum and minimum voltage (PMV50N - PMV70N - PMV80N)

Asymmetry (PMV70N)

Maximum and minimum frequency (PMV80N)



TYPE	Single phase	—	—	—	—	—	—
	Three phase	PMV50	PMV60	PMV70	—	—	—
	Three phase with/without neutral	—	—	—	PMV50 N	PMV70 N	PMV80 N
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 and incorrect phase sequence	
CONTROL CIRCUIT							
Rated voltage to control (Ue)	208-240VAC	208-240VAC	208-240VAC	208-240VAC	208-240VAC	208-240VAC	208-240VAC
	380-575VAC	380-575VAC	380-575VAC	380-440VAC	380-440VAC	380-440VAC	380-440VAC
	600VAC	600VAC	600VAC	480-600VAC	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	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	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		0.1-20s	0.1-5s frequency
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% frequency
Instantaneous tripping for Ue	<70% Ue configured						
Repeat accuracy	< ±0.1%						
POWER SUPPLY							
Auxiliary voltage (Us)	Self powered						
Operating range	0.7-1.2Ue						
Frequency	50/60Hz ±5%						
Power consumption (maximum)	11VA (208-240VAC)❶ 30VA (380-575VAC)❶ 19VA (600VAC)❶			27VA max			
Power dissipation (maximum)	2.5W			1.9W max			
RELAY OUTPUTS							
Number of relays	1			2			
Relay state	Normally energised De-energises at tripping						
Contact arrangement	1 changeover SPDT			2 changeover SPDT			
Rated operational voltage	250VAC						
Maximum switching voltage	400VAC						
Conventional free-air thermal current (Ith)	8A						
UL/CSA and IEC/EN 60947-5-1 designation	B300						
Electrical life (with rated load)	10 ⁵ cycles						
Mechanical life	30x10 ⁶ cycles						
Indications	1 green LED for power on and tripping 2 red LEDs for tripping		1 green LED for power on and tripping 3 red LEDs for tripping		1 green LED for power on and tripping 2 red LEDs for tripping		
CONNECTIONS							
Terminal tightening torque (maximum)	0.8Nm (7lbin; 7-9lbin per UL/CSA - PMV...N excluded)						
Conductor section min-max	0.2-4.0mm ² (24-12AWG; 18-12 AWG per UL/CSA - PMV...N excluded)						
INSULATION (input-output)							
IEC rated insulation voltage Ui	600VAC						
IEC rated impulse withstand voltage Uimp	6kV						
IEC power frequency withstand voltage	4kV						
AMBIENT CONDITIONS							
Operating temperature	-20...+60°C						
Storage temperature	-30...+80°C						
HOUSING							
Material	Self-extinguishing polyamide						

❶ Power consumption (maximum) at 50Hz.