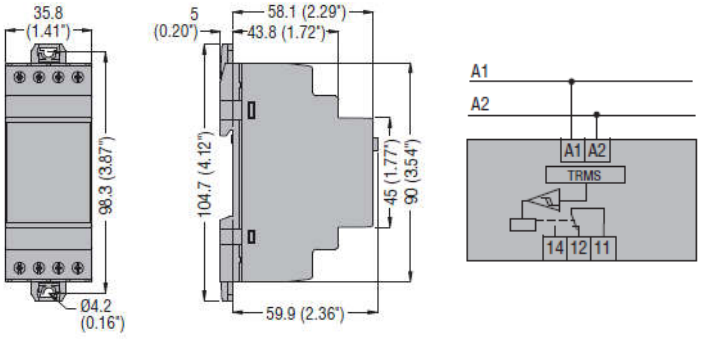
Lovato electric

ENERGY AND AUTOMATION

Order code	Rated voltage to control Ue	Qty per pkg	Wt
	[V] 50/60Hz	n°	[kg]
Single-phase system. Minimum and maximum AC voltage. Delayed trip.			
PMV55 A240	208-240VAC	1	0.125
PMV55 A440	380-440VAC	1	0.125



General characteristics

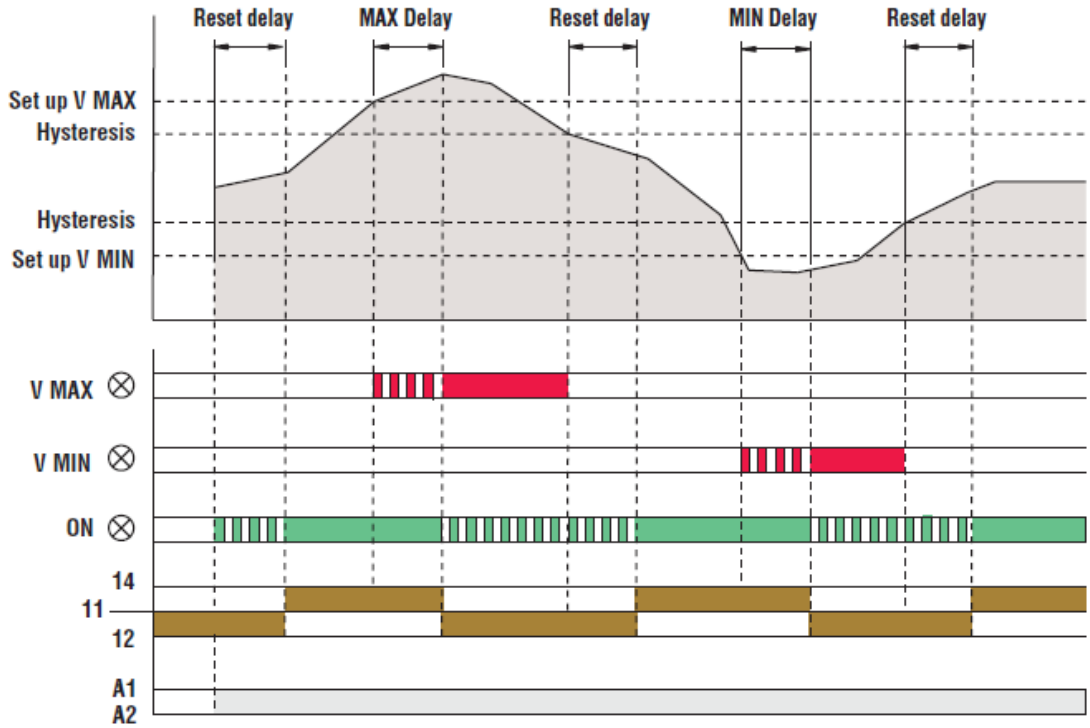
- Voltage monitoring relay, self powered, for minimum and maximum voltage
- 4 configurable rated voltage (Ue):
  - PMV55 A240: 208-220-230-240VAC
  - PMV55 A440: 380-400-415-440VAC
- Excellent tripping accuracy
- TRMS measurements (True Root Mean Square)
- 1 relay output with 1 changeover contact (SPDT)
- 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 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.



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ENERGY AND AUTOMATION

TYPE						
	Single phase	**PMV55**	—	—	—	—
	Three phase	—	**PMV10**	**PMV20**	**PMV30**	**PMV40**
	Three phase with/without neutral	—	—	—	—	—
DESCRIPTION						
		Mimum and maximum AC voltage	Phase loss and incorrect phase sequence		Minimum AC voltage, phase loss and incorrect phase sequence	Asymmetry, phase loss and incorrect phase sequence
CONTROL CIRCUIT						
Rated voltage to control (Ue)		208-240VAC	208-480VAC	100-240VAC	208-240VAC	
		380-440VAC		208-575VAC	380-575VAC	
				380-600VAC	600VAC	
Maximum voltage set-point		105-115% Ue	—	—	—	—
Minimum voltage set-point		80-95% Ue	—	—	80-95% Ue	—
Asymmetry set-point		—	—	—	—	5-15%Ue
Minimum and maximum frequency set-point		—	—	—	—	—
Tripping time		0.1-20s	60ms		0.1-20s	
Resetting time		0.1-20s (0.5s at power up)	0.5s		0.1-20s (0.5s at power up)	
Resetting hysteresis		3%	5%		3%	
Instantaneous tripping for Ue		<70% Ue configured	Umin<70% Umax		<70% Ue configured	<70% minimum Ue
Repeat accuracy		< ±0-1%	< ±1%		< ±0.1%	< ±0.1%
POWER SUPPLY						
Auxiliary voltage (Us)		Self powered				
Operating range		0.7-1.2Ue	0.85-1.1Ue		0.7-1.2Ue	
Frequency		50/60Hz ±5%				
Power consumption (maximum)		10VA (208-240VAC)❶ 17VA (380-440VAC)❶	20VA❶	28VA❶	11VA (208-240VAC)❶ 30VA (380-575VAC)❶ 19VA (600VAC)❶	
Power dissipation (maximum)		1.5W	2.2W	2.5W		
RELAY OUTPUTS						
Number of relays		1				
Relay state		Normally enegised De-energises at tripping				
Contact arrangement		1 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		1 green LED for power on and tripping 1 red LED for tripping	
CONNECTIONS						
Terminal tightening torque (maximum)		0.8Nm (7lbin; 7-9lbin per UL/CSA)				
Conductor section min-max		0.2-4.0mm^2 (24-12AWG; 18-12 AWG per UL/CSA)				
INSULTION (input-output)						
IEC rated insulation voltage Ui		440VAC	480VAC	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.