

## **PMV30A240** electric VOLTAGE MONITORING REALY FOR THREE-PHASE SYSTEM, WITHOUT NEUTRAL, MINIMUM AC VOLTAGE. PHASE LOSS AND INCORRECT PHASE SEQUENCE, 208...240VAC 50/60HZ



Product designation			Voltage monitoring relays
Product type designation			PMV30
General characteristics			
Description			Minimum AC voltage, phase loss and incorrect phase sequence relay
Type of system			Three-phase without neutral
Power supply			
Auxiliary supply voltage Us			Self powered
Operating voltage range			0.71.2 Ue
Rated frequency		Hz	50/60 ±5%
Power consumption Max		VA	11
Power dissipation Max		W	2.5
Control circut			
Rated voltage to control (Ue)			
	min	VAC	208
	Max	VAC	240
Voltage set-point (%Ue)			
	min	%	8095
Tripping delay		S	0.120
Resetting time		S	0.1…20 (0.5 at power up)
Resetting hysteresis		%	3
Instantaneous tripping for Ue			Voltage <70% Ue
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 Ith		А	8
UL/CSA and IEC/EN 60947-5-1 designation			B300
Electrical life (with rated load)		cycles	100000
Mechanical life		cycles	3000000
Functions			

PMV30A240

The characteristics described in this document are subject to updates or modifications at any time. The descriptions, technical and functional information, illustrations and instructions in this brochure are purely illustrative, and are consequently not contractually binding



ENERGY AND AUTOMATION

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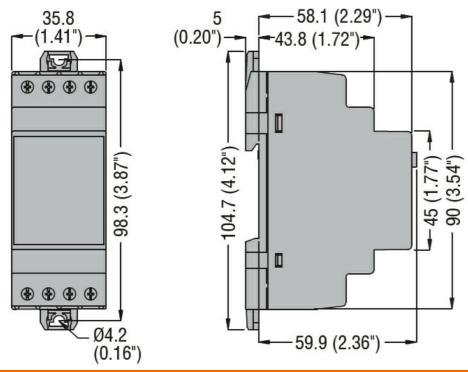
Minimum AC voltage Yes   Maximum AC voltage No   Phase loss Yes   Incorrect phase sequence Yes   Asymmetry No   Indication 1 green LED for power on and tripping and 1 red LED for tripping   Connections Screw   Tightening torque for terminals Screw   Tightening torque for terminals Screw   Maximum AC voltage Max   Maximum AC voltage Screw   Tightening torque for terminals max   Max Nm 0.8   Conductor cross section Max   AWG/Kcmil min mm²   IEC min mm²   Version AWG/Kcmil Max   Max NWG 12   Insulations V 600   Rated insulation voltage Uimp V 600   Rated insulation voltage Uimp KV 4   Ambient conditions Temperature min< °C   Temperature Quertaing temperature min   Max °C +80   Housing Self-extinguishing polyamide   Execution (n° of modules) 2   Material Self-extinguishing polyamide   Mounting Self-extinguishing	Modular version				2U		
Maximum AC voltage No Phase loss Yes Incorrect phase sequence Yes Asymmetry No Indications I green LED for power on and tripping and 1 red Connections Screw Terminals type Screw Tightening torque for terminals Conductor cross section AWG/Kcmil Min AWG 24 Max AWG 12 IEC Min MMG 24 Max Correct Action AMG/Max AWG 12 IEC Min MMG 24 Max Correct Action AMG/Max AWG 12 IEC Min MMG 24 Max Correct Action AMG/Max AWG 12 IEC Min MMG 24 Max AWG 24							
Phase loss     Yes       Incorrect phase sequence     Yes       Asymmetry     No       Indications     1 green LED for power on and tripping and 1 red LED for tripping       Connections     5       Terminals type     Screw       Tightening torque for terminals     max       Max     Nm       AWG/Kcmil     min       AWG/Kcmil     Max       IEC     min       Terminals type     0.8       Conductor cross section     AWG/Kcmil       AWG/Kcmil     min       Max     mm <sup>3</sup> Deparating frequency withstand voltage UIP     V       Rated insulation voltage UI     V       Operating frequency withstand voltage     kV       Ambient conditions     min       Temperature     Operating temperature       Material     Self-extinguishing polyamide       Material     Self-extinguishing polyamide       Material     Self-extinguishing polyamide       Mounting     Self-extinguishing polyamide       Uncertain the protection     IP40 on front, E4.9       Wou							
Incorrect phase sequence Yes Asymmetry No Indications 1 green LED for power on and tripping and 1 red LED for tripping Connections Screw Tightening torque for terminals Terminals type Screw Tightening torque for terminals MWG/Kcmil Min AWG 24 Max AWG 12 IEC Min mm² 0.2 Max MWG 12 Isulations Rated insulation voltage Uinp V 600 Operating frequency withstand voltage Uinp KV 6 Operating frequency withstand voltage Uinp KV 6 Storage temperature Min °C -20 max °C +80 Housing Soft-extinguishing polyamide Material Soft-extinguishing polyamide Mounting (IEC/EN 60715) IEC degree of protection IP20 at terminals Dimensions (W x H x D) mm 35.8 x 104.7 x 64.9 Weight Q g 130							
Asymmetry     No       Indications     1 green LED for power on and tripping and 1 red LED for tripping       Connections     Screw       Terminals type     Screw       Tightening torque for terminals     max       Max     Nm       0.8     max       Max     Nm       AWG/Kcmil     min       Max     AWG       IEC     min       IEC     min       Itsulations     V       Rated insulation voltage Ui     V       Rated insulation voltage Ui     V       Conductor cross section     KV       Insulations     V       Terminal stype     V       Operating frequency withstand voltage Uimp     V       Ambient conditions     Temperature       Temperature     min<*C		ence					
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LED for tripping   Connections   Tightening torque for terminals max Nm 0.8   max Ibin 7   Conductor cross section AWG/Kcmil min AWG 24   Max AWG 12   IEC min mm² 0.2   Max Max Mm² 4   Insulations v 600   Rated insulation voltage Ui V 600   Querating frequency withstand voltage kV 4   Ambient conditions v 6   Temperature Operating temperature min °C   Storage temperature min °C -20   Material Self-extinguishing polyamide   Mounting IF40 on front;   IEC degree of protection IP40 on front;   Dimensions (W x H x D) mm 55.8 x 104.7 x   Weight g 130	Indication				•		
Screw     Tightening torque for terminals     max   Nm   0.8     max   Ibin   7     Conductor cross section     AWG/Kcmil   min   AWG   24     Max   AWG   12   12     IEC   min   mm <sup>2</sup> 4     Isulations   mm   0.2   Max   mm <sup>2</sup> 4     Isulations   mm   0.2   Max   mm <sup>2</sup> 4     Isulations   mm   0.2   Max   mm <sup>2</sup> 4     Rated insulation voltage Ui   V   600   Rated insulation voltage Uimp   KV   6     Operating frequency withstand voltage   kV   4   4     Arrbient conditions   min   °C   -20   max   °C   +60     Operating temperature   min   °C   -30   max   °C   +60     Housing   2   Self-extinguishing polyamide   Self-extinguishing polyamide   Self-extinguishing polyamide     Execution (n° of modules)   2   Self-extinguishing polyamide   Self-extinguishing polyamide </td <td></td> <td></td> <td></td> <td></td> <td></td>							
Tightening torque for terminals   max   Nm   0.8     max   Nm   0.8     max   Nm   0.8     max   Nm   0.8     AWG/Kcmil   min   AWG   24     Max   AWG   12     IEC   min   mm²   0.2     Max   Max   Max   4     Insulations   V   600   600     Rated insulation voltage Uim   V   600   600     Querating frequency withstand voltage Uimp   KV   6   6     Operating frequency withstand voltage   kV   4   4     Ambient conditions   max   °C   -20     Temperature   min   °C   -20     Max   °C   +60   5     Storage temperature   min   °C   -30     max   °C   +80   4     Housing   2   Self-extinguishing   polyamide     Execution (n° of modules)   2   Self-extinguishing   polyamide     Mounting   IEC degree of protection   IP40 on f	Connections						
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Maxmm24InsulationsRated insulation voltage UiV600Rated insulation voltage UimpkV6Operating frequency withstand voltagekV4Ambient conditionsKV4TemperatureOperating temperaturemin°C-20min°C-20min°C-20min°C-20min°C-20min°C-20min°C-20min°C-20min°C-20min°C-20min°C-20min°C-20min°C-20min°C-20MaterialIPMaterialMountingIP40 on front; IP20 at terminalsIEC degree of protectionIP40 on front; IP20 at terminalsDimensions (W x H x D)mm35.8 x 104.7 x 64.9Weightg		IEC					
Insulations   V   600     Rated insulation voltage Ui   V   600     Rated impulse withstand voltage Uimp   kV   6     Operating frequency withstand voltage   kV   4     Ambient conditions   KV   4     Temperature   Operating temperature   min   °C   -20     Max   °C   +60   -20   max   °C   +60     Storage temperature   min   °C   -30   -30   max   °C   +80     Housing   Execution (n° of modules)   2   Self-extinguishing polyamide   -35mm DIN rail (IEC/EN 60715)     Material   35mm DIN rail (IEC/EN 60715)   IP40 on front; IP20 at terminals   -120 at terminals     Dimensions (W x H x D)   mm   35.8 x 104.7 x 64.9   -64.9     Weight   g   130			min	mm²	0.2		
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Rated impulse withstand voltage Uimp   kV   6     Operating frequency withstand voltage   kV   4     Ambient conditions   remperature   with x conditions     Temperature   Operating temperature   min °C -20 max °C +60     Storage temperature   min °C -30 max °C +80     Housing   max °C +80     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	Insulations						
Operating frequency withstand voltage   kV   4     Ambient conditions   Temperature   min   °C   -20     max   °C   +60   *60     Storage temperature   min   °C   -30     max   °C   +80     Housing   2   *80     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	Rated insulation voltage	ge Ui		V	600		
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$\begin{array}{c cccc} max & ^{\circ}C & +80 \\ \hline \mbox{Housing} & & & & \\ \hline \mbox{Execution (n^{\circ} of modules)} & & & 2 \\ \hline \mbox{Material} & & & & \\ \hline \mbox{Mounting} & & & & \\ \hline \mbox{Mounting} & & & & \\ \hline \mbox{Housing} & & & & \\ \hline \mbox{IEC degree of protection} & & & & \\ \hline \mbox{IEC degree of protection} & & & & \\ \hline \mbox{IP40 on front;} & & \\ \hline \mbox{IP20 at terminals} & \\ \hline \mbox{Dimensions (W x H x D)} & & \\ \hline \mbox{Meight} & & & \\ \hline \mbox{Weight} & & & \\ \hline \mbox{g} & & \\ \hline \mbox{J35} & \\ \hline \mbox{g} & & \\ \hline \mbox{g} &$		Storage temperature					
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Weight g 130	Dimensions (W x H x	D)		mm	35.8 x 104.7 x		
<u> </u>	Weight			g			



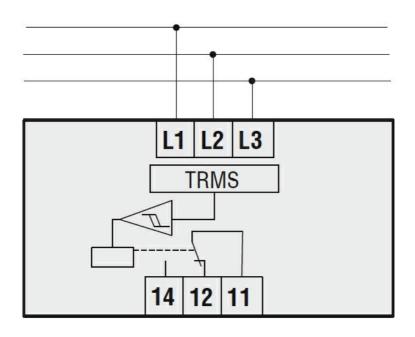
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ENERGY AND AUTOMATION

AC VOLTAGE. PHASE LOSS AND INCORRECT PHASE SEQUENCE, 208...240VAC 50/60HZ



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



ENERGY AND AUTOMATION

ETIM classification

**ETIM 8.0** 

VOLTAGE MONITORING REALY FOR THREE-PHASE SYSTEM, WITHOUT NEUTRAL, MINIMUM AC VOLTAGE. PHASE LOSS AND INCORRECT PHASE SEQUENCE, 208...240VAC 50/60HZ

> EC001438 -Voltage monitoring relay

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