## VOLTAGE MONITORING REALY FOR THREE-PHASE SYSTEM, WITHOUT NEUTRAL, PHASE LOSS AND INCORRECT PHASE SEQUENCE, 100...240VAC 50/60HZ

			The second of th
Product designation			Voltage
Product type designation			monitoring relays PMV20
General characteristics			1 1010 20
Description			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			0.851.1 Ue
Rated frequency		Hz	50/60 ±5%
Power consumption Max		VA	28
Power dissipation Max		W	2.5
Control circut			
Rated voltage to control (Ue)			
	min	VAC	100
	Max	VAC	240
Tripping delay		S	0.06
Resetting time		S	0.5
Resetting hysteresis		%	5
Instantaneous tripping for Ue			Voltage <70% Ue
Type of reset			Automatic
Repeat accuracy		%	<±1
Tripping time for phase loss		ms	60
Relay outputs		N I.e	4
Number of relays		Nr.	Normally:
Relay state			Normally energised De- energises at
			tripping 1 changeover
Contact arrangement			SPDT
Rated operational voltage AC (IEC)		VAC	250
Maximum switching voltage		VAC	400
IEC Conventional free air thermal current Ith		A	8
UL/CSA and IEC/EN 60947-5-1 designation			B300
Electrical life (with rated load)		cycles	100000
Mechanical life		cycles	3000000
Functions			
Modular version			2U
Minimum AC voltage			No
Maximum AC voltage			No
Phase loss			Yes
Incorrect phase sequence			Yes
The characteristics described in this document are subject to undates or modifications at any time. The de-	escription	s technical a	nd

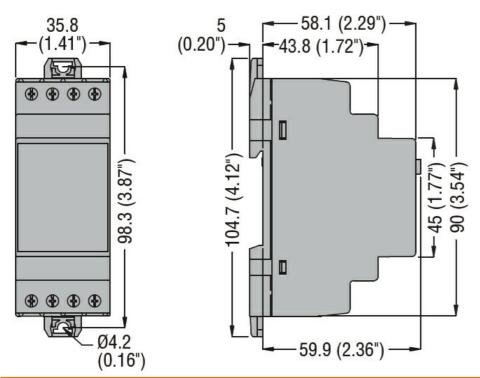
**ENERGY AND AUTOMATION** 

## VOLTAGE MONITORING REALY FOR THREE-PHASE SYSTEM, WITHOUT NEUTRAL, PHASE LOSS AND INCORRECT PHASE SEQUENCE, 100...240VAC 50/60HZ

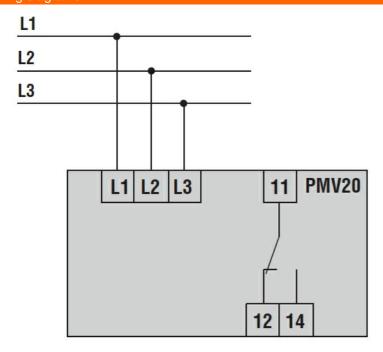
Indications	Asymmetry				No
Production   Pr	Indications				
Terminals type					power on and
Tightening torque for terminals					
Max   Nm   0.8 max   lbin   7					Screw
Conductor cross section	Tightening torque f	or terminals			
Conductor cross section			max		
AWG/Kcmil			max	Ibin	7
Max	Conductor cross se	ection			
Nax		AWG/Kcmil			
IEC			min	AWG	24
Max min mm² 0.2   Max mm² 4			Max	AWG	12
Max mm² 4           Insulations         Insulation voltage Uimp         V         600           Rated impulse withstand voltage Uimp         kV         6           Operating frequency withstand voltage         kV         4           Ambient conditions         Temperature           Temperature         min °C -20 max °C +60           Storage temperature         min °C -30 max °C +80           Housing         Execution (n° of modules)         Z           Material         Self-extinguishing polyamide           Mounting         IEC degree of protection           Dimensions (W x H x D)         IP40 on front; IP20 at terminals           Dimensions (W x H x D)         mm 35.8 x 104.7 x 64.9           Weight         g		IEC			
Rated insulation voltage Ui			min	mm²	0.2
Rated insulation voltage Ui         V         600           Rated impulse withstand voltage         kV         6           Operating frequency withstand voltage         kV         4           Ambient conditions         Temperature			Max	mm²	4
Rated impulse withstand voltage Uimp         kV         6           Operating frequency withstand voltage         kV         4           Ambient conditions         Temperature	Insulations				
Rated impulse withstand voltage Uimp         kV         6           Operating frequency withstand voltage         kV         4           Ambient conditions         Temperature	Rated insulation vo	ltage Ui		V	600
Operating frequency withstand voltage         kV         4           Ambient conditions         Temperature				kV	6
Ambient conditions   Temperature	· · · · · · · · · · · · · · · · · · ·			kV	
Temperature		<u>.                                      </u>			
Operating temperature           min or company of company or					
min °C -20 max °C +60		Operating temperature			
Max or   C   +60		oporating temperature	min	°C	-20
Storage temperature  min °C -30 max °C +80  Housing  Execution (n° of modules)  Material  Mounting  IEC degree of protection  Dimensions (W x H x D)  Storage temperature  min °C -30 max °C +80   Self-extinguishing polyamide  35mm DIN rail (IEC/EN 60715)  IP40 on front; IP20 at terminals  64.9  Weight					
Material   min °C -30 max °C +80		Storage temperature	Пах		100
max °C +80           Housing         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         120		Otorage temperature	min	°C	-30
Housing           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         120					
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         120	Housing		max		100
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         120		odules)		<del>_</del>	2
Mounting         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         120	Execution (ii or iii	oddies)			
IEC degree of protection   IP40 on front;   IP20 at terminals	Material				
Dimensions (W x H x D) $ \begin{array}{c}                                     $	Mounting				
Dimensions (W X H X D)         64.9           Weight         g         120	IEC degree of prot	rection			
<u> </u>	Dimensions (W x F	1 x D)		mm	
<u> </u>	Weight			g	120
		n)]			

**ENERGY AND AUTOMATION** 

VOLTAGE MONITORING REALY FOR THREE-PHASE SYSTEM, WITHOUT NEUTRAL, PHASE LOSS AND INCORRECT PHASE SEQUENCE, 100...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** 

VOLTAGE MONITORING REALY FOR THREE-PHASE SYSTEM, WITHOUT NEUTRAL, PHASE LOSS AND INCORRECT PHASE SEQUENCE, 100...240VAC 50/60HZ

ETIM classification

ETIM 8.0

EC001438 -Voltage monitoring relay