ENERGY AND AUTOMATION

SPANNUNGSWÄCHTER 3-PHASIG (OHNE N, PHASE, ASYMMETRIE, DELAY, +/- U, 380-575VAC)



Product designation			Voltage monitoring relays
Product type designation			PMV70
General characteristics			
Description			Minimum and maximum AC voltage, phase loss, incorrect phase sequence and asymmetry 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	30
Power dissipation Max		W	2.5
Control circut			
Rated voltage to control (Ue)			
	min	VAC	380
·	Max	VAC	575
Voltage set-point (%Ue)	_		
	min	%	8095
	Max	%	105115
	111001	٠,	
Asymmetry set-point (%Ue)	· · · · ·	%	515
Tripping delay	Wiesk	S	515 0.120
Tripping delay Resetting time	- Triax	s s	515 0.120 0.5
Tripping delay Resetting time Resetting hysteresis	····ax	S	515 0.120 0.5 3
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue	Mex	s s	515 0.120 0.5 3 Voltage <70% Ue
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset	Wilde	s s %	515 0.120 0.5 3 Voltage <70% Ue Automatic
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy	Wied X	s s %	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss	Wild X	s s %	515 0.120 0.5 3 Voltage <70% Ue Automatic
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss Relay outputs	Wild Control of the C	s s % ms	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss	THE STATE OF THE S	s s %	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss Relay outputs		s s % ms	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60 1 Normally
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss Relay outputs		s s % ms	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60 1 Normally energised De-
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss Relay outputs Number of relays		s s % ms	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60 1 Normally energised De- energises at
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss Relay outputs Number of relays		s s % ms	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60 1 Normally energised De- energises at tripping 1 changeover
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss Relay outputs Number of relays Relay state Contact arrangement		s s % % ms	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60 1 Normally energised De- energises at tripping 1 changeover SPDT
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss Relay outputs Number of relays Relay state Contact arrangement Rated operational voltage AC (IEC)		s s % ms	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60 1 Normally energised De- energises at tripping 1 changeover SPDT 250
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss Relay outputs Number of relays Relay state Contact arrangement		s s % ms Nr.	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60 1 Normally energised De- energises at tripping 1 changeover SPDT
Tripping delay Resetting time Resetting hysteresis Instantaneous tripping for Ue Type of reset Repeat accuracy Tripping time for phase loss Relay outputs Number of relays Relay state Contact arrangement Rated operational voltage AC (IEC) Maximum switching voltage		s s % % ms Nr.	515 0.120 0.5 3 Voltage <70% Ue Automatic <±0.1 60 1 Normally energised De- energises at tripping 1 changeover SPDT 250 400

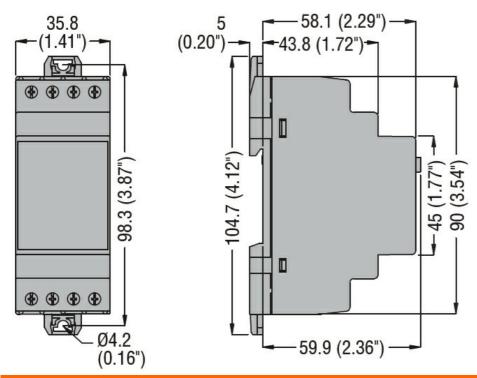
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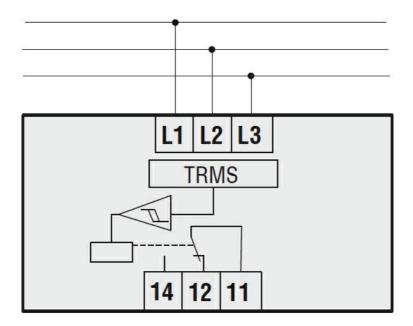
Electrical life (with rated load) Mechanical life Cycles 30000000 Functions Modular version Modular version Modular version Maximum AC voltage Maximum AC voltage Yes Maximum AC voltage Yes Phase loss Incorrect phase sequence Asymmetry No Indications 1 green LED for power on and tripping and 3 red LEDs for tripping Connections Terminals type Tightening torque for terminals
FunctionsModular version2UMinimum AC voltageYesMaximum AC voltageYesPhase lossYesIncorrect phase sequenceYesAsymmetryNoIndications1 green LED for power on and tripping and 3 red LEDs for trippingConnectionsLEDs for trippingTerminals typeScrewTightening torque for terminals
Minimum AC voltage Yes Maximum AC voltage Yes Phase loss Yes Incorrect phase sequence Yes Asymmetry No Indications Indication 1 green LED for power on and tripping and 3 red LEDs for tripping Connections Terminals type Screw Tightening torque for terminals
Maximum AC voltage Phase loss Incorrect phase sequence Asymmetry No Indications Indication Indication Connections Terminals type Tightening torque for terminals Yes Yes No Incorrect phase sequence Yes Asymmetry No Indication Sometimes Yes Yes Asymmetry No No Ingreen LED for power on and tripping and 3 red LEDs for tripping Screw
Phase loss Incorrect phase sequence Asymmetry No Indications Indication Indication Indication Connections Terminals type Tightening torque for terminals Yes Yes Asymmetry No Ingreen LED for power on and tripping and 3 red LEDs for tripping Screw
Incorrect phase sequence Asymmetry Indications Indication Indication Connections Terminals type Tightening torque for terminals Yes No 1 green LED for power on and tripping and 3 red LEDs for tripping Screw
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Indication power on and tripping and 3 red LEDs for tripping Connections Terminals type Screw Tightening torque for terminals
Terminals type Tightening torque for terminals tripping and 3 red LEDs for tripping Screw
Connections Terminals type Tightening torque for terminals
Terminals type Screw Tightening torque for terminals
Tightening torque for terminals
NI 0.0
max Nm 0.8
max Ibin 7
Conductor cross section
AWG/Kcmil
min AWG 24
Max AWG 12
IEC
min mm ² 0.2
Max mm ² 4
Insulations
Rated insulation voltage Ui V 600
Rated impulse withstand voltage Uimp kV 6
Operating frequency withstand voltage kV 4
Ambient conditions Temporature
Temperature Operation temperature
Operating temperature min °C -20
Storage temperature min °C -30
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 $\frac{35.8 \times 104.7 \times 1000}{64.9}$
Dimensions (W x H x D) mm 35.8 x 104.7 x 64.9 Weight g 130 Dimensions g 130

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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

Certificates

cULus

UL 508

EAC





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ETIM classification

ETIM 8.0

EC001438 -Voltage monitoring relay