# STROMWÄCHTER 1-PHASIG MIT MAN. ODER AUTOM. RÜCKSTELLUNG (MAX. STROM, 24-240VAC/DC)



Product designation			Current monitoring relays
Product type designation			PMA20
General characteristics			
Description			AC/DC maximum current monitoring relay
Type of system			Single-phase
Power supply			
Auxiliary supply voltage Us			24240VAC/DC
Operating voltage range			0.851.1 Us
Rated frequency		Hz	50/60 ±5%
Power consumption Max		VA	3.2
Power dissipation Max		W	1.6
Control circut			
Rated current (le)		Α	5 or 16
Overload capacity			5le for 1s - 160A for 10ms - Constant 16A
Connection			Direct or by current transformer
Current set-point (% le)			
	Max	%	5100
Tripping delay		S	0.130
Resetting time		S	0.130
Resetting hysteresis		%	150
Inhibition time		S	160
Type of reset			Automatic or manual
External input			Docotting /
·			Resetting / Inhibition
Repeat accuracy		%	
Repeat accuracy Relay outputs			Inhibition ±1 (with constant parameters)
Repeat accuracy		% Nr.	Inhibition ±1 (with constant parameters)
Repeat accuracy Relay outputs			Inhibition ±1 (with constant parameters)  1 Normally energised / Deenergised (selectable)
Repeat accuracy  Relay outputs  Number of relays			Inhibition ±1 (with constant parameters)  1 Normally energised / Deenergised
Repeat accuracy  Relay outputs  Number of relays  Relay state			Inhibition ±1 (with constant parameters)  1 Normally energised / Deenergised (selectable) 1 changeover
Repeat accuracy  Relay outputs  Number of relays  Relay state  Contact arrangement  Rated operational voltage AC (IEC)  Maximum switching voltage		Nr.	Inhibition ±1 (with constant parameters)  1 Normally energised / Deenergised (selectable) 1 changeover SPDT
Repeat accuracy  Relay outputs  Number of relays  Relay state  Contact arrangement  Rated operational voltage AC (IEC)		Nr.	Inhibition ±1 (with constant parameters)  1 Normally energised / Deenergised (selectable) 1 changeover SPDT 250



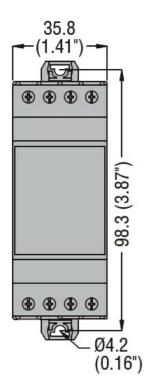
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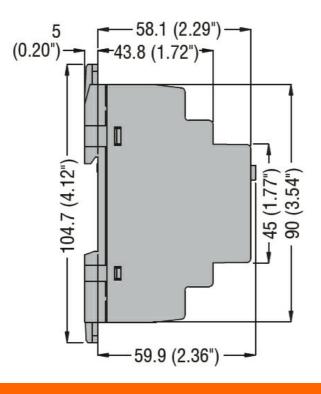
Mechanical life	Electrical life (with rated load)		cycles	100000
Punctions			-	
Modular version         2U           Maximum AC/DC current         No           Minimum or maximum AC/DC current         No           Indications         1 green LED for power on / inhibition and 1 red LED for tripping           Connections           max         Nm         0.8           Tightening torque for terminals           max         Nm         0.8           EC           max         Nm         0.8           Max         AWG         2.4         0.2           Max         AWG         1.2         0.2           IEC         min         mm²         0.2         0.2           Insulations         min         mm²         0.2			, , , , ,	
Minimum or maximum AC/DC current         No           Minimum and maximum AC/DC current Indications         No           Indication         1 green LED for power on / inhibition and 1 red LED for tripping           Connections         max         Nm         0.8 max           Tightening torque for terminals         max         Nm         0.8 max           Conductor cross section         min         AWG         24 max           AWG/Kcmil         min         AWG         24 max           IEC         min         mm²         0.2 mm²           IEC         min         mm²         0.2 mm²           Insulations         mm²         4           Rated insulation voltage Ui         V         415           Rated insulation voltage Uimp         kV         4           Operating frequency withstand voltage         kV         2.5           Ambient conditions         min         °C         -20 max           Temperature         min         °C         -20 max         respective max           Operating temperature         min         °C         -30 max         respective max           Housing         Execution (n° of modules)         2	Modular version			2U
Minimum and maximum AC/DC current   Indications	Maximum AC/DC current			Yes
Indication	Minimum or maximum AC/DC current			No
Indication   Ind	Minimum and maximum AC/DC current			No
Indication   In	Indications			
Tightening torque for terminals           max         Nm         0.8           Conductor cross section         min         AWG         24           Max         AWG         24           Max         AWG         12           IEC         min         AWG         12           Insulations         wm²         4           Rated insulation voltage Ui         V         415           Rated impulse withstand voltage Uimp         kV         4           Operating frequency withstand voltage         kV         2.5           Ambient conditions         min         °C         -20           Temperature         min         °C         -20           Max         °C         +60           Storage temperature         min         °C         -30           Execution (n° of modules)         Z         Self-extinguishing polyamide           Mounting         Modular DIN 43880 housing         43880 housing           IEC degree of protection         IP40 on front; IP20 at terminals           Dimensions (W x H x D)         m         35.8 x 104.7 x 64.9           Weight         g         121				power on / inhibition and 1 red LED for
Max				
Conductor cross section	rightering torque for terminals	max	Nm	0.8
Conductor cross section           AWG/Kcmil           min Max         AWG         24 AWG           IEC         min Max         mm²         0.2 AWG           Insulations           Rated insulation voltage Uimp         V         415           Rated impulse withstand voltage Uimp         kV         4           Operating frequency withstand voltage         kV         2.5           Ambient conditions         W         2.5           Temperature         min °C         -20 max         °C         +60           Storage temperature         min °C         -30 max         °C         +60           Housing         Execution (n° of modules)         2         Self-extinguishing polyamide           Material         Modular DIN         Modular DIN         Modular DIN           Mounting         Head on front; IP20 at terminals         IP40 on front; IP20 at terminals         IP20 at terminals           Dimensions (W x H x D)         mm         35.8 x 104.7 x 64.9         Weight         g         121				
Number of Max   AWG   24   AWG   12   AWG	Conductor cross section			<u> </u>
Max   AWG   24   AWG   12   AWG   AWG   12   AWG   AWG				
IEC		min	AWG	24
Insulations         mm² bm² bm² bm² bm² bm² bm² bm² bm² bm²		Max	AWG	12
Max         mm²         4           Insulations         Rated insulation voltage Ui         V         415           Rated impulse withstand voltage Uimp         kV         2.5           Operating frequency withstand voltage         kV         2.5           Ambient conditions         Temperature         min         °C         -20           Parameter         min         °C         -20 <t< td=""><td>IEC</td><td></td><td></td><td></td></t<>	IEC			
Insulations           Rated insulation voltage Ui         V         415           Rated impulse withstand voltage Uimp         kV         4           Operating frequency withstand voltage         kV         2.5           Ambient conditions         Temperature           Poperating temperature         min °C -20 max °C +60           Storage temperature         min °C -30 max °C +80           Housing         Execution (n° of modules)         2           Material         Self-extinguishing polyamide           Mounting         Modular DIN 43880 housing           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         121		min	mm²	0.2
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Rated impulse withstand voltage Uimp         kV         4           Operating frequency withstand voltage         kV         2.5           Ambient conditions         Temperature           Temperature         min °C -20 max °C +60           Storage temperature         min °C -30 max °C +80           Housing         Execution (n° of modules)         2           Material         Self-extinguishing polyamide           Mounting         Modular DIN 43880 housing           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         121	Insulations			
Operating frequency withstand voltage         kV         2.5           Ambient conditions         Temperature           Temperature         min °C -20 max °C +60           Storage temperature         min °C -30 max °C +80           Housing Execution (n° of modules)         2           Material         Self-extinguishing polyamide           Mounting         Modular DIN 43880 housing           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 121	Rated insulation voltage Ui		V	415
Ambient conditions   Temperature   Operating temperature	Rated impulse withstand voltage Uimp		kV	4
Comparation	, , ,		kV	2.5
Operating temperature           min max         °C max         -20 max           Storage temperature         min or max         °C max         -30 max           Housing           Execution (n° of modules)         2           Material         Self-extinguishing polyamide polyamide           Mounting         Modular DIN 43880 housing           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         121				
min	•			
max         °C         +60           Storage temperature         min         °C         -30           max         °C         +80           Housing         Execution (n° of modules)         2           Material         Self-extinguishing polyamide           Mounting         Modular DIN 43880 housing           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         121	Operating temperature			
Storage temperature   min or content or co		min		
Housing         Execution (n° of modules)         2           Material         Self-extinguishing polyamide           Mounting         Modular DIN 43880 housing           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         121		max	°C	+60
Housing         Execution (n° of modules)         2           Material         Self-extinguishing polyamide           Mounting         Modular DIN 43880 housing           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         121	Storage temperature		20	••
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Material  Mounting  Mounting  IEC degree of protection  Dimensions (W x H x D)  Weight  Self-extinguishing polyamide  Modular DIN 43880 housing  IP40 on front; IP20 at terminals  64.9  Weight				2
Mounting         Modular DIN 43880 housing           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 121	,			
Head of the protection   Head of the protect	Material			polyamide
Dimensions (W x H x D)   The state of protection   IP20 at terminals   35.8 x 104.7 x   64.9   The state of protection   IP20 at terminals   IP20 at terminals   The state of protection   IP20 at terminals   IP20 at terminals	Mounting			
Dimensions (W X H X D)         mm         64.9           Weight         g         121	IEC degree of protection			-
·	Dimensions (W x H x D)		mm	
	Weight		g	121
	Dimensions			

240VAC/DC)

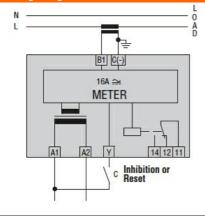


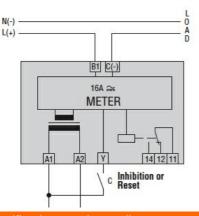
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#### Wiring diagrams





#### Certifications and compliance

### Compliance

CSA C22.2 n° 14

IEC/EN 60255-5

IEC/EN 61000-6-2

IEC/EN 61000-6-3

UL 508



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### PMA20240 STROMWÄCHTER 1-PHASIG MIT MAN. ODER AUTOM. RÜCKSTELLUNG (MAX. STROM, 24-

240VAC/DC)

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ETIM classification

ETIM 8.0

EC001440 -Current monitoring relay