ENERGY AND AUTOMATION

CURRENT MONITORING RELAY FOR SINGLE-PHASE SYSTEM, AC/DC MAXIMUM CURRENT CONTROL, 5A OR 16A

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Product designation			Current monitoring relays
Product type designation			PMA20
General characteristics			4.0/D0 in
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 act point (9/ Ia)			
Current set-point (% le)	N 4 -	0/	E 400
	Max	%	5100
Tripping delay	Max	S	0.130
Tripping delay Resetting time	Max	s s	0.130 0.130
Tripping delay Resetting time Resetting hysteresis	Max	s s %	0.130 0.130 150
Tripping delay Resetting time	Max	s s	0.130 0.130 150 160
Tripping delay Resetting time Resetting hysteresis	Max	s s %	0.130 0.130 150 160 Automatic or manual
Tripping delay Resetting time Resetting hysteresis Inhibition time	Max	s s %	0.130 0.130 150 160 Automatic or
Tripping delay Resetting time Resetting hysteresis Inhibition time Type of reset	Max	s s %	0.130 0.130 150 160 Automatic or manual Resetting /
Tripping delay Resetting time Resetting hysteresis Inhibition time Type of reset External input	Max	s s % s	0.130 0.130 150 160 Automatic or manual Resetting / Inhibition ±1 (with constant
Tripping delay Resetting time Resetting hysteresis Inhibition time Type of reset External input Repeat accuracy	Max	s s % s	0.130 0.130 150 160 Automatic or manual Resetting / Inhibition ±1 (with constant
Tripping delay Resetting time Resetting hysteresis Inhibition time Type of reset External input Repeat accuracy Relay outputs	Max	s s % s	0.130 0.130 150 160 Automatic or manual Resetting / Inhibition ±1 (with constant parameters) 1 Normally energised / Deenergised (selectable)
Tripping delay Resetting time Resetting hysteresis Inhibition time Type of reset External input Repeat accuracy Relay outputs Number of relays	Max	s s % s	0.130 0.130 150 160 Automatic or manual Resetting / Inhibition ±1 (with constant parameters) 1 Normally energised / Deenergised
Tripping delay Resetting time Resetting hysteresis Inhibition time Type of reset External input Repeat accuracy Relay outputs Number of relays Relay state	Max	s s % s	0.130 0.130 150 160 Automatic or manual Resetting / Inhibition ±1 (with constant parameters) 1 Normally energised / Deenergised (selectable) 1 changeover
Tripping delay Resetting time Resetting hysteresis Inhibition time Type of reset External input Repeat accuracy Relay outputs Number of relays Relay state Contact arrangement Rated operational voltage AC (IEC) Maximum switching voltage	Max	s s % s	0.130 0.130 150 160 Automatic or manual Resetting / Inhibition ±1 (with constant parameters) 1 Normally energised / Deenergised (selectable) 1 changeover SPDT
Tripping delay Resetting time Resetting hysteresis Inhibition time Type of reset External input Repeat accuracy Relay outputs Number of relays Relay state Contact arrangement Rated operational voltage AC (IEC)	Max	s s % s	0.130 0.130 150 160 Automatic or manual Resetting / Inhibition ±1 (with constant parameters) 1 Normally energised / Deenergised (selectable) 1 changeover SPDT 250

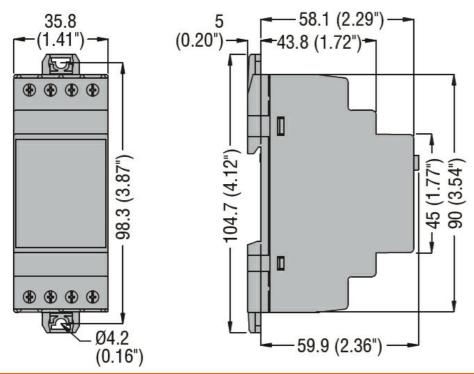


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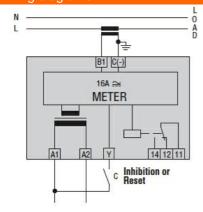
Electrical life (with rated load) cycles 100000 Mechanical life cycles 30000000 Functions Modular version 2U Maximum AC/DC current No Minimum and maximum AC/DC current No Indications 1 green LED for power on / inhibition and 1 red LED for tripping Connections max Nm 0.8 max Tightening torque for terminals max lbin 7 Conductor cross section AWG/Kcmil min AWG 24 max IEC min mm AWG 24 max Insulations min mm² 0.2 max Max mm² 4
Functions Modular version 2U Maximum AC/DC current Yes Minimum or maximum AC/DC current No Minimum and maximum AC/DC current No Indications 1 green LED for power on / inhibition and 1 red LED for tripping Connections max Nm 0.8 max 1bin 7 Conductor cross section AWG/Kcmil AWG/Kcmil min AWG 24 Max AWG 12 IEC min mm² 0.2 Max mm² 4
Modular version 2U Maximum AC/DC current Yes Minimum or maximum AC/DC current No Minimum and maximum AC/DC current No Indications Indication Indication Connections Tightening torque for terminals max Nm ols max lbin 7 Conductor cross section AWG/Kcmil min AWG 24 Max AWG 12 IEC min mm² ols min mm² ols No min mm² ols Max mm² delay
Maximum AC/DC current Yes Minimum or maximum AC/DC current No Minimum and maximum AC/DC current No Indications Indications 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 mm² 4
Minimum or maximum AC/DC current
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Indication Power on / inhibition and 1 red LED for tripping
Tightening torque for terminals max Nm 0.8 Nm 0.8 Nm Nm Nm Nm Nm Nm Nm
max Nm 0.8 max Ibin 7
max Ibin 7
Conductor cross section AWG/Kcmil min AWG 24 Max AWG 12 IEC min mm² 0.2 Max mm² 4
AWG/Kcmil min AWG 24 Max AWG 12 IEC min mm² 0.2 Max mm² 4
min AWG 24 Max AWG 12 IEC min mm² 0.2 Max mm² 4
IEC min mm² 0.2 Max mm² 4
min mm² 0.2 Max mm² 4
Max mm² 4
Insulations
Rated insulation voltage Ui V 415
Rated impulse withstand voltage Uimp kV 4
Operating frequency withstand voltage kV 2.5
Ambient conditions
Temperature
Operating temperature
min °C -20
max °C +60
Storage temperature min °C -30
max °C +80 Housing
Execution (n° of modules)
Solf oxtinguishing
Material polyamide
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
Dimensions

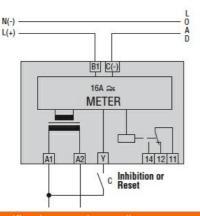






Wiring diagrams





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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Certificates	
	cULus
	EAC
ETIM classification	

ETIM 8.0

EC001440 -Current monitoring relay