



Product designation	Current monitoring relays		
Product type designation	PMA40		
General characteristics			
Description	AC/DC minimum and maximum current monitoring relay		
Type of system	Single-phase and three-phase		
Power supply			
Auxiliary supply voltage U_s	24...240VAC/DC		
Operating voltage range	0.85...1.1 U_s		
Rated frequency	Hz	50/60 $\pm 5\%$	
Power consumption Max	VA	7	
Power dissipation Max	W	1.7	
Control circuit			
Rated current (I_e)	A	0.02 - 0.05 - 0.25 - 1 - 5 - 16	
Overload capacity	(50mA - 1A inputs) 5 I_e for 1s - 10 I_e for 10ms - Constant 2 I_e (16A inputs) 5 I_e for 1s - 160A for 10ms - Constant 16A		
Connection	Direct or by current transformer		
Current set-point (% I_e)	Max	%	5...100
Tripping delay		s	0.1...30
Resetting hysteresis		%	3
Inhibition time		s	1...60
Type of reset	Automatic or manual		
Repeat accuracy		%	± 1 (with constant parameters)
Relay outputs			
Number of relays	Nr.	2	
Relay state	Normally energised / De-energised (selectable)		
Contact arrangement	2 x 1 changeover SPDT each		

Rated operational voltage AC (IEC)	VAC	250
Maximum switching voltage	VAC	400
IEC Conventional free air thermal current I _{th}	A	8
UL/CSA and IEC/EN 60947-5-1 designation		B300
Electrical life (with rated load)	cycles	100000
Mechanical life	cycles	30000000

Functions

Modular version		3U
Maximum AC/DC current		No
Minimum or maximum AC/DC current		No
Minimum and maximum AC/DC current		Yes

Indications

Indication		1 green LED for power on / inhibition and 2 red LEDs for max/min tripping
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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	mm ²	0.2
		Max	mm ²	4

Insulations

Rated insulation voltage U _i	V	415
Rated impulse withstand voltage U _{imp}	kV	4
Operating frequency withstand voltage	kV	2.5

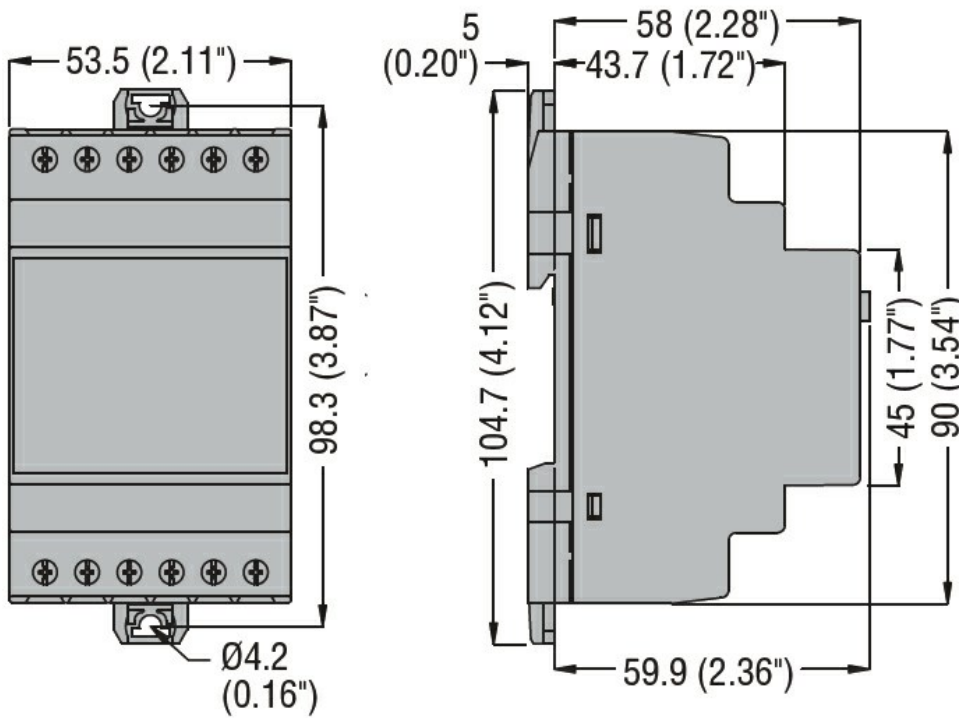
Ambient conditions

Temperature	Operating temperature	min	°C	-20
		max	°C	+60
	Storage temperature	min	°C	-30
		max	°C	+80

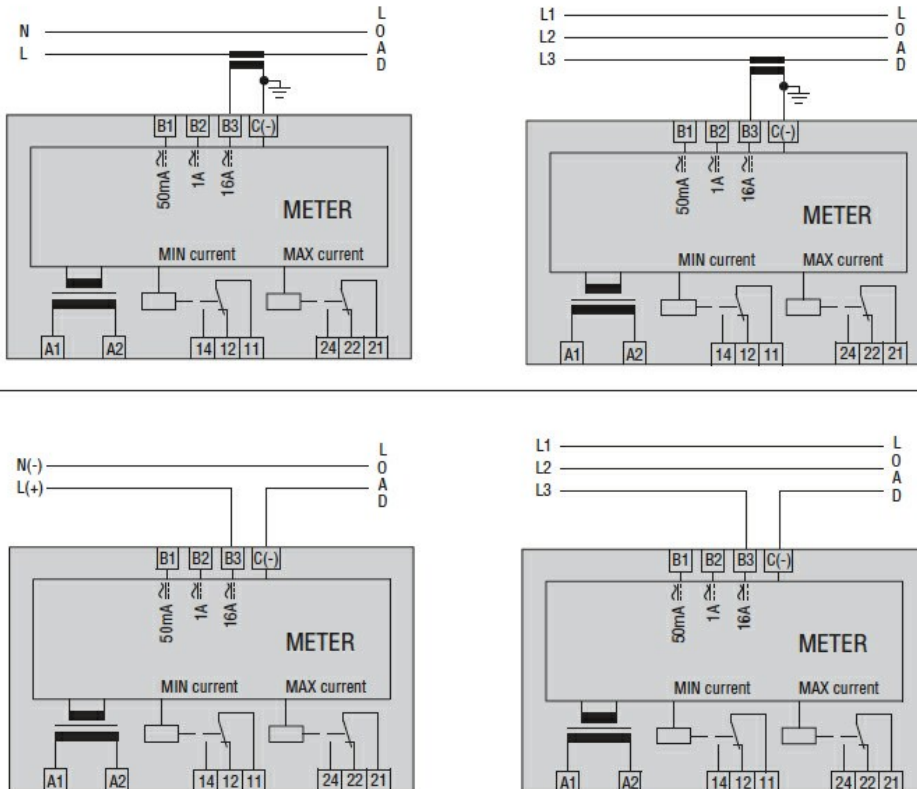
Housing

Execution (n° of modules)		3
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	53.5 x 104.7 x 64.9
Weight	g	166

Dimensions [mm (in)]



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

ETIM classification

ETIM 8.0

EC001440 -
Current
monitoring relay