



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 ±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) 5I _e for 1s - 10I _e for 10ms - Constant 2I _e (16A inputs) 5I _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	lbin	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

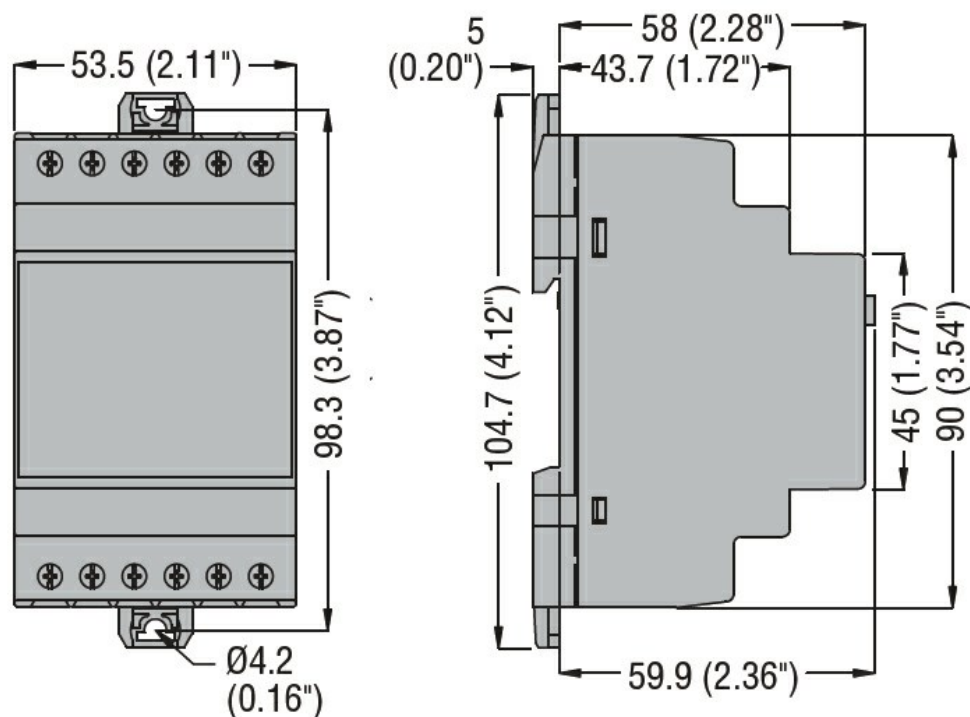
Ambient conditions

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

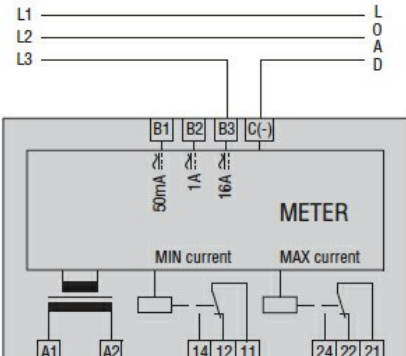
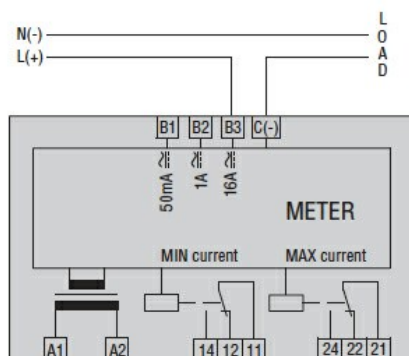
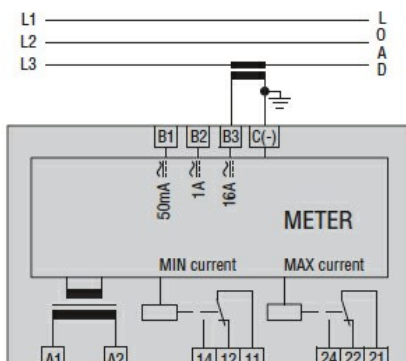
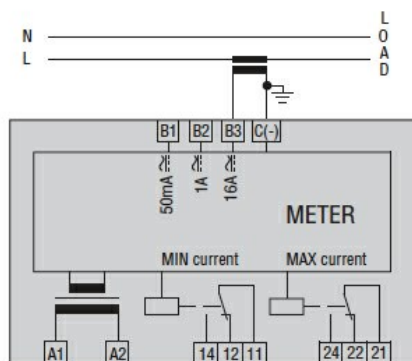
Housing

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



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