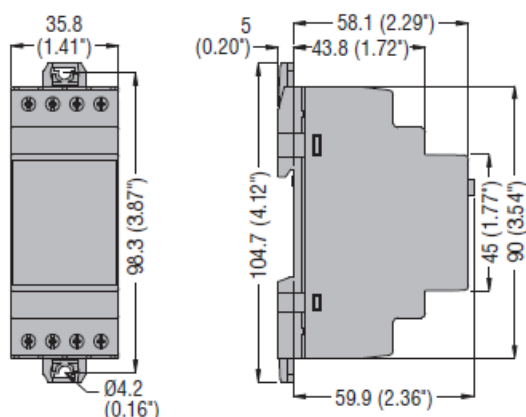


Order code	Rated current I _e	Auxiliary supply voltage	Qty per pkg	Wt
	[A]	[V]	n°	[kg]

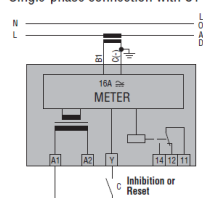
Single-phase system.
AC/DC maximum current control.
Auxiliary AC/DC power supply.
Automatic or manual reset.

PMA20 240	5 or 16A	24-240V AC/DC	1	0.121
------------------	----------	---------------	---	-------

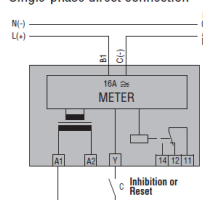


Current monitoring relay for 1-phase systems
PMA20

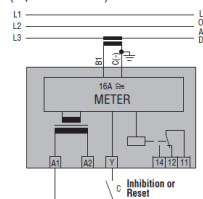
Single-phase connection with CT



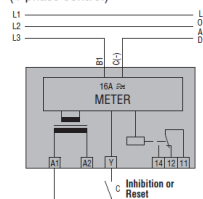
Single-phase direct connection



Three-phase connection with CT (1 phase control)



Three-phase direct connection (1 phase control)



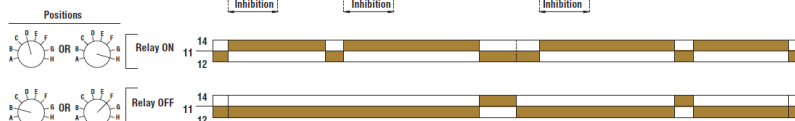
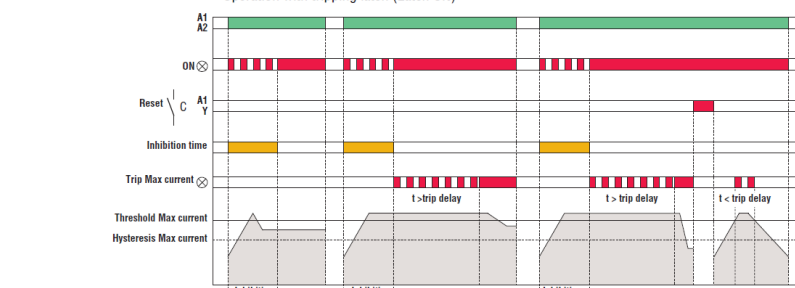
General characteristics

- Current monitoring relay for AC/DC maximum current control, AC/DC multivoltage auxiliary power supply
- Direct connection up to 16A max or by current transformer (CT)
- Excellent tripping accuracy
- TRMS current measurements (True Root Mean Square)
- Resetting and inhibition input
- 1 relay output with 1 changeover contact (SPDT)
- Modular DIN 43880 housing, 2 module
- IEC protection degree: IP40 on front (only when placed in IP40 enclosure or control board); IP20 at terminals.

ADJUSTMENTS

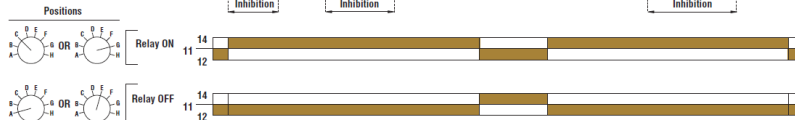
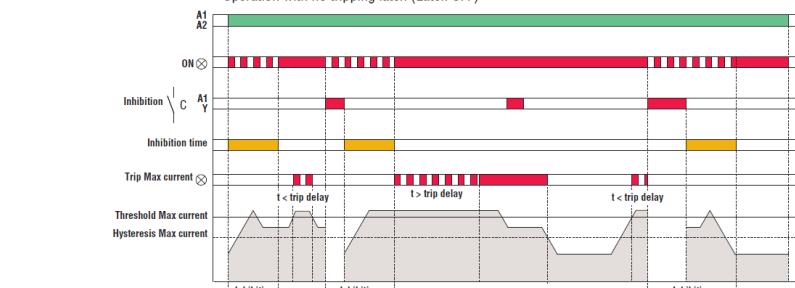
- "I_{max}" Maximum current tripping threshold 5-100% I_e
- "Hysteresis" Maximum hysteresis threshold 1-50%
- "Trip delay" Tripping time 0.1-30s
- "Inhibition time" Tripping delay for external input or at power up 1-60s
- "Aut. reset delay" Automatic resetting time 0.1-30s
- "Mode"
 - Rated current 5A or 16A,
 - Relay output normally energised or de-energised
 - Tripping memory (Latch) On or Off.

Operation with tripping latch (Latch ON)



Operation			
Mode	I _e	Relay output	Latch
A	5A	OFF	OFF
B			ON
C		ON	OFF
D			ON
E	16A	OFF	OFF
F			ON
G		ON	OFF
H			ON

Operation with no tripping latch (Latch OFF)



Certifications and compliance
 Certifications obtained: EAC; UL Listed, for USA and Canada (cULus - File E93601), as Auxiliary Devices - Modular ampere monitoring relays.
 Compliant with standards: IEC/EN 60255-5, IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL 508, CSA C22.2 n° 14.

TYPE	PMA20	PMA30	PMA40
DESCRIPTION	Single-phase maximum current monitoring AC/DC multiscale	Single-phase minimum or maximum current monitoring AC/DC multiscale	Single-phase minimum and maximum current monitoring AC/DC multiscale
CONTROL CIRCUIT			
Rated current to be monitored Ie	5 or 16A		0.02 - 0.05 - 0.25 - 1 - 5 - 16A
Rated frequency	50/60Hz ±5%		
Overload capacity	5 Ie for 1s 160A for 10ms Constant 16A	50mA - 1A inputs	16A input
		5 Ie for 1s 10Ie for 10ms Constant 2Ie	5 Ie for 1s 160A for 10ms Constant 16A
Connection	Direct or by current transformer		
Adjustment	Tripping values	5-100% f.s.	
	Tripping time	0.1-30s	
	Inhibition time	1-60s	
	Resetting hysteresis	1-50%	3% fixed
Resetting	Automatic / Manual		
External input	Resetting / Inhibition		—
Repeat accuracy	±1% with constant parameters		
AUXILIARY SUPPLY			
Auxiliary supply voltage Us	24-240VAC/DC		
Operating range	0.85-1.1 Us		
Rated frequency	50/60Hz ±5%		
Power consumption (maximum)	3.2VA	7VA	
Power dissipation (maximum)	1.6W	1.7W	
RELAY OUTPUTS			
Number of relays	1	2	
Relay state	Normally energised / de-energised (selectable)		
Contact arrangement	1 changeover contact SPDT each		
Rated operational voltage	250VAC		
Maximum switching voltage	400VAC		
IEC conventional free air thermal current Ith	8A		
UL/CSA and IEC/EN 60947-5-1 designation	B300		
Electrical life (with rated load)	10 ⁵ cycles		
Mechanical life	30x10 ⁶ cycles		
Indications	1 green LED for power on/inhibition 1 red LED for tripping		1 green LED for power on/inhibition 2 red LEDs for max/min tripping
CONNECTIONS			
Tightening torque maximum	0.8Nm (7lbin; 7-9lbin per UL/CSA)		
Conductor section min-max	0.2-4.0mm ² (24-12AWG; 18-12 AWG per UL/CSA)		
INSULATION (input-output)			
IEC rated insulation voltage Ui	415V		
IEC rated impulse withstand voltage Uimp	4kV		
IEC power frequency withstand voltage	2.5kV		
AMBIENT CONDITIONS			
Operating temperature	-20...+60°C		
Storage temperature	-30...+80°C		
HOUSING			
Material	Self-extinguishing polyamide		