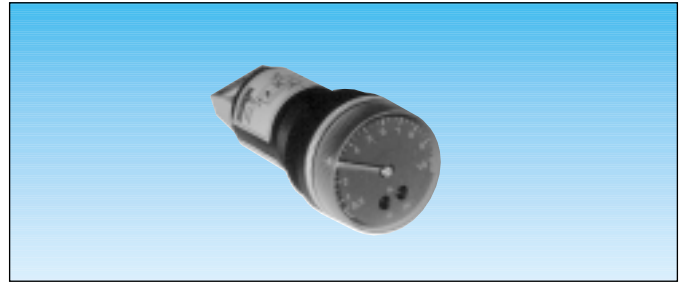


MBA panel-mounted electronic timers (Ø 22 mm)

Solid state output

- Panel-mounted pushbutton-type timer
- Function A delay on energisation
- 10 timing ranges : 0.05 s to 60 min
- Supply 24 V \equiv and 110 • 240 V \equiv \sim 50 • 60 Hz
- Fast adjustment of timing period on PLCs (compatible with IEC1131)
- IP 65



Characteristics

Accuracy		
Repetition accuracy (with constant parameters)		
		$\pm 0.2\%$
Display accuracy		
		$\pm 5\%$
Maximum reset time by de-energisation	during timed delay	88 901 1.2 30 ms
		88 901 1.8 120 ms
	after timing	88 901 1.2 30 ms
	88 901 1.8 15 ms	
Output specification		
Solid state open collector PNP output		
Nominal current		200 mA/30 VDC at 20 °C (derating 1.5 mA/°C)
	88 901 1.8	400 mA at 20 °C (derating 1.5 mA/°C)
Voltage drop at terminals	88 901 1.2	$\leq 3\text{ V} \equiv$
	88 901 1.8	$\leq 3.5\text{ V} \equiv \sim$
Leakage current	88 901 1.2	$< 0.1\text{ mA}$
	88 901 1.8	$< 5\text{ mA} \equiv \sim$
Electrical life (operations)		
Protection against polarity reversal		
Protection against load short-circuits		
Immunity from micro power cuts		
		10 ms
Function and use		
Display of output state by LED	Red LED : output in operation	88 901 1.2 •
	Green LED : power on	88 901 1.8 —
Dielectric strength	88 901 1.2	1500 V / 50 Hz / 1 min
	88 901 1.8	3750 V \sim / 1 min
Ripple		$\leq 10\%$
Consumption	88 901 1.2	$< 1\text{ W} / > 10\text{ mA}$
	88 901 1.8	$< 1\text{ VA}$
Temperature limits	Use	88 901 1.2 - 20 + 60 °C
	Stored	88 901 1.8 - 20 + 80 °C
Varistor protection against overvoltage		
Drift	Temperature	$\pm 0.2\%$ °C
	Voltage	$\pm 0.1\%$ V
Conformity to standards VDE 0435 / IEC 255 / IEC 1131 / IEC 801 4		
Protection class according to	Panel-mounted	IP 65
NFC 20010	Terminal	IP 10
IEC 529 - DIN 40050		
Material	Housing	ABS ULV0
Terminal capacity	Single wire	1 x 4 mm ²
	Multi-wire with ferrule	1 x 2.5 mm ²
Terminal screws		M3
Tightening torque		0.5 Nm
Weight		20 g

Voltages 24 V \equiv 110 • 240 V \equiv \sim 50 - 60 Hz

Types	MIN BOU	MBA2F
Part numbers (and time ranges)		
0.05 s • 1 s	88 901 102	88 901 108
0.15 s • 3 s	88 901 112	88 901 118
0.5 s • 10 s	88 901 122	88 901 128
1.5 s • 30 s	88 901 132	88 901 138
3 s • 60 s	88 901 142	88 901 148
5 s • 100 s	88 901 152	88 901 158
15 s • 300 s	88 901 162	88 901 168
0.5 min • 10 min	88 901 172	88 901 178
1.5 min • 30 min	88 901 182	88 901 188
3 min • 60 min	88 901 192	88 901 198

Functions

Mono-function A

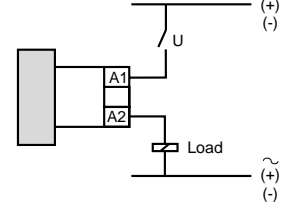
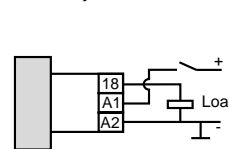
Function diagrams

24 V \equiv 110 • 240 V \equiv \sim 50 - 60 Hz
 Delay on energisation Delay on energisation

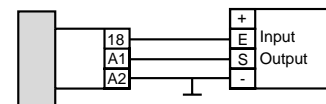


Connections

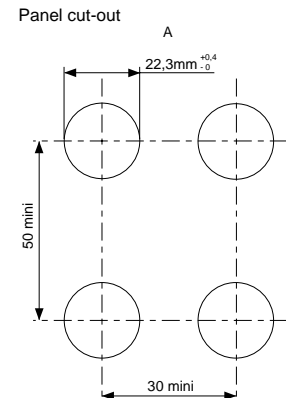
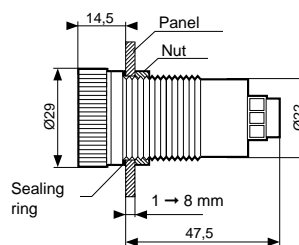
Version 24 V \equiv Version 110 • 240 V \equiv \sim 50 - 60 Hz
 On relay



On PLC



Dimensions



To order, specify :

Standard products

1 Part number

Standard products, non stocked

Example : MBA panel-mounted electronic timer - 88 901 122