

MBA Ø 22 panel-mounted timers



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 DC and 110 → 240 V DC AC 50 → 60 Hz
- Fast adjustment of timing period on PLCs (compatible with IEC1131)
- IP 65



Specifications

Type	Functions	Time ranges	Output	Supply voltage	Nominal rating	Code
MBA2F	A	0.1 s → 1 s	State	100 → 240 V AC/DC	400 mA	88 901 308
	A	0.5 s → 10 s	State	100 → 240 V AC/DC	400 mA	88 901 328
	A	3 s → 60 s	State	100 → 240 V AC/DC	400 mA	88 901 348
	A	0.5 min → 10 min	State	100 → 240 V AC/DC	400 mA	88 901 378
	A	3 min → 60 min	State	100 → 240 V AC/DC	400 mA	88 901 398
MBA3F	A	0.1 s → 1 s	State	24 V DC	200 mA	88 901 302
	A	0.5 s → 10 s	State	24 V DC	200 mA	88 901 322
	A	3 s → 60 s	State	24 V DC	200 mA	88 901 342
	A	0.5 min → 10 min	State	24 V DC	200 mA	88 901 372
	A	3 min → 60 min	State	24 V DC	200 mA	88 901 392

General characteristics

Precision

Repetition accuracy (with constant parameters)	+/-0.2 %
Display accuracy	± 5 %
Maximum reset time by de-energisation MBA3F during timed delay	7 ms
Maximum reset time by de-energisation MBA3F after timing	5 ms
Maximum reset time by de-energisation MBA2F after timing	60 ms
Maximum reset time by de-energisation MBA2F after timing	30 ms

Output specification

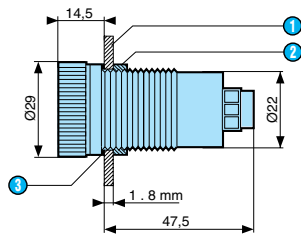
Solid state open collector PNP output	•
Voltage drop at terminals	MBA2F : ≤ 5 V AC MBA3F : ≤ 3 V DC
Nominal rating	MBA2F : 400 mA at 200C (derating 5 mA/°C) MBA3F : 200 mA at 20 °C (derating 1.5 mA/°C)
Leakage current	MBA2F : ≤ 5 mA AC MBA3F : ≤ 0.1 mA DC
Electrical life (number of operations)	> 10 ⁸
Protection against polarity inversions	MBA3F
Protection against load short circuits	MBA3F
Immunity from micro power cuts	•

Function and use

Display of output state by LED : output in operation	•
Display of output state by LED : Power on	•
Dielectric strength	1500 V / 50 Hz / 1 min
Ripple	± 10 %
Consumption	•
Temperatures limits use (°C)	-20 → +60
Temperature limits stored (°C)	-20 → +80
Varistor protection against overvoltage	•
Drift Temperature	+/- 0.05 %/°C
Drift Voltage	+/- 0.2 %/V
Conformity to standards VDE 0435 / ICE 255 / ICE 1131 / ICE 801 4	•
Protection class according to NFC C 20010-IEC 529-DIN 40050 Panel-mounted	IP65
Protection class according to NFC C 20010 - IEC 529 - DIN 40050	IP10
Terminal	•
Material housing	•
Terminal capacity Single-wire	1 x 4 mm ²
Terminal capacity Multi-wire with ferrule	1 x 2.5 mm ²
Terminal screws	M3
Tightening torque (Nm)	0.5 Nm
Weight (g)	27

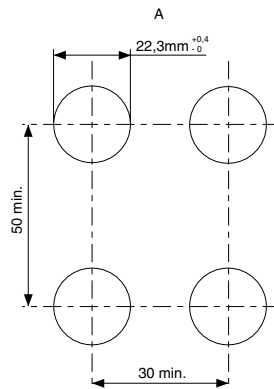
To order, see page 6

Dimensions



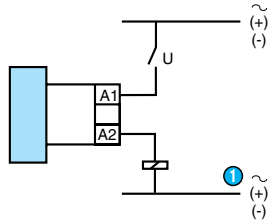
- 1 Panel
- 2 Nut
- 3 Sealing ring

Panel cut-out



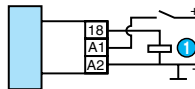
Connections

Version 110 - 240 V DC AC 50 - 60 Hz



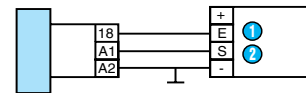
- 1 Load

Version 24 V DC on relay



- 1 Load

Version 24 V DC on PLC



- 1 Input
- 2 Output