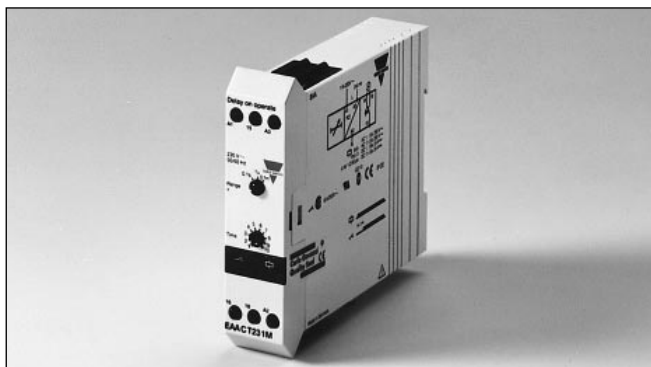


# Timers

## Delay on Operate

### Type EAA



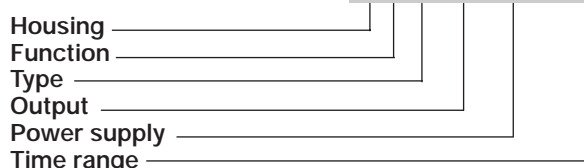
- Time range 0.1 s to 10 h
- Automatic start
- Knob-adjustable time setting
- Knob selection of time range
- Oscillator-controlled time circuit
- Repeat accuracy:  $\leq 0.2\%$
- Output: 5 A SPDT or 5 A DPDT
- For mounting on DIN-rail in accordance with DIN/EN 50 022
- 22.5 mm Euronorm housing
- LED-indication for relay and power supply ON
- Combined AC and DC power supply

### Product Description

Mono-function timer with 3 selectable time ranges within 0,1 s to 1 m or 1 m to 10 h. For mounting on DIN-rail. Often used to prevent over-loading the power distribution system, when e.g. pumps should not be switched on at the same time.

### Ordering Key

**EAA C T23 1M**



### Type Selection

Mounting	Output	Time range
For DIN-rail	SPDT	0.1 s - 1 m
	SPDT	1 m - 10 h
	DPDT	0.1 s - 1 m
	DPDT	1 m - 10 h

Supply: 24 VAC/DC & 115-230 VAC

- EAA C T23 1M
- EAA C T23 10H
- EAA D T23 1M
- EAA D T23 10H

### Time Specifications

<b>Time ranges</b>	
Type 1 M Selectable by rotary switch	0.1 s - 1 s 1 s - 10 s 0.1 m - 1 m
Type 10 H Selectable by rotary switch	1 m - 10 m 0.1 h - 1 h 1 h - 10 h
<b>Time range accuracy</b>	$\pm 10\%$ on max. min. setting; actual time $\leq$ min. set time
<b>Repeat accuracy</b>	$\leq 0.2\%$
<b>Time variation</b> Within rated power supply and ambient temperature	$\leq 0.05\%/V$ $\leq 0.2\%/^{\circ}C$
<b>Reset</b> Time and relay	Power supply interruption $\geq 200$ ms

### Output Specifications

<b>Output</b>	SPDT relay DPDT relay
Type C Type D	
<b>Rated insulation voltage</b>	250 VAC (contact/elect.)
<b>Contact ratings (AgCdO)</b>	$\mu$ (micro gap)
Resistive loads	AC 1 5 A, 250 VAC DC 1 5 A, 24 VDC
Small inductive loads	AC 15 2 A, 250 VAC DC 13 3 A, 24 VDC
<b>Mechanical life</b>	$\geq 40 \times 10^6$ operations
<b>Electrical life</b>	$\geq 10^5$ operations (at max. load)
<b>Operating frequency</b>	$\leq 7200$ operations/h
<b>Dielectric strength</b>	
Dielectric voltage	2 kVAC (rms)
Rated impulse withstand volt.	4 kV (1.2/50 $\mu$ s)



## Supply Specifications

<b>Power supply</b>	Overvoltage cat. III (IEC 60664)
Rated operational voltage through term. A1 & A2 T23	(IEC 60038) 115-230 VAC, -10/+15%
frequency through term. A2 & A3 T23	50/60 Hz, -5/+5 Hz
frequency	24 VAC/DC, -10/+15%
Voltage interruption	50/60 Hz, -5/+5 Hz
Dielectric voltage	≤ 40 ms
Rated impulse withstand voltage	None
	4 kV (1.2/50 μs)
<b>Rated operational current</b>	
Type C	20 mA @ 24 VDC 40 mA @ 24 VAC 20 mA @ 115 VAC 40 mA @ 230 VAC
Type D	25 mA @ 24 VDC 40 mA @ 24 VAC 30 mA @ 115 VAC 60 mA @ 230 VAC

## General Specifications

<b>EMC</b>	Electromagnetic Compatibility
Immunity	Acc. to IEC 60801-4 Acc. to IEC 60801-5
<b>Power ON delay</b>	≤ 200 ms
<b>Power OFF delay</b>	≥ 200 ms
<b>Indication for</b>	
Power supply ON	LED, green
Output ON	LED, yellow
<b>Environment</b>	
Degree of protection	IP 20
Pollution degree	3
Operating temperature	-20° to +50°C (-4° to +122°F)
Storage temperature	-50° to +85°C (-58° to +185°F)
<b>Weight</b>	125 g
<b>Screw terminals</b>	
Tightening torque	Max. 0,5 Nm acc. to IEC 60947
<b>Approvals</b>	UL, CSA
<b>CE-marking</b>	Yes

## Mode of Operation

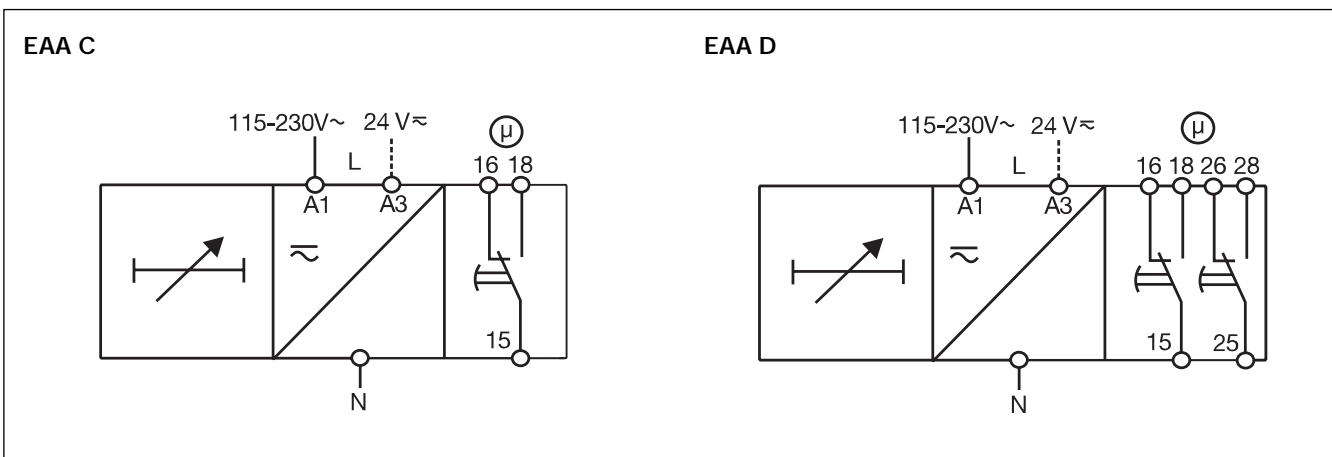
The delay period begins when power supply is applied. At the end of the set delay, the relay will operate and will not release until power supply is interrupted for at least 200 ms. If power supply is interrupted for at least 200 ms before the relay operates, the time circuit is reset to zero and the relay is ready for a new time period.

## Time Setting

**Selection of time ranges**  
Upper knob: 3-position rotary switch.

**Time setting**  
Lower knob: Knob-adjustable on relative scale 1-10.

## Wiring Diagrams



## Operation Diagram

