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# Timers

## Delay on Operate

### Types FAA01, FAA08

CARLO GAVAZZI



- Time range 0.05 s to 300 h
- Knob selection of time range
- Knob adjustable time setting
- Knob selection of operating mode (4 functions):
  - Op - delay on operate
  - R - symmetrical recycler ON first
  - In - interval
  - Sh - one shot
- Automatic start
- Repeatability:  $\pm 0.2\%$  on full scale
- Output: 8 A DPDT relay
- 48 x 48 mm housing for front panel mounting
- 8 or 11 pin socket
- LED indication for relay status and power supply ON

## Product Description

Delay on operate timer with 4 functions and selectable time ranges from 0.05 seconds to 300 hours. Housing 48 x 48 mm for front panel mounting and on 8-pin or 11-pin socket.

## Ordering Key

**FAA 01 D W24**

Housing \_\_\_\_\_  
 Function \_\_\_\_\_  
 Type \_\_\_\_\_  
 Item number \_\_\_\_\_  
 Output \_\_\_\_\_  
 Power supply \_\_\_\_\_

## Type Selection

Mounting	Output	Plug	Supply: 12 to 240 VAC/DC
Front or socket	DPDT	11-pin	FAA01DW24
Front or socket	DPDT	8-pin	FAA08DW24

## Time Specifications

Time ranges	Setting accuracy	Repeatability	Time variation	Reset
Knob selectable	$\pm 5\%$ on full scale $\pm 50$ ms	$\pm 0.2\%$ on full scale or $\pm 200$ ms	Within rated power supply $\leq 0.05\% /V$ Within ambient temperature $\leq 0.2\% /^{\circ}C$	Power supply interruption $> 100$ ms
Full scale 12	0.02 to 1.2s 0.2 to 12s 2 to 120s 0.2 to 12min 2 to 120min 0.2 to 12h 2 to 120h			
Full scale 30	0.05 to 3s 0.5 to 30s 5 to 300s 0.5 to 30min 5 to 300min 0.5 to 30h 5 to 300h			

**Note**  
When the time knob is below "0" the output activates instantaneously

## Output Specifications

<b>Output</b> Rated insulation voltage	DPDT relay 250 VAC	<b>Electrical life</b>	$\geq 10^5$ operations (at 8 A, 250 V, $\cos \varphi = 1$ )
<b>Contact ratings</b> (AgSnO <sub>2</sub> ) Resistive loads AC 1 DC 12 Small inductive loads AC 15 DC 13	$\mu$ 8 A @ 250 VAC 5 A @ 24 VDC 2.5 A @ 250 VAC 2.5 A @ 24 VDC	<b>Operating frequency</b>	$\leq 3600$ operations/h
<b>Mechanical life</b>	$\geq 30 \times 10^6$ operations	<b>Dielectric strength</b> Dielectric voltage Rated impulse withstand volt.	$\geq 2$ kVAC (rms) 4 kV (1.2/50 $\mu$ s)



## Supply Specifications

<b>Power Supply</b>		Overvoltage cat II (IEC 60947-1)
Rated operational voltage through terminals: (FAA01DW24)	2, 10	12 to 240 VDC + 10% - 15% 12 to 240 VAC + 10% - 15%, 45 to 65 Hz
(FAA08DW24)	2, 7	12 to 240 VDC + 10% - 15% 12 to 240 VAC + 10% - 15%, 45 to 65 Hz
<b>Power consumption</b>		
Rated operational power		
	AC	3 VA
	DC	1.5 W

## General Specifications

<b>Indication for</b>	
Power supply On	LED, green
Output ON	LED, yellow (flashing when timing)
<b>Environment</b>	
Degree of protection	IP 50 (front panel)
Operating temperature	-10 to +55 °C, R.H. < 85%
Storage temperature	-10 to +55 °C, R.H. < 85%
<b>Housing</b>	
Dimensions	48 x 48 mm
Material	PA66
<b>Weight</b>	Approx. 95 g
<b>Approvals</b>	UL, CSA
<b>CE marking</b>	Yes
<b>EMC</b>	
Immunity	Electromagnetic Compatibility According to EN 61000-6-2
Emission	According to EN 61000-6-3
<b>Timer specifications</b>	According to EN 61812-1

## Mode of Operation

### Function Op

#### Delay on operate

The set delay period begins as soon as the power supply is connected. At the end of the set delay the relay operates and doesn't release until the power supply is interrupted for at least 100 ms.

### Function R

#### Symmetrical recycler (ON first)

The relay operates and the time period start as soon as the power is applied. At the end of the first set time period, the relay releases. At the end of the second time period (equal to the first), the relay operates again. This sequence continues with equal ON- and OFF- time periods until the power supply is interrupted for at least 100 ms.

### Function In

#### Interval

The relay operates and the time period begins as soon as the power is applied. The relay releases at the end of the time period or when the power supply is disconnected for at least 100 ms.

### Function Sh

#### One shot

The time period begins as soon as the power supply is connected and at the end of this period the relay operates for 1s.

## Function and Time Setting

### Lower left knob:

Setting of function  
**Op** - delay on operate  
**R** - simmetrical recycler  
**In** - interval  
**Sh** - one shot

### Lower right knob:

Time unit selector  
**0.1sec** (0.1 seconds)  
**sec** (seconds)  
**10sec** (10 seconds)  
**min** (minutes)  
**10m** (10 minutes)  
**hrs** (hours)  
**10h** (10 hours)

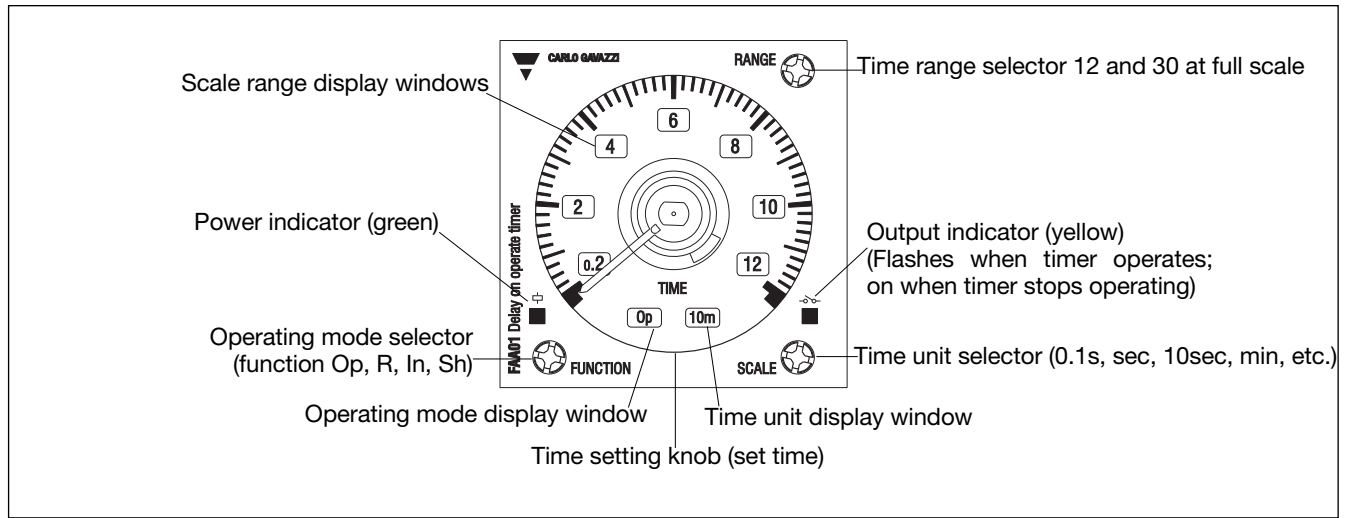
### Upper right knob:

Time range selector  
**12** or **30**

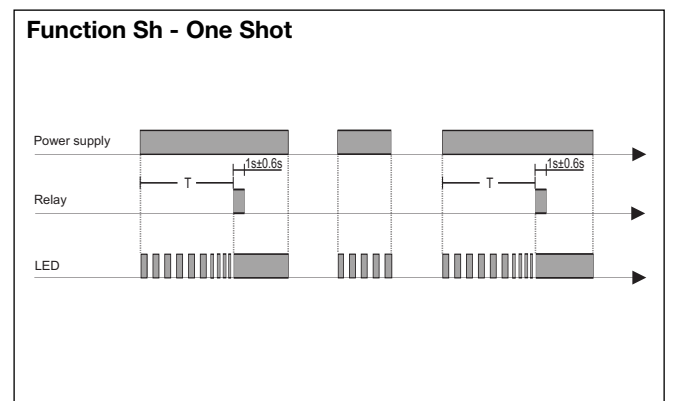
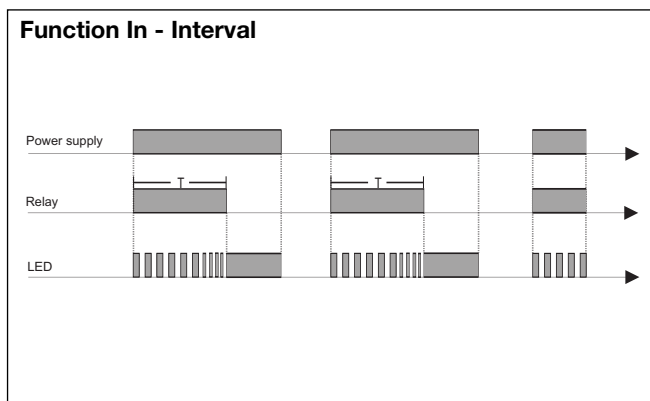
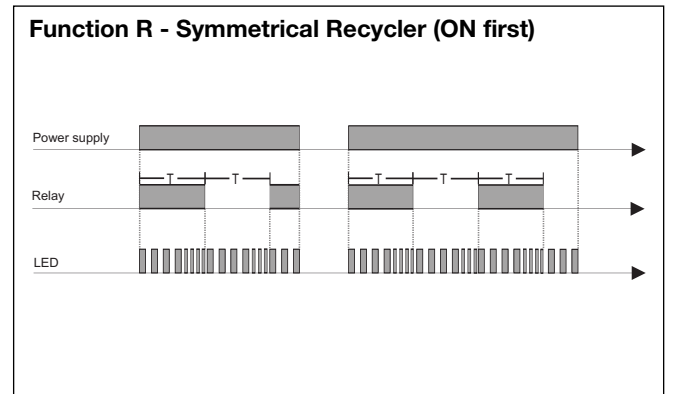
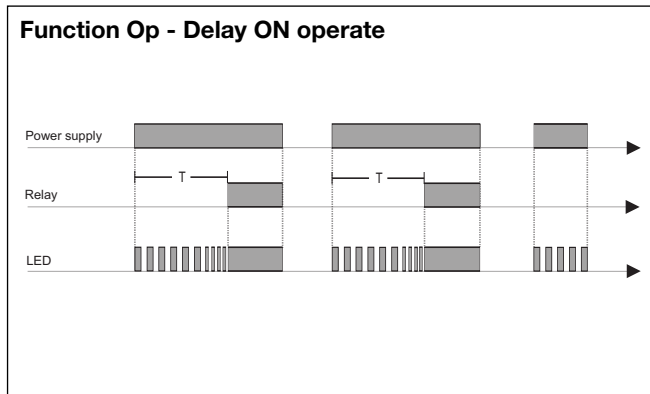
### Centre knob:

Time setting on absolute scale

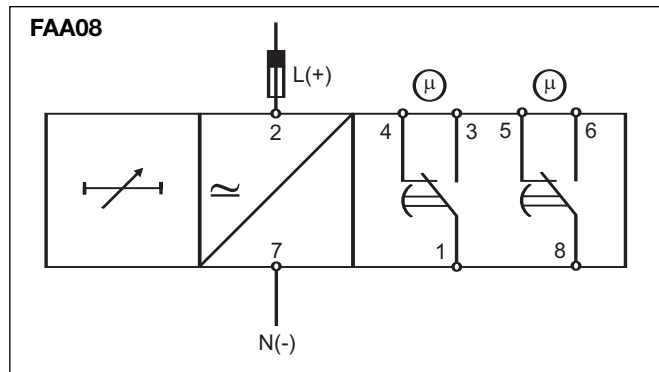
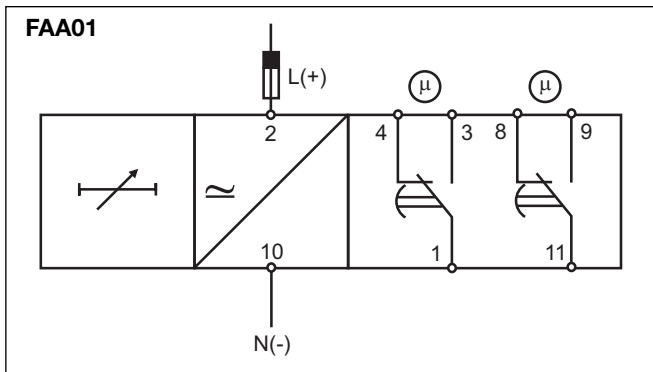
## Range and operation mode selection



## Operating Diagrams



## Wiring Diagrams



## Dimensions

