

Timers

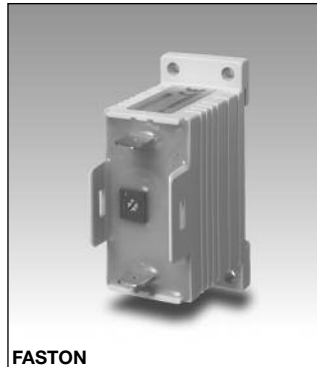
Symmetrical Recycler

Type ECS

CARLO GAVAZZI



SCREW



FASTON

- Fail-safe two-wire connection
- Low-cost
- Multi-voltage: 24-230 VAC
- 2 types: Recycler (Start OFF)
Recycler (Start ON)
- Time range: 0.5 s - 10 m
- Knob-adjustable time setting
- Output: SCR 10-500 mA (screws) and SCR 10-700mA (Fast-ON)
- For mounting on DIN-rail in accordance with DIN/EN 50 022
- 22.5 mm small Euronorm housing

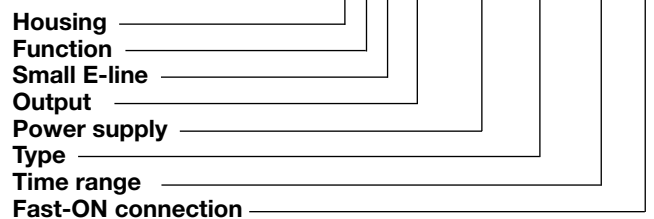
Product Description

Small, low cost monofunction timer with adjustable time setting. 2-wire connection for easy and fail-safe use (see diagram). For mounting on DIN-rail or directly on sur-

face by screw. The timer is used e.g. with industrial relays or 3-phase contactors.

Ordering Key

ECS S M23 A 10S F



Type Selection

| Mounting | Output | Time range | Connection | Supply: 24 - 230 VAC |
|------------------------------|--------|------------|------------|---|
| For DIN-rail or for screw | SCR | 0.5 - 10 s | Screws | ECS S M23 A 10S (OFF) ECS S M23 B 10S (ON) |
| | SCR | 0.1 - 1 m | Screws | ECS S M23 A 1M (OFF) ECS S M23 B 1M (ON) |
| | SCR | 1 - 10 m | Screws | ECS S M23 A 10M (OFF) ECS S M23 B 10M (ON) |
| For DIN-rail or for screw | SCR | 0.5 - 10 s | Fast-ON | ECS S M23 A 10S F (OFF) ECS S M23 B 10S F (ON) |
| | SCR | 0.1 - 1 m | Fast-ON | ECS S M23 A 1M F (OFF) ECS S M23 B 1M F (ON) |
| | SCR | 1 - 10 m | Fast-ON | ECS S M23 A 10M F (OFF) ECS S M23 B 10M F (ON) |

Time Specifications

| | |
|---|--|
| Time ranges | |
| 10 S | 0.5 - 10 s |
| 1 M | 0.1 - 1 m |
| 10 M | 1 - 10 m |
| Time range accuracy | Max. setting: actual time ≥ max. set time min. setting: actual time ≤ min. set time |
| Repeat accuracy | ≤ 0.2% |
| Time variation | |
| Within rated power supply and ambient temperature | ≤ 0.1%/V ≤ 0.2%/°C |
| Ratio T_{OFF}/T_{ON} | $1 \leq \frac{T_{OFF}}{T_{ON}} \leq 1.1$ |
| Reset | |
| Time and output | Power supply interruption ≥ 200 ms |

Output Specifications

| | |
|---|--------------------------------|
| Output | SCR |
| Output current | |
| Maximum load current (screw terminals) (Fast-ON connection) | 500 mA 700 m |
| Maximum current for 100 ms (screw terminals) (Fast-ON connection) | 5.5 A 7 A |
| Minimum load current | 10 m |
| Leakage current | ≤ 3.5 mA @ 230 V typ.: 2 m |
| Voltage drop | ≤ 8 VAC typ.: 5 VAC @ 50 mA |

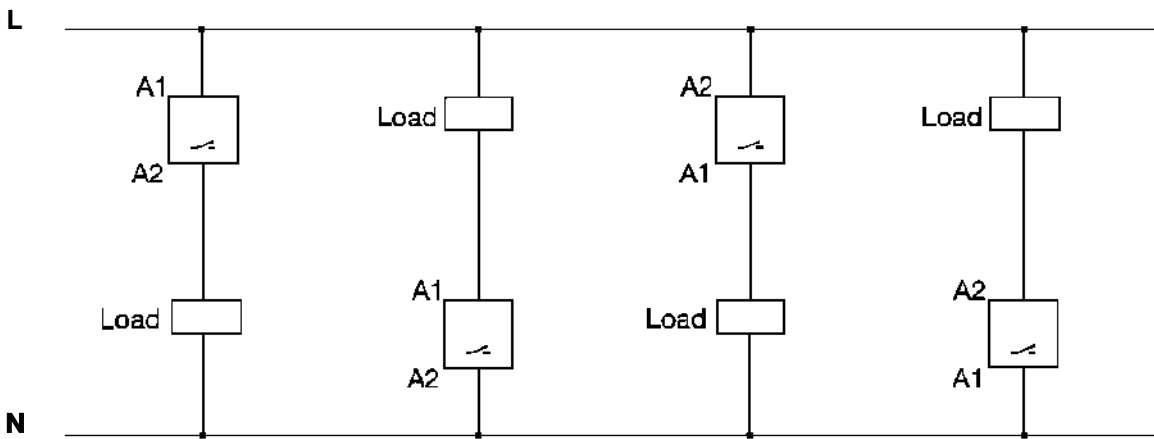
Supply Specifications

| | |
|---------------------------|--|
| Power supply | Overvoltage cat. III (IEC 60664) (IEC 60038) |
| Rated operational voltage | 24-230 VAC, -10/+15% |
| Rated insulation voltage | None |

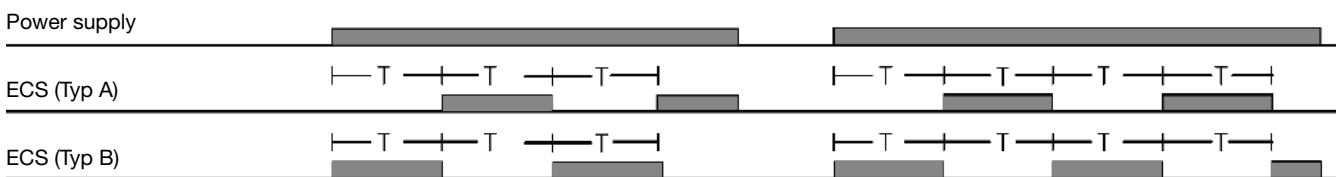
General Specifications

| | | | |
|----------------------------|--------------------------------|-------------------|---|
| Power ON delay | ≤ 100 ms | Approvals | UL, CSA |
| Power OFF delay | ≥ 200 ms | CE Marking | Yes |
| Environment | | EMC | Electromagnetic Compatibility Acc. to IEC 60801-4 Acc. to IEC 60801-5 |
| Degree of protection | IP 20 | Immunity | |
| Pollution degree | 3 | | |
| Operating temperature | -20° to +50°C (-4° to +122°F) | | |
| Storage temperature | -30° to +80°C (-22° to +176°F) | | |
| Weight | 50 g | | |
| Housing | | | |
| Dimensions Screw terminals | 22.5 x 56 x 49 mm | | |
| Fast-ON terminals | 22.5 x 56 x 44 mm | | |
| Material | ABS | | |

Wiring Diagram



Operation Diagram



Dimensions

