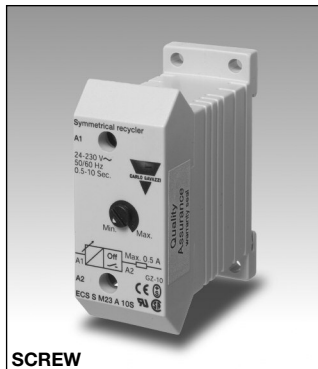


Timers

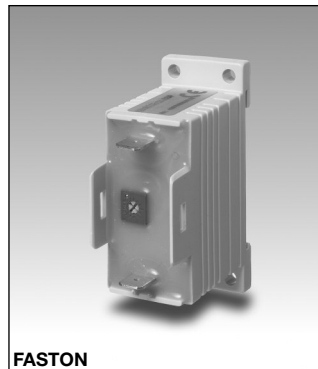
Symmetrical Recycler

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

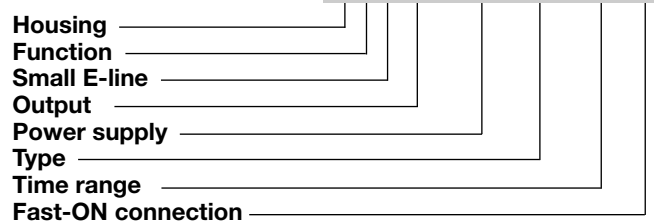
Product Description

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 \geq max. set time min. setting: actual time \leq min. set time
Repeat accuracy	$\leq 0.2\%$
Time variation	Within rated power supply and ambient temperature
	$\leq 0.1\%/V$ $\leq 0.2\%/^{\circ}C$
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

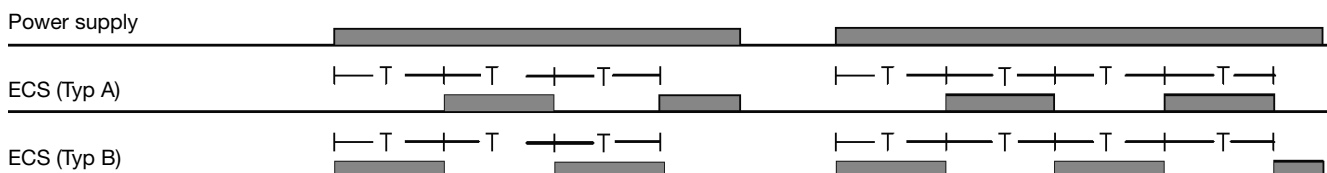
Power supply	Overvoltage cat. III (IEC 60664) (IEC 60038)
Rated operational voltage	24-230 VAC, -10/+15%
Rated insulation voltage	None

General Specifications

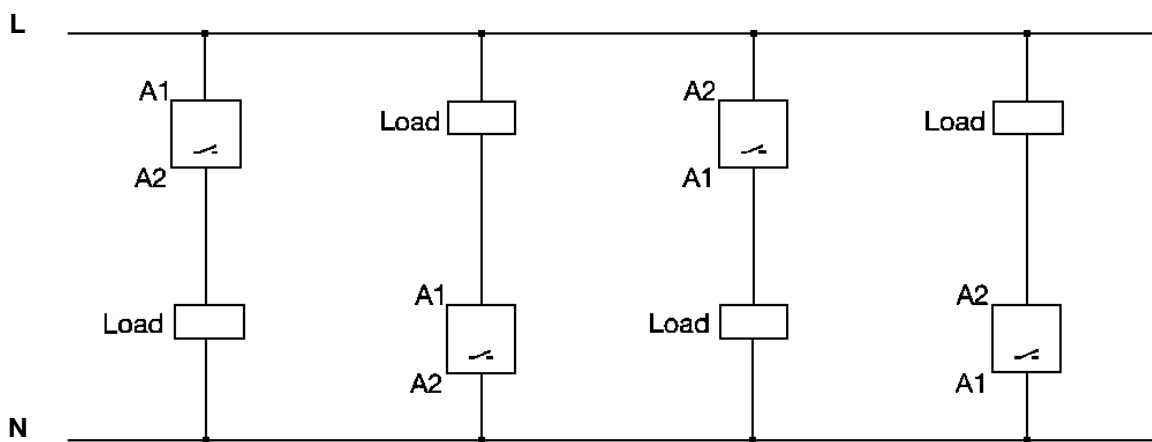
Power ON delay	≤ 100 ms
Power OFF delay	≥ 200 ms
Environment	
Degree of protection	IP 20
Pollution degree	3
Operating temperature	-20° to +50°C (-4° to +122°F)
Storage temperature	-30° to +80°C (-22° to +176°F)
Weight	50 g
Housing	
Dimensions (screw connection)	22.5 x 56 x 49 mm
Max. screws tightening torque	0.5 Nm

Dimensions (Fast-ON connection)	22.5 x 56 x 49 mm
Material	ABS
Approvals	UL, CSA
CE Marking	Yes
EMC	
Immunity	Electromagnetic Compatibility Acc. to IEC 60801-4 Acc. to IEC 60801-5

Operation Diagram



Wiring Diagram



Dimensions

