

Timers

Symmetrical Recycler

Type ECS

CARLO GAVAZZI



- 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
- For mounting on DIN-rail in accordance with DIN/EN 50 022
- 22.5 mm small Euronorm housing

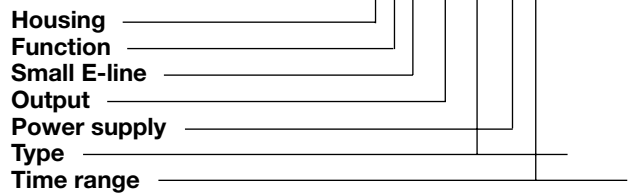
Product Description

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

Ordering Key

ECS S M23 A 10S



Type Selection

Mounting	Output	Time range
For DIN-rail or for screw	SCR	0.5 - 10 s
	SCR	0.1 - 1 m
	SCR	1 - 10 m

Supply: 24 - 230 VAC

- ECS S M23 A 10S (OFF)
- ECS S M23 B 10S (ON)
- ECS S M23 A 1M (OFF)
- ECS S M23 B 1M (ON)
- ECS S M23 A 10M (OFF)
- ECS S M23 B 10M (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	500 mArms
Minimum load current	10 mArms
Leakage current	≤ 3.5 mArms @ 230VACrms typ.: 2 mArms
Voltage drop	≤ 8 VACrms typ.: 5 VACrms @ 50 mArms

Supply Specifications

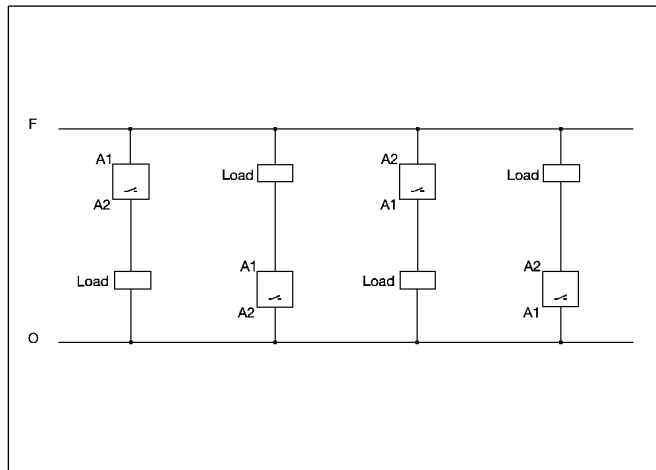
Power supply	Overvoltage cat. III (IEC 60664)
Rated operational voltage	(IEC 60038) 24-230 VAC, -10/+15%
Rated insulation voltage	None



General Specifications

EMC	Electromagnetic Compatibility
Immunity	Acc. to IEC 60801-4 Acc. to IEC 60801-5
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
Dimensions	49 x 22.5 x 56 mm (L x W x H)
Approvals	UL, CSA
CE-marking	Yes

Wiring Diagram



Operation Diagram

