

Timers

Two-state Relay

Type SG 125

CARLO GAVAZZI



- Two-state relay with built-in memory
- Time ranges: 0.15 s to 3 s
- Switches, with a preset delay, to opposite contact position at power supply interruption
- Repeatability deviation: $\leq 1\%$
- Output: 8 A SPDT relay
- Plug-in type module
- S-housing
- LED-indication for relay on
- AC or DC power supply

Product Description

Two-state, plug-in time relays with built-in memory and timer up to 3 s. When interrupting power supply, the contact switches after an adjustable delay to the opposite posi-

tion where it remains. Often used in applications with two pumps in order to prevent the same pump from always starting first.

Ordering Key

SG 125 024

Housing _____
 Function _____
 Output _____
 Type _____
 Power supply _____

Type Selection

| Plug | Output | Time range | Supply: 24 VAC | Supply: 115 VAC | Supply: 230 VAC | Supply: 24 VDC |
|----------|--------|------------|----------------|-----------------|-----------------|----------------|
| Circular | SPDT | 0.15 -3 s | SG 125 024 | SG 125 115 | SG 125 230 | SG 125 724 |

Time Specifications

| | |
|------------------------------------------------------------------------|---------------------------------------------------------------|
| Time ranges | 0.15 - 3 s |
| Time range accuracy | 0 to +20% on max. min. actual time \leq min. set time |
| Repeatability deviation | $\leq 1\%$ |
| Time variation Within rated power supply and ambient temperature | $\leq 0.2\%/^{\circ}\text{C}$ $\leq 0.05\%/V$ |
| Reset | \geq set delay |

Output Specifications

| | |
|----------------------------------|----------------------------------------------------------------------------------|
| SPDT relay | |
| Basic electrical insulation | 250 VAC (rms) (contact/electronics) |
| Contact ratings (AgCdO) | μ (micro gap) |
| Resistive loads | AC 1 10 A/250 VAC (2000 VA) DC 1 1 A/250 VDC (100 W) or 4 A/25 VDC (100 W) |
| Small inductive loads | AC 15 2.5 A/230 VAC DC 13 5 A/24 VDC |
| Mechanical life | $\geq 30 \times 10^6$ operations |
| Electrical life | AC 1 $\geq 2.5 \times 10^5$ operations (at max. load) |
| Operating frequency | ≤ 7200 operations/h |
| Insulation voltages | |
| Rated insulation voltage | ≥ 2.0 kVAC (rms) (cont./elec.) |
| Rated transient protection volt. | 4 kV (1.2/50 μs) (cont./elec.) (IEC 60664) |



Supply Specifications

| | | |
|-----------------------------------------------|-----------|-----------------------------------|
| Power supply AC types | | Installation cat. III (IEC 60664) |
| Rated operational voltage through pins 2 & 10 | 230 | 230 VAC ± 15%, 45 to 65 Hz |
| | 115 | 115 VAC ± 15%, 45 to 65 Hz |
| | 024 | 24 VAC ± 15%, 45 to 65 Hz |
| Drop-out tolerance | | ≥ 40 ms |
| Rated insulation voltage | | ≥ 2.0 kVAC (rms) (supply/elec.) |
| Rated transient protection volt. | | 4 kV (1.2/50 µs) (line/neutral) |
| Power supply DC type | | Installation cat. III (IEC 60664) |
| Rated operational volt. | 724 | 24 VDC ± 15% (pin 2 pos.) |
| Rated insulation voltage | | None |
| Rated transient protection volt. | | 800 V (1.2/50 µs) |
| Consumption | AC supply | 2.5 VA |
| | DC supply | 1.5 W |

General Specifications

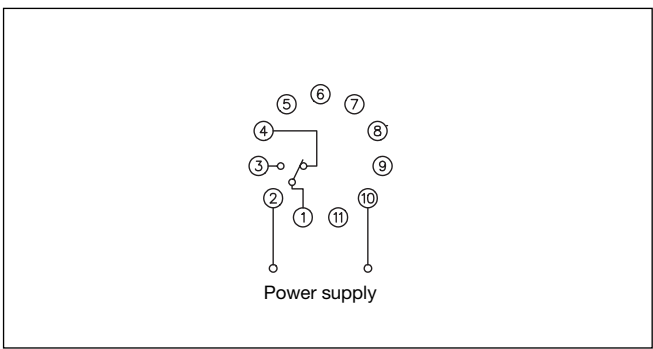
| | | |
|---------------------------------|----------|-----------------------------------------------------|
| Power ON time | | ≥ 1 s |
| Power OFF delay | | ≥ set delay |
| Indication for Output ON | | LED. red |
| Environment | | Degree of protection IP 20 B |
| | | Pollution degree 2 (IEC 60664) |
| | | Operating temperature -20° to +50°C (-4° to +122°F) |
| | | Storage temperature -50° to +85°C (-58° to +185°F) |
| Weight | AC types | 200 g |
| | DC types | 125 g |
| Approvals | | UL, CSA |

Mode of Operation

The relay contact remains in its present position (pins 1 and 4 or pins 1 and 3) when power supply is applied.

When interrupting power supply, however, after a delay of 0.15 - 3 s set on the potentiometer the contact switches to the opposite position where it remains.

Wiring Diagram



Accessories

| | |
|----------------------|-------|
| Socket◊ | S 411 |
| Hold down spring◊ | HF |
| Mounting rack | SM 13 |
| Socket cover | BB 4 |
| Front mounting bezel | FRS2 |
| Potentiometer lock | PL |

For further information refer to "Accessories".
For other AC/DC voltages refer to "General Information".

Time Setting

0.15 - 3 s.
Knob-adjustable on relative scale.

Operation Diagram

