



88826103-MUR3



- ✓ Relay or solid state output
- ✓ Multi-function or mono-function
- ✓ Multi-range
- ✓ Multi-voltage
- ✓ Screw or spring terminals
- ✓ LED status indicator (relay version)
- ✓ Option of connecting an external power supply to the control input
- ✓ 3-wire sensor control option

Timing

| | |
|---|--|
| Timing ranges (7 ranges) | 1 s - 10 s - 1 min - 10 min - 1 h - 10 h - 100 h TK2R1: 0.6s - 2.5s - 20s - 160 s |
| Repetition accuracy with constant parameters | ± 0.5% (IEC 1812-1) |
| Drift Temperature | ± 0,05% / °C |
| Drift Voltage | ± 0.2% / V |
| Display accuracy according to IEC 1812-1 | ± 10% / 25°C |
| Minimum pulse duration typically (relay version) | 30 ms |
| Minimum pulse duration typically (solid state version) | 50 ms |
| Minimum pulse duration typically (relay version under load) | 100 ms |
| Maximum reset time by de-energisation typically (relay version) | 100 ms |
| Maximum reset time by de-energisation typically (solid state version) | 350 ms |
| Immunity from micro power cuts: typical | > 10 ms |

Supply

| | |
|----------------------------|--|
| Multi-voltage power supply | Depending on version |
| Frequency (Hz) | 50 / 60 |
| Operating range | 85 to 110% Un (85 to 120% Un for 12V AC/DC) |
| Operator factor | 100% |
| Max. absorbed power | 0,6 W 24 V AC/DC 1,5 W 230 V AC 32 VA 230 V AC |

Output specification


| | |
|---|--|
| 1 or 2 changeover relays, AgNi (cadmium-free) | 2000 VA/80 W |
| Rated power | 2000 VA/80 W |
| Maximum breaking current | 8 A AC 8A DC |
| Minimum breaking current | 10 mA / 5 V DC |
| Voltage breaking capacity | 250 V AC/ DC |
| Electrical life (operations) | 10 ⁵ operations 8 A 250 V resistive |
| Mechanical life (operations) | 5x10 ⁶ |
| Breakdown voltage acc. to IEC 1812-1 | 2.5 kV / 1 min / 1 mA / 50 Hz |
| Impulse voltage acc. to IEC 664-1, IEC 1812-1 | 5 kV, wave 1.2 / 50 µs |

Solid state output

| | |
|--|--|
| Rated power | 0,7 A AC/DC 20 °C (0,5 A UL) |
| Derating | 5 mA / °C |
| Maximum admissible current | 20 A ≤ 10 ms |
| Minimum breaking current | 10 mA |
| Leakage current | < 5 mA |
| Voltage breaking capacity | 250 V AC/ DC |
| Maximum voltage drop at terminals | 3 wire 4V - 2 wire 8V |
| Electrical life (operations) | 10 ⁸ |
| Mechanical life (operations) | 10 ⁸ |
| Breakdown voltage acc. to IEC 664, IEC 255-5 | 2.5 kV to 1 mA / 1 min |
| Input type | Volt-free contact 3-wire PNP output control option residual voltage: 0.4V whatever the timer power supply |

General characteristics

| | |
|--|----------------|
| Conforming to standards IEC 1812-1, EN 50081-1/2, EN 50082-1/2, LV directives (73/23/EEC + 93/68/EEC (CE marking) + EMC (89/336/EEC + IEC 669-2-3 (17,5 mm)) | ✓ |
| Approvals | UL - CSA - cUL |
| Temperature limits use (°C) | -20 → +60 |
| Temperature limits stored (°C) | -30 → +60 |

| | |
|---|---|
| Installation category (acc. to IEC 664-1) | Voltage surge category |
| Creepage distance and clearance acc. to IEC 664-1 | 4 kV / 3 |
| Protection (IEC 529) | IP 20 IP 40 |
| Degree of protection acc. to IEC 529 Front face (except Tk2R1) | IP 50 |
| Vibration resistance acc. to IEC 68-2-6 | f = 10  55 Hz A = 0,35 mm |
| Relative humidity no condensation acc. to IEC 60068-2-3 | 93% sans condensation |
| Electromagnetic compatibility - Immunity to electrostatic discharges acc to IEC 1000-42 | Level III (Air 8 KV / Contact 6 KV) |
| Immunity to electrostatic fields acc. ENV 50140/204 (IEC 61000-4-3) | Level III 10V/m (80 MHz to 1 GHz) |
| Immunity to rapid transient bursts acc. to IEC 61000-4-4 | Level III (direct 2kV / Capacitive coupling clamp 1 KV) |
| Immunity to shock waves on power supply acc. to IEC 61000-4-5 | Level III (2 KV / common mode 2 KV/residual current mode 1KV) |
| Immunity to radio frequency in common mode acc. to ENV (IEC 61000-4-6) | Level III (10V rms: 0.15 MHz to 80 MHz) |
| Immunity to voltage dips and breaks acc. to IEC 1000-4-11 | 30%/10 ms 60%/100 ms > 95%/5 s |
| Mains-borne and radiated emissions acc. to EN 55022 (EN 55011 Group 1) | Class B |
| Fixing: Symmetrical DIN rail (EN 50022) | 35 mm |
| Connection capacity - without ferrule | 2 x 2,5 mm ² |
| Connection capacity - with ferrule | 2 x 1,5 mm ² |
| Spring terminals, 2 terminals per connection point - flexible wire | 1,5 mm ² |
| Spring terminals, 2 terminals per connection point - rigid wire | 2,5 mm ² |
| Housing material | Self-extinguishing |
| Weight: casing 17,5 mm | 60 g |
| Weight: casing 22,5 mm | 90 g |
| Weight: plug-in casing | 80 g |

Display

Visualisation des états par 1 LED

- Verte clignotante sous tension

Indication du fonctionnement LED verte

Flashes brefs :

- minuterie sous tension, pas de temporisation en cours (sauf Di-D et Li-L) *

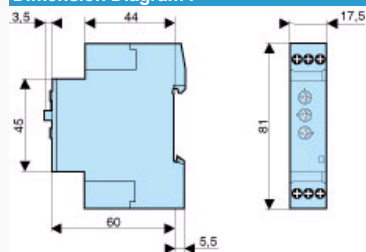
Clignotement :

- temporisation en cours

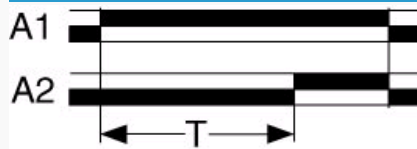
Allumage permanent :

- relais enclenché, pas de temporisation en cours

Dimension Diagram :



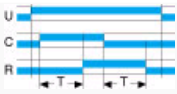
Curves : Function A



Function A

Delay on energisation

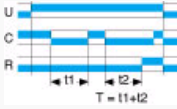
Curves : Function Ac



Function Ac

Timing after closing and opening of control contact 1 relay

Curves : Function At



Function At

Timing on energisation with memory 1 relay

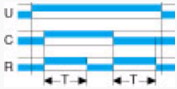
Curves : Function B



Function B

Timing on impulse one shot 1 relay

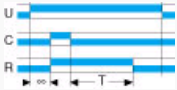
Curves : Function Bw



Function Bw

Pulse output (adjustable) 1 relay

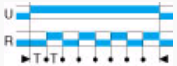
Curves : Function C



Function C

Timing after impulse 1 timer

Curves : Function D



Function D

Flip-flop 1 relay Pause start

Curves : Function Di



Function Di

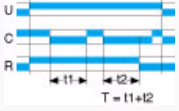
Flip-flop 1 relay Pulse start

Curves : Function H

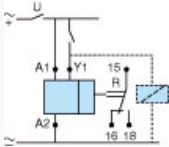


Function H

Timing on energisation 1 relay

Curves : Function Ht**Function Ht**

Delay on energisation with memory 1 relay

: 1 changeover relay output**Functions**

A-At / H-Ht / B / C / Di-D / Ac / BW

Ad - Ah - N - O - P - Pt - Tl - Tt - W