



## Plug-in OUR1 Part number 88867105



- Multi-function or mono-function
- Multi-range
- Multi-voltage
- Relay output 1 or 2 : 8 A - 250 V (10 A UL)
- LED status indicator
- Option of connecting an external power supply to the control input
- 3-wire sensor control option

### Part numbers

|          | Type | Functions                                  | Timing    | Output             | Nominal rating | Connections | Supply voltage         |
|----------|------|--------------------------------------------|-----------|--------------------|----------------|-------------|------------------------|
| 88867105 | OUR1 | A - At - B - C - H - Ht - Di - D - Ac - Bw | 0,1s→100h | 1 changeover relay | 8 A            | 8-pin       | 24 V DC / 24 →240 V AC |

### Specifications

#### Timing

|                                                                       |                                                                                       |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Timing ranges (7 ranges)                                              | 1 s - 10 s - 1 min - 10 min - 1 h - 10 h - 100 h<br>TK2R1 : 0.6s - 2.5s - 20s - 160 s |
| Repetition accuracy with constant parameters                          | ± 0.5 % (IEC/EN 1812-1)                                                               |
| Drift Temperature                                                     | ± 0,05 % / °C                                                                         |
| Drift Voltage                                                         | ± 0.2 % / V                                                                           |
| Display accuracy according to IEC/EN 61812-1                          | ± 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                                                                | *** TRADUCTION MANQUANTE ***                                                          |
| Multi-voltage power supply                                            | Depending on version                                                                  |
| Frequency (Hz)                                                        | 50 / 60                                                                               |
| Operating range                                                       | 85 to 110 % Un<br>(85 to 120 % Un for 12V AC/DC)                                      |
| Operating factor                                                      | 100 %                                                                                 |
| Max. absorbed power                                                   | 0,6 W 24 V AC/DC<br>1,5 W 230 V AC<br>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 <sup>5</sup> operations 8 A 250 V resistive |
| Mechanical life (operations)                           | 5x10 <sup>6</sup>                              |
| Breakdown voltage acc. to IEC/EN 61812-1               | 2.5 kV /1 min / 1 mA / 50 Hz                   |
| Impulse voltage acc. to IEC/EN 60664-1, IEC/EN 61812-1 | 5 kV, wave 1.2 / 50 µs                         |

#### Solid state output

|                                                          |                                                                                                               |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Rated power                                              | 0,7 A AC/DC<br>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 <sup>8</sup>                                                                                               |
| Mechanical life (operations)                             | 10 <sup>8</sup>                                                                                               |
| Breakdown voltage acc. to IEC/EN 60664-1, IEC/EN 60255-5 | 2.5 kV to 1 mA / 1 min                                                                                        |
| Input type                                               | Volt-free contact<br>3-wire PNP output control option residual voltage : 0.4V whatever the timer power supply |

### General characteristics

|                                                                                              |                                                                                                |
|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Conformity to standards                                                                      | IEC/EN 61812-1<br>IEC/EN 61000-6-1<br>IEC/EN 61000-6-2<br>IEC/EN 61000-6-3<br>IEC/EN 61000-6-4 |
| Certifications                                                                               | CE, UL, cUL, CSA, GL                                                                           |
| Temperature limits use (°C)                                                                  | -20 →+60                                                                                       |
| Temperature limits stored (°C)                                                               | -30 →+60                                                                                       |
| Installation category<br>(acc. to IEC/EN 60664-1)                                            | Voltage surge category                                                                         |
| Creepage distance and clearance acc. to IEC/EN 60664-1                                       | 4 kV / 3                                                                                       |
| Protection (IEC/EN 60529)                                                                    | IP 20<br>IP 40                                                                                 |
| Degree of protection acc. to IEC/EN 60529 Front face<br>(except Tk2R1)                       | IP 50                                                                                          |
| Vibration resistance<br>acc. to IEC/EN 60068-2-6                                             | f = 10 ■ 55 Hz<br>A = 0,35 mm                                                                  |
| Relative humidity no condensation acc. to IEC/EN 60068-2-30                                  | 93 % sans condensation                                                                         |
| Electromagnetic compatibility - Immunity to electrostatic discharges acc to IEC/EN 61000-4-2 | Level III (Air 8 kV / Contact 6 kV)                                                            |
| Immunity to radiated, radio-frequency, electromagnetic field acc. IEC/EN 61000-4-3           | Level III 10V/m (80 M Hz to 1 G Hz)                                                            |
| Immunity to rapid transient bursts acc. to IEC/EN 61000-4-4                                  | Level III (direct 2kV / Capacitive coupling clamp 1 kV)                                        |
| Immunity to shock waves on power supply acc. to IEC/EN 61000-4-5                             | Level III (2 kV / common mode 2 kV/residual current mode 1kV)                                  |
| Immunity to radio frequency in common mode acc. to IEC/EN 61000-4-6                          | Level III (10V rms : 0.15 M Hz to 80 M Hz)                                                     |
| Immunity to voltage dips and breaks acc. to IEC/EN 61000-4-11                                | 30 %/10 ms<br>60 %/100 ms ><br>95 %/5 s                                                        |
| Mains-borne and radiated emissions acc. to EN 55022 (CISPR22), EN55011 (CISPR11)             | Class B                                                                                        |
| Fixing : Symmetrical DIN rail                                                                | 35 mm                                                                                          |
| Connection capacity - without ferrule                                                        | 2 x 2,5 mm <sup>2</sup>                                                                        |
| Connection capacity - with ferrule                                                           | 2 x 1,5 mm <sup>2</sup>                                                                        |
| Spring terminals, 2 terminals per connection point - flexible wire                           | 1,5 mm <sup>2</sup>                                                                            |
| Spring terminals, 2 terminals per connection point - rigid wire                              | 2,5 mm <sup>2</sup>                                                                            |
| Housing material                                                                             | Self-extinguishing                                                                             |
| Weight : casing 17,5 mm                                                                      | 60 g                                                                                           |
| Weight : casing 22,5 mm                                                                      | 90 g                                                                                           |
| Weight : plug-in casing                                                                      | 80 g                                                                                           |

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Accessories

| Accessories          | Code       |
|----------------------|------------|
| 8-pin connector base | 25 622 128 |

Display

State displayed by 1 LED

- Flashing green when on

Green LED operation indicator

Pulsing :

- timer on, no timing in progress (except functions Di-D and Li-L)

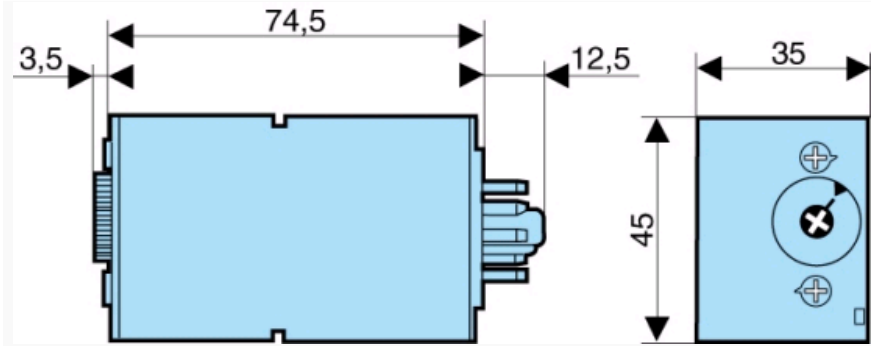
Flashing :

- timing in progress

Permanently lit :

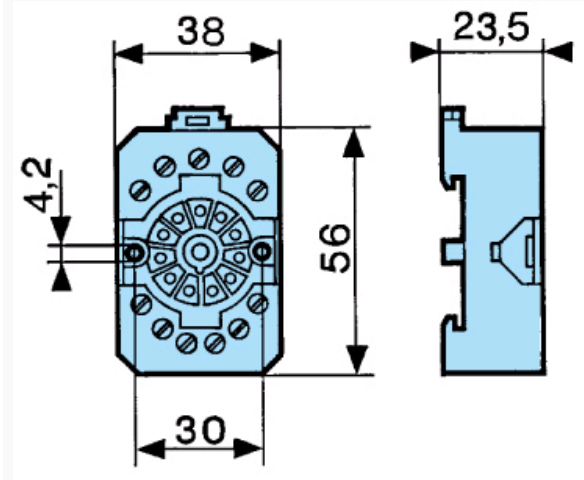
- Relay waiting, no timing in progress

Dimensions (mm)



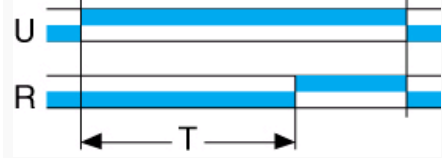
Dimensions (mm)

Accessories



Curves

Function A - 1 relay output



|                                                                       |
|-----------------------------------------------------------------------|
| Function A                                                            |
| Delay on energisation 2 timers or 2 relays, including 1 instantaneous |

Curves

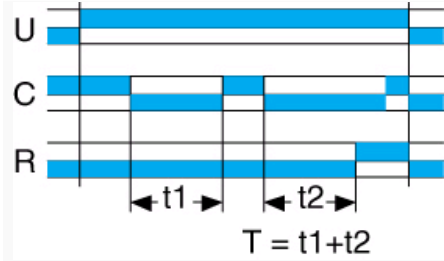
Function Ac - 1 relay output



|                                                     |
|-----------------------------------------------------|
| Function Ac                                         |
| Timing after closing and opening of control contact |

Curves

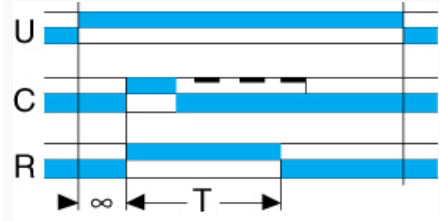
Function At - 1 relay output



|                                    |
|------------------------------------|
| Function At                        |
| Timing on energisation with memory |

Curves

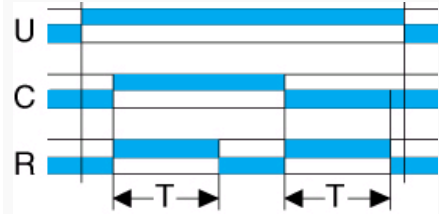
Function B - 1 relay output



|                            |
|----------------------------|
| Function B                 |
| Timing on impulse one shot |

Curves

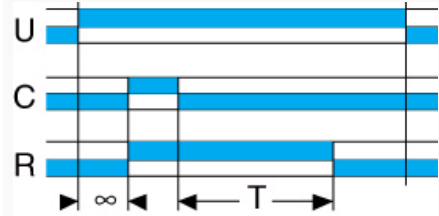
Function Bw - 1 relay output



|                           |
|---------------------------|
| Function Bw               |
| Pulse output (adjustable) |

Curves

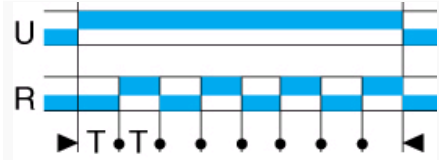
Function C - 1 relay output



|                      |
|----------------------|
| Function C           |
| Timing after impulse |

Curves

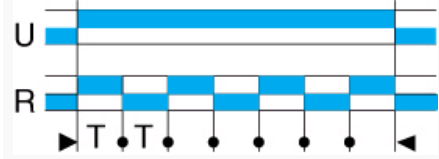
Function D - 1 relay output



|                          |
|--------------------------|
| Function D               |
| Flip-flop<br>Pause start |

Curves

Function Di - 1 relay output



|                          |
|--------------------------|
| Function Di              |
| Flip-flop<br>Pulse start |

Curves

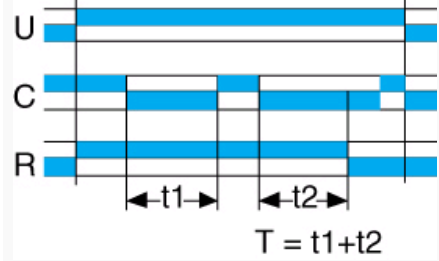
Function H - 1 relay output



|                        |
|------------------------|
| Function H             |
| Timing on energisation |

Curves

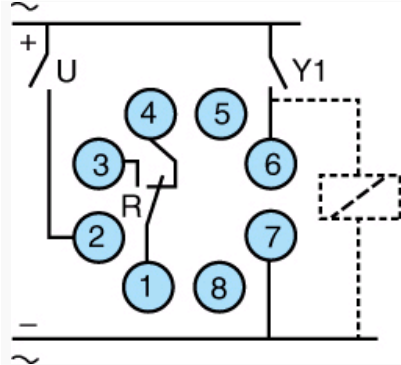
Function Ht - 1 relay output



|                                   |
|-----------------------------------|
| Function Ht                       |
| Delay on energisation with memory |

Connections

8-pin 1 relay output



| Functions                                           |
|-----------------------------------------------------|
| Functions A - At / H - Ht/ B / C / Di - D / Ac / Bw |