





Terminology

RATED VOLTAGE - it is the nominal value of the operating voltage of the circuit by which the relay is designed to be supplied and operate. The relays operating and use characteristics are referred to the rated voltage (EN 61810-1).

OPERATING RANGE - it is the range between the minimum and the maximum pick-up voltage.

DIELECTRIC STRENGTH - dielctric strength tests are carried out by applying a specified AC voltage (at 50 hz) for 1 minute between two circuits (ex. between coil and contacts, between adjacent contacts, between open contacts), and verifying that the leakage current does not overrun 10 mA. During the final 100% tests, the specified voltage is increased by 10%, and applied for 1 second. This refers to the rms value.

INSULATION GROUP - according to VDE 0110.

MECHANICAL LIFE - this test is carried out by energizing the coil without any load applied to the contacts, in order to check metal parts life, solder and residual magnetism intensity, which is checked by connecting one phase of each relay coil in parallel, while the other phase in connected to a contact of a pilot relay. This makes each relay independent in order to avoid induced counter electromotive force which could facilitate the drop-out of the relay withsome residual magnetism (EN 61810-1) still on.

AMBIENT TEMPERATURE - it is the temperature of the actual area where the relay is located in which a good operation of the relay is guaranteed. The relay is energized at the rated voltage (or at the voltage indicated in the diagrams, which shows the trend of operating minimum voltage versus temperature). All technical data in this catalogue refer to an ambient temperature +20°C.

TIME SETTING - range in which it is possible to set timing using the time scales.

REPEATABILITY - difference between the upper and lower limits of the confidence range from several time measurements of a specified time relay under identical stated conditions. Preferably the repeatability is indicated as a percentage of the mean value of all measured values.

SETTING ACCURACY - difference between the measured value of the specified time and the reference value set on the scale.

RECOVERY TIME - necessary time to start the relay again with the defined accuracy after the input energizing quantity has been taken away.

CONTACT SPECIFICATION

RATED POWER - it is the maximum switching power or maximum power value (in VA) with resistive load in AC, that a contact can make, hold and break many times.

RATED CURRENT - this is the current for continuous duty, which is the highest value (rms value in AC) that a contact can continuously hold within the prescribed temperature limits. It coincides with the cycling capacity, that is the current that a contact can make, hold and break many times (EN 60225-23).

MAXIMUM PEAK CURRENT - the highest value of current (rms value in AC) that a contact can make and cycle for not more than 0.5 seconds, and with a duty cycle (DC) not higher than 0.1, without undergoing a permanent degradation of its characteristics due to generated heat (EN 60225-23).

RATED VOLTAGE - it is the ratio between the rated power and the rated current.

MAXIMUM SWITCHING VOLTAGE - it is the highest voltage level that the contacts can switch. It is higher than or equal to the rated voltage.

BREAKING CAPACITY IN DC1 - for DC1 loads, it is the maximum value of current which contacts can switch, depending on the value of the load voltage, without any protection circuits.

SINGLE PHASE MOTOR RATING - it is the nominal value of the motors power, using AC3 category, $\cos \varphi = 0.7$, 250 V maximum that a relay can control according to EN 60947-1, UL 508 e CSA 22.2 No.14.



EMC SPECIFICATIONS

TYPE OF TEST	REFERENCE STANDARD
ELECTROSTATIC DISCHARGE - contact discharge	EN 61000-4-2
- air discharge	
RADIO-FREQUENCY ELECTROMAGNETIC FIELD (80 ÷ 1000 MHz)	ENV 50140 (IEC 1000-4-3)
FAST TRANSIENTS (burst) (5-50 ns, 5 kHz) on Supply terminals	EN 61000-4-4
SURGES (1.2/50 µs) on Supply terminals	
- common mode	EN 61000-4-5
- differential mode	
RADIO-FREQUENCY COMMON MODE (0.15 ÷ 80 MHz) on Supply terminals	ENV 50141 (IEC 1000-4-6)
POWER-FREQUENCY (50 Hz)	EN 61000-4-8
RADIATED AND CONDUCTED EMISSION	EN 55022

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94 Series - Sockets and Accessories for 85 Series Timers



A range of sockets and accessories for 85 series timers Features include:

- PCB, screw terminal, panel or 35 mm rail (EN 50022) mount versions
- Flammability in conformity with UL 94
- Approvals (according to type): BBJ, CSA, DEMKO, CS IMQ, SEV, cULus







P.C.B. SOCKETS

TYPE 94.12 for types 85.32 - 85.52 **TYPE 94.13** for types 85.33 - 85.53 **TYPE 94.14** for types 85.34 - 85.54

CHARACTERISTICS

- LOAD: 10 A 250 V
- ISOLATION RESISTANCE: $\geq 10^3 \ \text{M}\Omega$
- DIELECTRIC STRENGTH: \geq 2 kV AC
- MATERIAL: self-extinguishing PPEm (V1)
- CONNECTIONS: Cu Sn 6 tin plated



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PANEL MOUNT SOLDER SOCKETS (1 mm thick panel mount)

TYPE 94.22 for types 85.32 - 85.52 **TYPE 94.23** for types 85.33 - 85.53 **TYPE 94.24** for types 85.34 - 85.54

- LOAD: 10 A 250 V
- ISOLATION RESISTANCE: $\geq 10^3 \ \text{M}\Omega$
- DIELECTRIC STRENGTH: \geq 2 kV AC
- MATERIAL: polycarbonate (PC)
- CONNECTIONS: Cu Sn 6 silver plated













PANEL MOUNT SOLDER SOCKETS (M3 screw mount)

TYPE 94.32 for types 85.32 - 85.52 **TYPE 94.33** for types 85.33 - 85.53 **TYPE 94.34** for types 85.34 - 85.54

CHARACTERISTICS

- LOAD: 10 A 250 V
- ISOLATION RESISTANCE: $\geq 10^3 \; M\Omega$
- DIELECTRIC STRENGTH: $\geq 2 \text{ kV}$ AC
- MATERIAL: self-extinguishing PPEm (V1)
- CONNECTIONS: Cu Sn 6 tin plated



CLAMP TERMINALS SOCKETS (panel or 35 mm rail - EN 50022- mount) TYPE 94.62 for types 85.32 - 85.52 TYPE 94.64 for types 85.34 - 85.54 Accessories: TYPE 094.81 retaining clip

- LOAD: 10 A 250 V
- ISOLATION RESISTANCE: $\geq 10^3 \ \text{M}\Omega$
- DIELECTRIC STRENGTH: \geq 2 kV AC
- MATERIAL: self-extinguishing PPEm (V1)
- CONNECTIONS: Cu Zn 33 nickel plated
- PROTECTION CATEGORY: IP 20
- Non removable pozidrive slotted terminal screws.
- Identification label.













SCREW TERMINALS SOCKETS (panel or 35 mm rail - EN 50022- mount)

TYPE 94.73 for types 85.32 - 85.52 **TYPE 94.74** for types 85.34 - 85.54 Accessories: **TYPE 094.81** retaining clip

CHARACTERISTICS

- LOAD: 10 A 250 V
- ISOLATION RESISTANCE: $\geq 10^3 M\Omega$
- DIELECTRIC STRENGTH: $\geq 2 \text{ kV AC}$
- MATERIAL: self-extinguishing PPEm (V1)
- CONNECTIONS: Cu Zn 33 nickel plated
- PROTECTION CATEGORY: IP 20
- Non removable pozidrive slotted terminal screws.
- Identification label.



SCREW TERMINALS SOCKETS (panel or 35 mm rail - EN 50022- mount) TYPE 94.82 for types 85.32 - 85.52 Accessories: TYPE 094.81 retaining clip

- LOAD: 10 A 250 V
- ISOLATION RESISTANCE: $\geq 10^3 \ \text{M}\Omega$
- DIELECTRIC STRENGTH: $\geq 2 \text{ kV AC}$
- MATERIAL: self-extinguishing PPEm (V1)
- CONNECTIONS: Cu Zn 33 nickel plated
- PROTECTION CATEGORY: IP 20
- Non removable pozidrive slotted terminal screws.
- Identification label.









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6-WAY JUMPER LINK TYPE 094.06 for socket 94.02 and 94.04

- LOAD: 10 A 250 V

CLAMP TERMINALS SOCKETS (panel or 35 mm rail - EN 50022- mount) TYPE 94.02 for types 85.32 - 85.52 TYPE 94.04 for types 85.34 - 85.54 Accessories: TYPE 094.81 retaining clip TYPE 094.06 6-way jumper link

- LOAD: 10 A 250 V
- ISOLATION RESISTANCE: $\geq 10^3 \ \text{M}\Omega$
- DIELECTRIC STRENGTH: $\geq 2 \text{ kV AC}$
- MATERIAL: self-extinguishing PA 6 20% FV (V1)
- CONNECTIONS: Cu Zn 33 nickel plated
- PROTECTION CATEGORY: IP 20
- Non removable pozidrive slotted terminal screws.
- Identification label.

