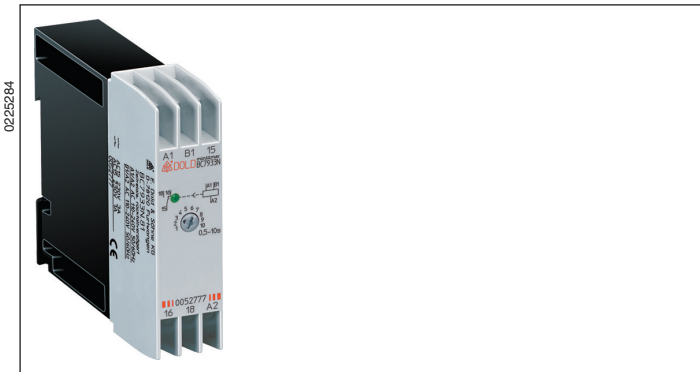
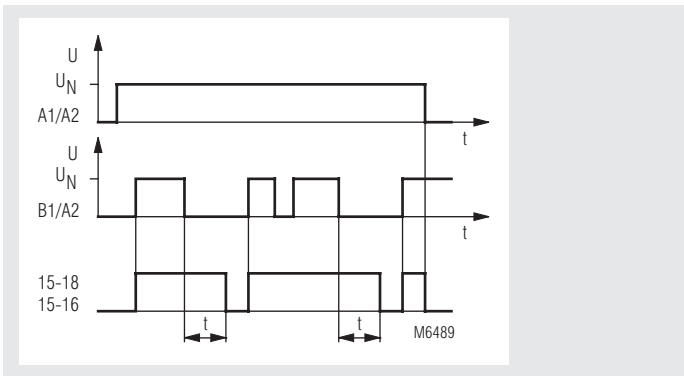


MINITIMER Timer, Release Delay BC 7933N



- According to IEC/EN 61 812-1
- Time ranges between 0.05 s and 10 h
- Settable release delay
- With auxiliary voltage
- Wide voltage range AC 110 ... 240 V
- Control input operated with nominal voltage, No voltage free contact necessary
- LED indicator for status of contact
- 1 changeover contact
- Wire connection: also 2 x 1.5 mm² stranded ferruled (isolated), DIN 46 228-1/-2/-3/-4 or 2 x 2.5 mm² stranded ferruled DIN 46 228-1/-2/-3
- Width 22.5 mm

Function Diagram



Approvals and Markings



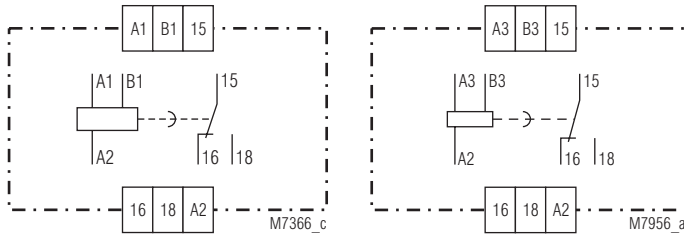
Applications

Time-dependent control circuits

Indicators

yellow LED: on, when output relay activated (contact 15 - 18 closed)

Circuit Diagram



BC 7933N

BC 7933N/200

Notes

The relay needs a supply voltage continuously connected to A1-A2. At relays with auxiliary supply < AC 180 V the control input must not be operated before the auxiliary supply is present for at least 150 ms. In this case also the recovery time after time delay is 150 ms.

Technical Data

Time Circuit

| | | |
|---------------------|--------------|--------------|
| Time ranges: | 0.05 ... 1 s | 0.5 ... 10 m |
| | 0.15 ... 3 s | 1.5 ... 30 m |
| | 0.5 ... 10 s | 0.15 ... 3 h |
| | 1.5 ... 30 s | 0.5 ... 10 h |
| | 5 ... 100 s | |
| | 15 ... 300 s | |

Time setting: infinitely variable 1:20
Min. closing time: (Control input B1)

AC: 15 ms
DC: 5 ms

Recovery time: < 50 ms
Repeat accuracy: ≤ 0.5 % + 10 ms

Voltage influence: ≤ 1 %
Temperature influence: ≤ 0.25 % / K

Technical Data

Input

| | |
|--|--|
| Nominal voltage U_N: | (A1/A2 and B1/A2) AC 110 ... 240 V AC 42 V AC/DC 24 V |
| Voltage range: | AC: 0.8 ... 1.1 U_N DC: 0.9 ... 1.25 U_N |
| Nominal consumption: | AC: 4 VA DC: 0.4 W |
| Nominal frequency: | AC: 50 / 60 Hz |
| Frequency range: | AC: 45 ... 65 Hz |
| Reset voltage: | (Control input B1) $\geq 15 \% U_N$ |

Output

| | |
|--|--|
| Contacts: | 1 changeover contact |
| Thermal current I_{th}: | 4 A |
| Switching capacity to AC 15 | |
| NO contact: | 3 A / AC 230 V IEC/EN 60 947-5-1 |
| NC contact: | 1 A / AC 230 V IEC/EN 60 947-5-1 |
| Electrical contact life to AC 15 at 1 A, AC 230 V: | 1.5 x 10 ⁵ switching cycles |
| Short circuit strength max. fuse rating: | 4 A gL IEC/EN 60 947-5-1 |
| Mechanical life: | 10 ⁸ switching cycles |

General Data

| | |
|---|---|
| Operating mode: | Continuous operation |
| Temperature range: | - 20 ... + 60°C |
| Clearance and creepage distances rated impulse voltage / pollution degree: | 4 kV / 2 IEC 60 664-1 |
| EMC | |
| Electrostatic discharge: | 8 kV (air) IEC/EN 61 000-4-2 |
| HF irradiation: | 10 V/m IEC/EN 61 000-4-3 |
| Fast transients: | 4 kV IEC/EN 61 000-4-4 |
| Surge voltages between | |
| wires for power supply: | 1 kV IEC/EN 61 000-4-5 |
| between wire and ground: | 4 kV IEC/EN 61 000-4-5 |
| Interference suppression: | Limit value class B EN 55 011 |
| Degree of protection | |
| Housing: | IP 40 IEC/EN 60 529 |
| Terminals: | IP 20 IEC/EN 60 529 |
| Housing: | Thermoplastic with V0 behaviour according to UL subject 94 |
| Vibration resistance: | Amplitude 0.35 mm IEC/EN 60 068-2-6 frequency 10 ... 55 Hz |
| Climate resistance: | 20 / 060 / 04 IEC/EN 60 068-1 |
| Terminal designation: | EN 50 005 |
| Wire connection: | 1 x 4 mm ² solid or 1 x 2.5 mm ² stranded ferruled (isolated) or 2 x 1.5 mm ² stranded ferruled (isolated) DIN 46 228-1/-2/-3/-4 or 2 x 2.5 mm ² stranded ferruled DIN 46 228-1/-2/-3 |
| Wire fixing: | Terminal screws M 3.5 Box terminal with wire protection |
| Mounting: | DIN rail IEC/EN 60 715 |
| Weight: | 80 g |

Dimensions

Width x height x depth: 22.5 x 84 x 97 mm

Standard Type

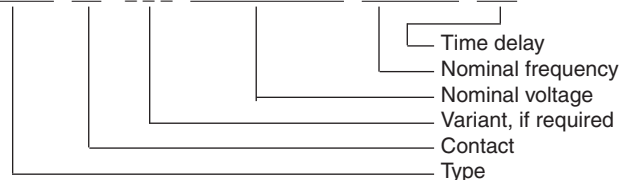
| | | | |
|---|----------------------|----------|--------------|
| BC 7933N.81 | AC 110 ... 240 V | 50/60 Hz | 0.5 ... 10 s |
| Article number: | 0052777 | | |
| • Front colour grey, with box terminals | | | |
| • Output: | 1 changeover contact | | |
| • Nominal voltage U_N : | AC 110 ... 240 V | | |
| • Time range: | 0.5 ... 10 s | | |
| • Width: | 22.5 mm | | |

Variante

| | |
|------------------|---|
| BC 7933N.81/200: | Special terminal designation: A3 corresponds A1, B3 corresponds B1 |
|------------------|---|

Ordering example for variant

BC 7933N .81 / _ _ _ AC 110 ... 240 V 50 / 60 Hz 10 s



Connection Example

