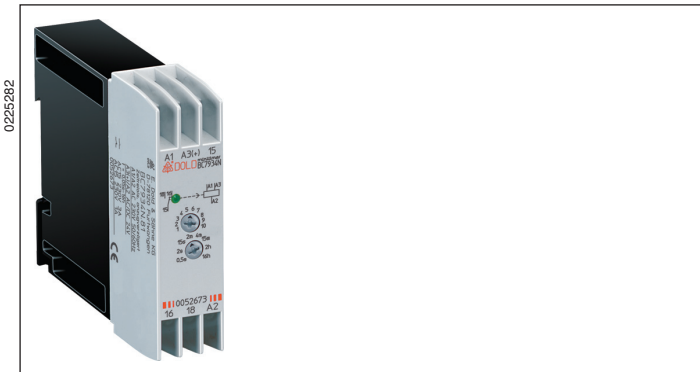


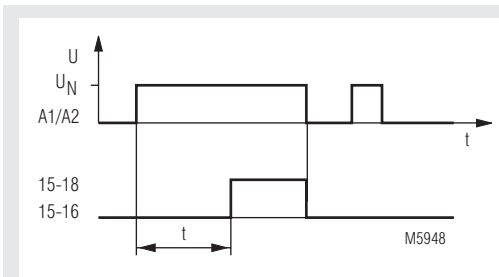
MINITIMER

Multi Range Time Relay, operate delay
BC 7934N



- According to IEC/EN 61 812-1
- 8 switching ranges from 0.05 s ... 16 h
- Infinite variable delay on every range 1 : 10
- Dual-voltage design as standard (e.g. AC 230 V + AC/DC 24 V)
- LED indicator for contact position
- 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 Marking



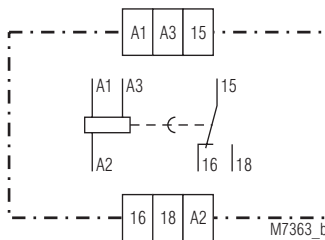
Applications

Time-dependent controllers

Indications

LED: on when output relay activated (contacts 15 - 18 are closed)

Circuit Diagram



Technical Data

Time circuit

Time ranges:

8 switching ranges
0.05 ... 0.5 s 0.4 ... 4 min.
0.2 ... 2 s 1.5 ... 15 min.
1.5 ... 15 s 0.2 ... 2 h
0.2 ... 2 min. 1.6 ... 16 h

Time setting:

infinitely variable 1:10

Recovery time:

≤ 100 ms

Repeat accuracy:

≤ 0.5 % + 10 ms

Voltage influence:

≤ 1 %

Temperature influence:

≤ 0.25 % / K

Input

Nominal voltage U_N :

AC/DC 24 V¹⁾ + AC 230 V²⁾
AC/DC 24 V¹⁾ + AC 110 ... 127 V²⁾
AC/DC 24 V¹⁾ + AC 42 V²⁾

¹⁾ on terminals A3-A2

²⁾ on terminals A1-A2

Voltage range:

0.8 ... 1.1 U_N with AC
0.9 ... 1.25 U_N with DC

Nominal consumption:

AC: 4 VA
DC: 0.4 W

Frequency range:

45 ... 64 Hz at AC

Release voltage:

≥ 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 life

to AC 15 at 1 A, AC 230 V: IEC/EN 60 947-5-1

1.5 x 10⁵ switching cycles

Short circuit strength

max. fuse rating:

4 A gL IEC/EN 60 947-5-1

Mechanical life:

10⁸ switching cycles

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range:	- 20 ... + 60°C	
Clearance and creepage distances		
rated impuls 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:	2 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:	85 g	

Dimensions

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

Standard Type

BC 7934N.81 AC/DC 24 V + AC 230 V 16 h
Article number: 0052673
• Front colour grey, with box terminals
• Output: 1 changeover contact
• Nominal voltage U_N : AC/DC 24 V + AC 230 V
• Time ranges: from 0.05 s ... 16 h
• Width: 22.5 mm

Ordering Example

BC 7934N	.81	AC/DC 24 + AC 230 V	0.05 s ... 16 h
			Time range end value
			Nominal voltage
			Contacts
			Type