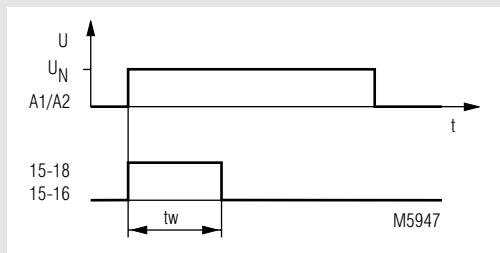


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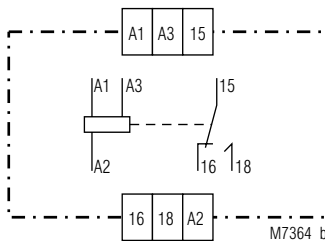


- According to DIN EN 61 812-1
- Fleeting action
- Repeat time adjustable to 100 s
- Repeat accuracy $\leq 0,5 \% + 10 \text{ ms}$
- Dual voltage supply
- LED indicator for contact position
- 1 changeover contact
- BC 7931N Wire connection: also 2 x 1,5 mm² stranded ferruled (isolated), DIN 46 228-4 or 2 x 2,5 mm² stranded ferruled DIN 46 228-1/-2/-3
- Width 22,5 mm

Function diagram



Circuit diagram



Approvals and marking



Applications

- Time-dependent controllers

Dimensions

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

Technical data

Time ranges: 0,05 ... 1 s
0,5 ... 10 s
5 ... 100 s

Time setting: stepless 1:20

Recovery time: $\leq 100 \text{ ms}$

Repeat accuracy: $\leq 0,5 \% + 10 \text{ ms}$

Voltage influence: $< 1 \% \text{ over voltage range}$

Temperature influence: $< 0,25 \% / \text{K}$

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⁾ at terminals A3-A2
²⁾ at terminals A1-A2

Voltage range: AC 0,8 ... 1,1 U_N
DC 0,9 ... 1,25 U_N

Nominal frequency: 50 / 60 Hz

Release voltage: 15 % U_N

Nominal consumption: AC: 4 VA
DC: 0,4 W

Output

Contacts
BC 7931.71, BC 7931N.71: 1 changeover contact

Thermal current I_{th} : 4 A

Switching capacity
to AC 15

NO contact: 3 A / AC 230 V EN 60 947-5-1
NC contact: 1 A / AC 230 V EN 60 947-5-1

Electrical life: EN 60 947-5-1
to AC 15 at 1 A, AC 230 V: 1,5 x 10⁵ switching cycles

Short circuit strength

max. fuse rating: 4 A gL 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		
overvoltage category / contamination level:	4 kV / 2	IEC 60 664-1
EMC		
Electrostatic discharge:	8 kV (air)	EN 61 000-4-2
HF irradiation:	10 V/m	EN 61 000-4-3
Fast transients:	4 kV	EN 61 000-4-4
Surge voltages between wires for power supply:	1 kV	EN 61 000-4-5
between wire and ground:	2 kV	EN 61 000-4-5
Interference suppression:	Limit value class B	EN 55 011
Degree of protection:	Housing: IP 40	EN 60 529
	Terminals: IP 20	EN 60 529
Housing:	Thermoplastic with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0,35 mm, frequency 10 ... 55 Hz	EN 60 068-2-6
Climate resistance:	20 / 060 / 04	EN 60 068-1
Terminal designation:	EN 50 005	
Wire connection		
BC 7931:	1 x 4 mm ² solid or 2 x 1,5 mm ² stranded wire with sleeve DIN 46 228	
BC 7931N:	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:		
BC 7931:	Flat terminals with self-lifting clamping piece DIN 46 206 and DIN 57 609 / VDE 0609	
BC 7931N:	Terminal screws M 3,5 Box terminal with wire protection	
Mounting:	DIN rail	EN 50 022
Weight:	80 g	

Dimensions

Width x height x depth: 22,5 x 84 x 97 mm

Standard type

BC 7931N.71	AC/DC 24 V + AC 230 V	50/60 Hz	0,5 ... 10 s
Article number:	0052663		
• Front colour grey, with box terminals			
• Output:	1 changeover contact		
• Nominal voltage U _N :	AC/DC 24 V + AC 230 V		
• Time range:	0,5 ... 10 s		
• Width:	22,5 mm		

Ordering example

BC 7931	.71	AC/DC 24 V + AC 230 V	50/60 Hz	1 s
			Time range end value	
			Nominal frequency	
			Nominal voltage	
			Contacts	
			BC 7931N: front colour grey, with box terminals	
			BC 7931: front colour orange, with flat terminals	