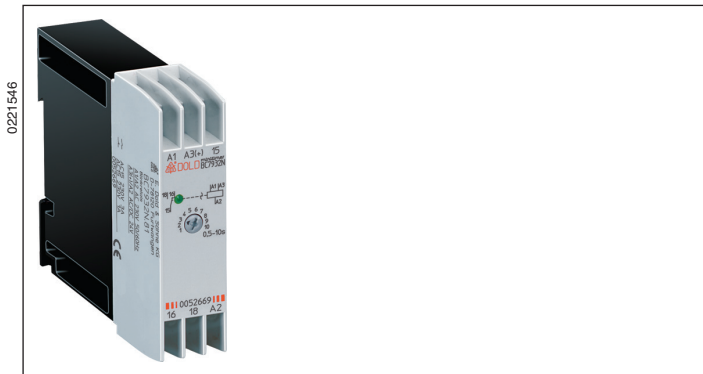


Time Control Technique

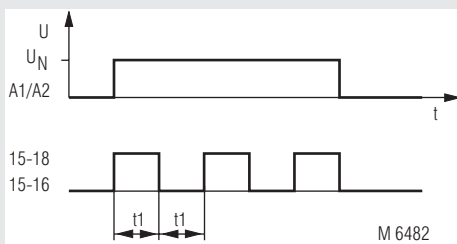
MINITIMER Flasher Relay BC 7932N

Translation
of the original instructions



- According to IEC/EN 61812-1
- Adjustable flashing frequency, pulse times to 100 s
- Start with pulse
- Repeat accuracy $\leq 0.5\% + 10\text{ ms}$
- 2-voltage design
- LED indicator for contact position
- 1 changeover contact
- Wire connection: Also 2 x 1.5 mm² stranded ferruledb (isolated), DIN 46228-1/-2/-3/-4 or 2 x 2.5 mm² stranded ferruled DIN 46228-1/-2/-3
- Width 22.5 mm

Function Diagram



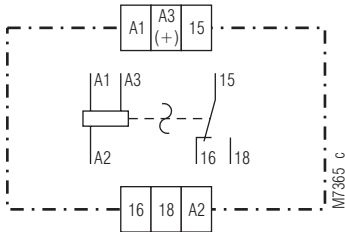
Approvals and Markings



Indicators

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

Circuit Diagram



Connection Terminals

Terminal designation	Signal description
A1, A3(+), A2	Operating voltage
15, 16, 18	Changeover contact

Technical Data

Time Circuit

Time ranges:	0.05 ... 1 s (pulse or space) 0.5 ... 10 s 5 ... 100 s
Time setting:	Stepless 1:20
Recovery time:	≤ 100 ms
Repeat accuracy:	≤ 0.5 % + 10 ms
Voltage influence:	≤ 1 %
Temperature influence:	< 0.25 % / K

Input

Nominal voltage U_N (Operating voltage):	AC/DC 24 V ¹⁾ + AC 230 V ²⁾ AC/DC 24 V ¹⁾ + AC 110 ... 127 V ²⁾ AC/DC 24 V ¹⁾ + AC 42 V ²⁾ 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 consumption:	AC: 4 VA DC: 0.4 W
Nominal frequency:	50 / 60 Hz
Frequency range:	± 5 % f_N
Release voltage:	15 % U_N

Output

Contacts:	1 changeover contact
Contact material:	AgNi
Measured nominal voltage:	AC 250 V
Thermal current I_{th}:	4 A
Switching capacity To AC 15	
NO contact:	3 A / AC 230 V IEC/EN 60947-5-1
NC contact:	1 A / AC 230 V IEC/EN 60947-5-1
Electrical life To AC 15 at 1 A, AC 230 V:	1.5 x 10 ⁵ switching cycles IEC/EN 60947-5-1
Permissible switching frequency:	36000 switching cycles / h
Short circuit strength	
Max. fuse rating:	4 A gG / gL IEC/EN 60947-5-1
Mechanical life:	10 ⁸ switching cycles

General Data

Operating mode:	Continuous operation
Temperature range	
Operation:	- 20 ... + 60 °C
Storage:	- 25 ... + 70 °C
Relative air humidity:	95 % at 40 °C
Altitude:	< 2000 m
Clearance and creepage distances	
Overvoltage category / pollution degree:	4 kV / 2 (basis insulation) IEC 60664-1
Overvoltage category:	III
Insulation test voltage, type test:	2.5 kV; 1 min
EMC	
Electrostatic discharge:	6 kV (contact) IEC/EN 61000-4-2 8 kV (air) IEC/EN 61000-4-2
HF irradiation	
80 MHz ... 2.7 GHz:	20 V / m IEC/EN 61000-4-3
Fast transients:	4 kV IEC/EN 61000-4-4
Surge voltages	
Between A1/A2:	2 kV IEC/EN 61000-4-5
Between A3(+)/A2:	0,5 kV IEC/EN 61000-4-5
Between A1, A2/PE:	4 kV IEC/EN 61000-4-5
HF-wire guided:	20 V IEC/EN 61000-4-6
Interference suppression:	Limit value class B EN 55011

Technical Data

Degree of protection

Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529
Housing:	Thermoplastic with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm IEC/EN 60068-2-6 frequency 10 ... 55 Hz	
Climate resistance:	20 / 060 / 04	IEC/EN 60068-1
Terminal designation:	EN 50005	

Wire connection:

Cross section:	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 46228-1/-2/-3/-4 or 2 x 2.5 mm ² stranded ferruled DIN 46228-1/-2/-3
----------------	--

Insulation of wires or sleeve length:

10 mm
Wire fixing:
Terminal screws M 3.5
Box terminal with wire protection

Fixing torque:

0.8 Nm
Mounting:
DIN rail IEC/EN 60715
Weight:
80 g

Dimensions

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

Standard Type

BC 7932N.81	AC/DC 24 V + AC 230 V	50/60 Hz	0.5 ... 10 s
Article number:	0052669		
• 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		

Variant

BC 7932N/100:	Start with space
---------------	------------------

Ordering example for variant

BC 7932N	.81	/	---	AC/DC 24 V + AC 230 V	50 / 60 Hz	10 s
					Time ranges	
					Nominal frequency	
					Nominal voltage	
					Variant, if required	
					Contacts	
					Type	