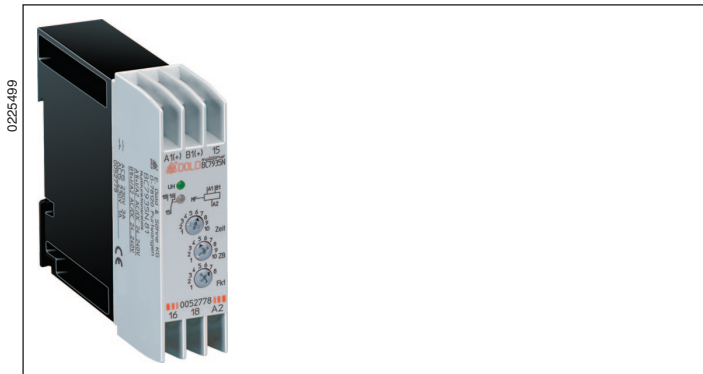


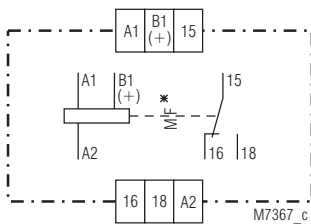
MULTITIMER Multifunction Relay BC 7935N



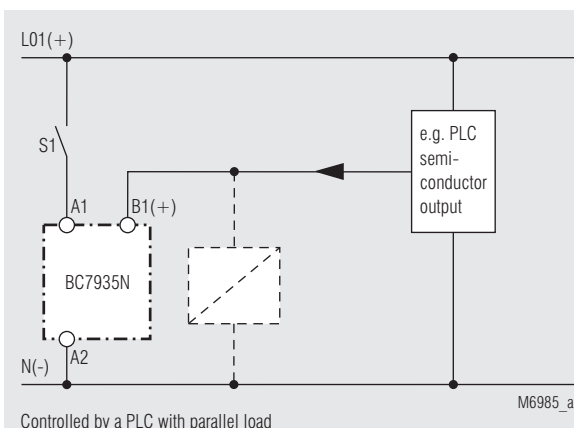
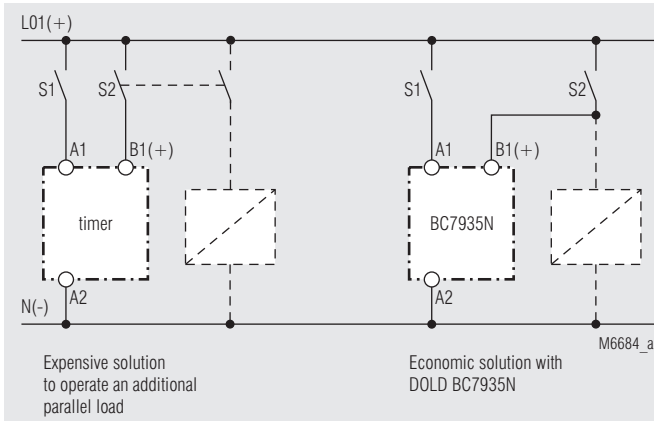
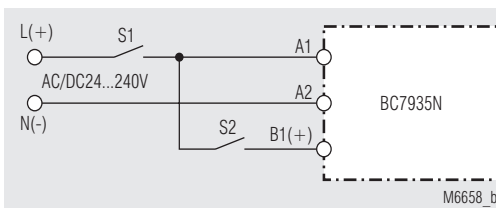
0225-499

- According to IEC/EN 61 812-1
- 8 functions selectable by rotational switch:
 - AV - operate delay
 - EW - fleeting on make
 - IE - delayed pulse function
 - BE - flasher start with impulse
 - RV - release delay
 - IF - pulse forming
 - AW - fleeting on break
 - AV/RV - operate / release delay
- With 10 time ranges up to 300 h selectable by rotational switch
- Time addition via control input B1 for the functions AV, EW, IE, BE
- Time ranges up to 300 h
- AC/DC 24 ... 240 V
- 1 changeover contact
- LED indicators for voltage supply and contact position, flashing function during elapse of time
- 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

Circuit Diagrams



Connection Examples



Approvals and Marking



Applications

Time-dependent controllers

Indicators

green LED: on, when supply connected.
yellow LED: on, when output relay active.
Flashes during time delay, pulse-pause-ratio indicates the state of the output relay (see Function Diagramm).

Notes

The functions RV, IF, AW, AV/RV have to be controlled by input B1(+) according to the connection Diagram.
At the functions AV,EW,IE, BE the timing cycle can be stopped by closing S2 (see Diagram). When opening S2 the timing cycles continues.

Technical Data

Time circuit

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

selectable by switch (ZB)
infinitely variable 1:20

Time setting:

Recovery time:

Repeat accuracy:

Voltage influence:

Temperature influence:

50 ms

± 2 %

≤ 1 %

0.05 % / K

Input

Nominal voltage U_N

A1 / A2, B1(+) / A2:

AC/DC 24 ... 240 V, DC 12 V

Voltage range:

0.8 ... 1.1 U_N

Nominal consumption:

AC		DC	
24 V	240 V	24 V	240 V
1.1 VA	4.1 VA	0.93 W	1.95 W

Nominal frequency:

50 / 60 Hz

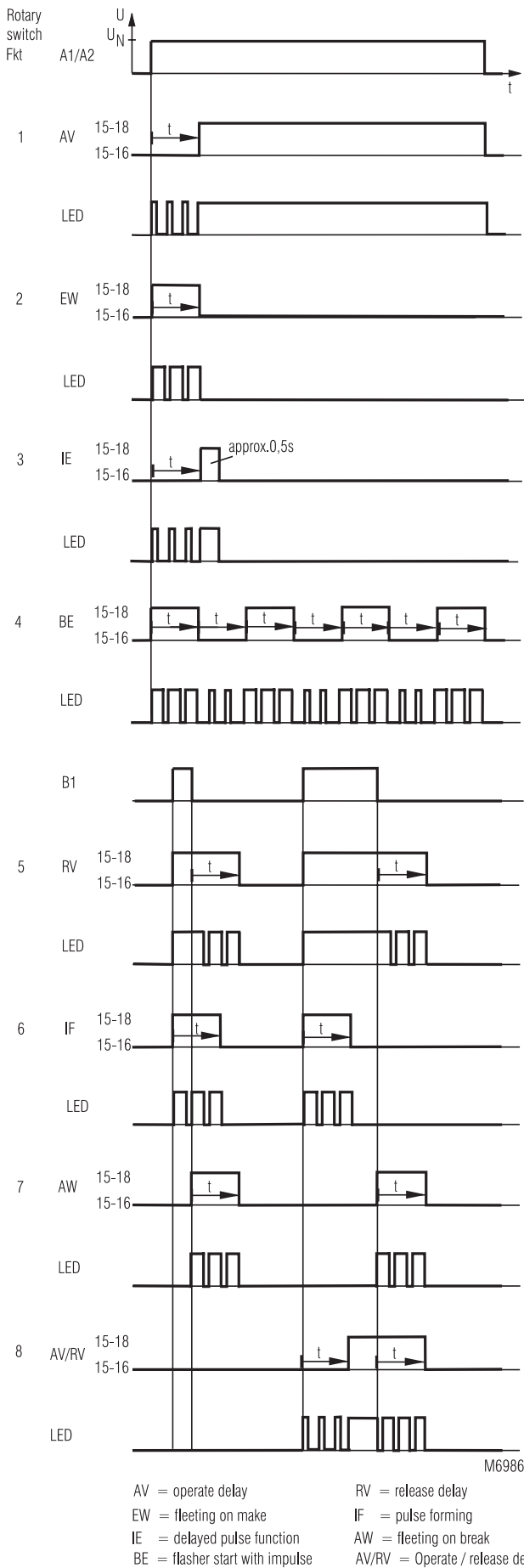
Release voltage:

AC: $\geq 15\% U_N$, DC: $\geq 5\% U_N$

Min. ontime of control input B1:

AC 30 ms, DC 10 ms

Function Diagram



Technical Data

Output

Contacts:	1 changeover contact
Thermal current I_{th}:	4 A
Switching capacity	
to AC 15:	3 A / AC 230 V IEC/EN 60 947-5-1
Electrical life	IEC/EN 60 947-5-1
to AC 15 at 1 A, AC 230 V:	typ. 150 000 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:	0 ... + 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:	2 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
	to UL subject 94
Vibration resistance:	Amplitude 0.35 mm IEC/EN 60 068-2-6
	frequency 10 ... 55 Hz
Climate resistance:	0 / 060 / 04 IEC/EN 60 068-1
Terminal arrangement:	DIN 46 199-5
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:	105 g

Dimensions

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

Standard Type

BC 7935N.81	AC/DC 24 ... 240 V	50/60 Hz
Article number:	0052778	
• Front colour grey, with box terminals		
• Output:	1 changeover contact	
• Nominal voltage U_N :	AC/DC 24 ... 240 V	
• Width:	22.5 mm	

Ordering Example

BC 7935N	.81	AC/DC 24 ... 240 V	50 / 60 Hz
			└─ Nominal frequency
			└─ Nominal voltage
			└─ Contacts
			└─ Type