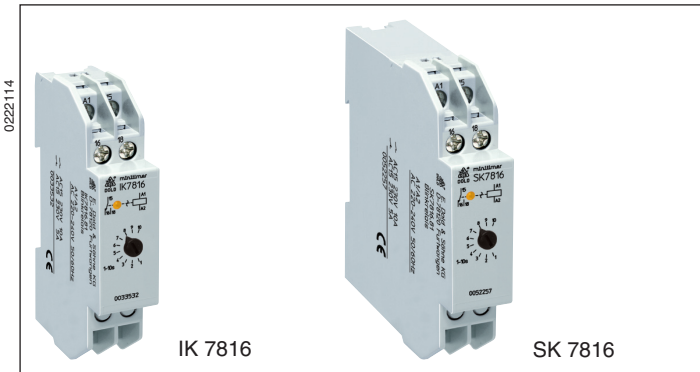
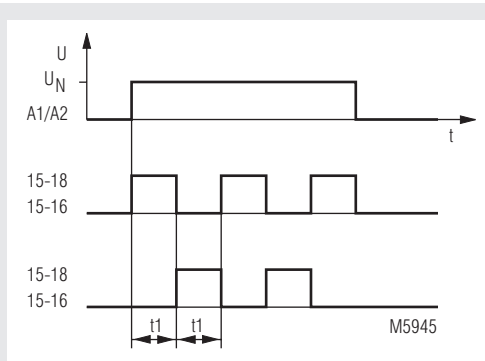


MINITIMER Flasher Relay IK 7816, SK 7816



- According to IEC/EN 61 812-1
- Pulse time up to 100 s
- Adjustable flashing time
- Repeat accuracy $\leq 1\%$
- Start with a pulse: IK 7816
Start with a pause: IK 7816/100
- LED indicator for contact position
- 1 changeover contact
- **Devices available in 2 enclosure versions:**
 - IK 7816:** depth 58 mm, with terminals at the bottom for installation systems and industrial distribution systems according to DIN 43 880
 - SK 7816:** depth 98 mm, with terminals at the top for cabinets with mounting plate and cable ducts
- Width 17.5 mm

Function Diagram



Approvals and Marking



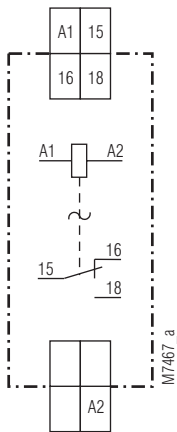
Application

Time-based control equipment

Indicator

LED: on when the output relay is activated (contact 15 - 18 is closed)

Circuit Diagram



IK 7816.81, SK 7816.81

Technical Data

Time circuit

Time range:	0.1 ... 1 s = 300 ... 30 pulses/min
	1 ... 10 s
	10 ... 100 s
Pulse duty factor:	1 : 1
Setting:	Infinitely variable, on relative scale
Recovery time	
tw 50 / 100:	< 60 ms
Repeat accuracy:	0.1 %
Voltage influence:	$\leq 1\%$ at 0.8 ... 1.1 U_N
Temperature influence:	0.05 % / K

Input

Nominal voltage U_N:	AC/DC 12 V, AC/DC 24 V, AC 110 ... 127 V, AC 220 ... 240 V
Voltage range:	0.8 ... 1.1 U_N with AC and DC 48 % residual ripple 0.9 ... 1.25 U_N in battery operating mode
Release voltage:	15 % U_N
Nominal consumption:	AC/DC 24 V 0.6 W AC 230 V 50 Hz 3.5 VA
Nominal frequency:	50 / 60 Hz
Frequency range:	$\pm 5\%$

Output

Contacts	IK 7816.81, SK 7816.81:	1 changeover contact
Thermal current I_{th}:		10 A at 45°C ambient temperature
Switching capacity		
to AC 15		
NO contact:	10 A / AC 230V	IEC/EN 60 947-5-1
NC contact:	5 A / AC 230 V	IEC/EN 60 947-5-1
Glow lamp load:	1200 W	
Electrical life:		IEC/EN 60 947-5-1
AC 15 at 3 A, AC 230 V:		5 x 10 ⁵ switching cycles

Technical Data

Permissible switching frequency:	6 000 switching cycles/h	
Short circuit strength		
max. fuse rating:	10 AgL	IEC/EN 60 947-5-1
max. line circuit breaker:	B16	IEC/EN 60 947-5-1
Mechanical life:	> 30 x 10 ⁶ switching cycles	

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: between wire and ground: Interference suppression:	2 kV 4 kV Limit value class B	IEC/EN 61 000-4-5 IEC/EN 61 000-4-5 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 Subj. 94	
Vibration resistance:	Amplitude 0.35 mm frequency 10 ... 55 Hz, IEC/EN 60 068-2-6 20 / 060 / 04 IEC/EN 60 068-1 EN 50 005	
Climate resistance:		
Terminal designation:	EN 50 005	
Wire connection:	2 x 2.5 mm ² solid or 2 x 1.5 mm ² stranded ferruled DIN 46 228-1/-2/-3/-4	
Wire fixing:	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1	
Mounting:	DIN rail IEC/EN 60 715	
Weight		
IK 7816:	75 g	
SK 7816:	94 g	

Dimensions

Width x height x depth	
IK 7816:	17.5 x 90 x 58 mm
SK 7816:	17.5 x 90 x 98 mm

Standard Type

IK 7816.81 AC 220 ... 240 V	1 ... 10 s	
Article number:	0033532	stock item
• Output:	1 changeover contact	
• Nominal voltage U _N :	AC 220 ... 240 V	
• Time range:	1 ... 10 s	
• Width:	17.5 mm	
SK 7816.81 AC 220 ... 240 V	1 ... 10 s	
Article number:	0052257	
• Output:	1 changeover contact	
• Nominal voltage U _N :	AC 220 ... 240 V	
• Time range:	1 ... 10 s	
• Width:	17.5 mm	

Variant

IK 7816/100:	Start with a pause
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Ordering example for variant

IK 7816 .81 AC 220 ... 240 V 50 / 60 Hz 1 ... 10 s	
	Setting range
	Nominal frequency
	Nominal voltage
	Contacts
	Type