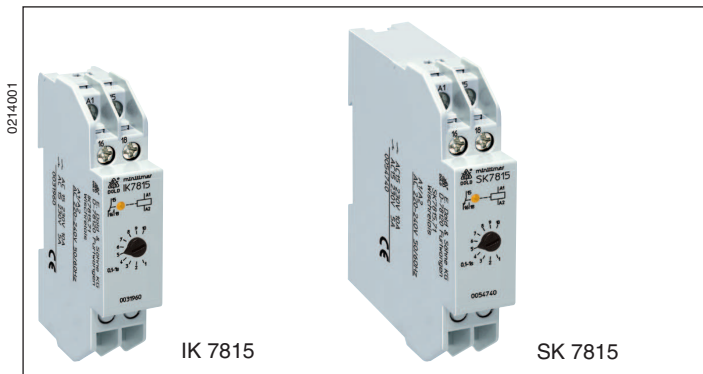
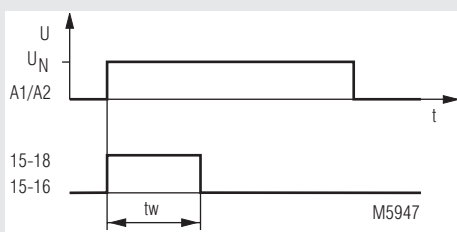


MINITIMER Fleeting Action Relay IK 7815, SK 7815



- According to IEC/EN 61 812-1
- Fleeting time up to 60 min.
- Adjustable fleeting time
- Repeat accuracy $\leq \pm 1 \%$
- LED indicator for contact position
- 1 changeover contact
- Devices available in 2 enclosure versions:
 - IK 7815: depth 58 mm, with terminals at the bottom for installation systems and industrial distribution systems according to DIN 43 880
 - SK 7815: depth 98 mm, with terminals at the top for cabinets with mounting plate and cable duct
- Width 17.5 mm

Function Diagram



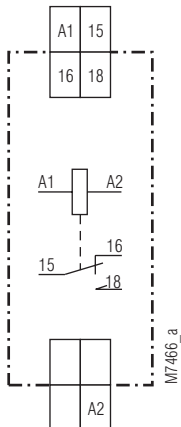
Approvals and Markings



Application

Time-based control equipment

Circuit Diagram



Geräteanzeigen

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

Notes

A change of the time setting is directly valid. If a time is changed during time elaps, the output relay may energise unintended.

Connection Terminals

Terminal designation	Signal designation
A1	L / +
A2	N / -
15, 16, 18	Changeover contact

Technical Data

Time circuit

Fleeting time ranges:	0,1... 1 s	1 ... 10 min
	0,3 ... 3 s	3 ... 30 min
	1 ... 10 s	6 ... 60 min
	3 ... 30 s	
	10 ... 100 s	
Setting:	Infinitely variable, on relative scale	
Recovery time		
tw 50 / 100:	< 60 ms	
Repeat accuracy:	0.1 %	
Voltage influence:	≤ 1 % bei 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:	± 5 %

Output

Contacts:	1 changeover contact	
Contact material:	AgSnO ₂	
Measured nominal voltage:	AC 250 V	
Thermal current I_{th}:	max. 10 A (see quadratic total current limit curve)	
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	
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	
Mechanical life:	> 30 x 10 ⁶ 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:	< 2.000 m	
Clearance and creepage distances		
rated impulse voltage/ pollution degree:	4 kV / 2 (base insulation) IEC 60 664-1	
Overvoltage category:	III	
Insulation test voltage, type test:	2.5 kV; 1 min	
EMC		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation		
80 MHz ... 1 GHz:	10 V / m	IEC/EN 61 000-4-3
1 GHz ... 2.5 GHz:	3 V / m	IEC/EN 61 000-4-3
2.5 GHz ... 2.7 GHz:	1 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:	2 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
HF-wire guided:	20 V	IEC/EN 61 000-4-6
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

Technical Data

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
Climate resistance:	20 / 060 / 04 IEC/EN 60 068-1
Terminal designation:	EN 50 005
Wire connection:	DIN 46 228-1/-2/-3/-4
Cross section:	2 x 2,5 mm ² solid or 2 x 1,5 mm ² stranded ferruled
Stripping length:	10 mm
Wire fixing:	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1 0.8 Nm IEC/EN 60 999-1
Mounting:	DIN rail IEC/EN 60 715
Weight	
IK 7815:	75 g
SK 7815:	94 g

Dimensions

Width x height x depth	
IK 7815:	17.5 x 90 x 58 mm
SK 7815:	17.5 x 90 x 98 mm

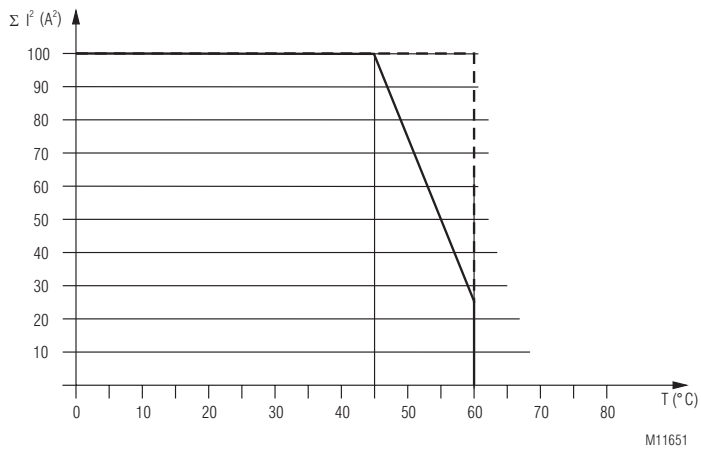
Standard Type

IK 7815.71 AC 220 ... 240 V	0.1 ... 1 s
Article number:	0031960
• Output:	1 changeover contact
• Nominal voltage U _N :	AC 220 ... 240 V
• Fleeting time:	0.1 ... 1 s
• Width:	17.5 mm
SK 7815.71 AC 220 ... 240 V	0.1 ... 1 s
Article number:	0054740
• Output	1 changeover contact
• Nominal voltage U _N :	AC 220 ... 240 V
• Fleeting time:	0.1 ... 1 s
• Width:	17.5 mm

Variant

IK 7815 .71 AC 220 ... 240 V	0.1 ... 1 s
	Time range
	Nominal voltage
	Contacts
	Type

Characteristic



--- device mounted away from heat generation components.

— device mounted without distance heated by devices with same load.

Quadratic total current limit curve

Connection Example

