MINITIMER
Flasher Relay
IK 7827

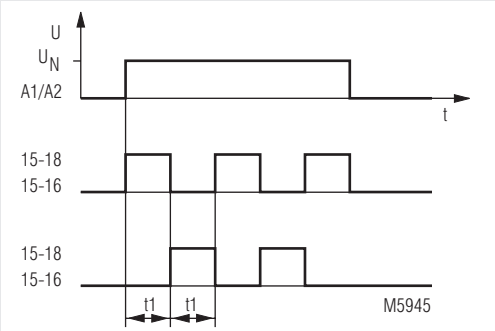
Translation of the original instructions

DOLD

0221568

- According to IEC/EN 61812-1
- Pulse time up to 100 s
- IK 7827 start with pulse
- IK 7827/100 start with pause
- Repeat accuracy ≤ 0.5 % + 10 ms
- Pushbutton for manual actuation of the contact
- 1 changeover contact for 16 A
- Width 17.5 mm

Function Diagram



Approvals and Markings

CE

Application

- Time-dependent controllers

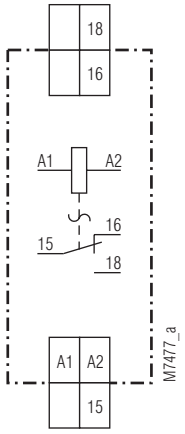
Indicators

Push button: Pressed, when relay energized

Notes

A change of time setting is accepted directly.
If during elaps of time the time setting is changed, the output relay may switch unintentionally!

Circuit Diagram



Connection Terminals

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

Technical Data

Time ranges: 0.05 ... 1 s
(equivalent to 600 ... 30 pulses / min.)
0.5 ... 10 s
5 ... 100 s
Tolerance of end value: - 5 ... + 25 % of nominal value
Time setting: Stepless, 1:20 on relative scale
Recovery time: Approx. 60 ms
(during run-down o the pulse time)
Approx. 700 ms
(during run-down of the pause time)
Repeat accuracy: < ± 0.5 % + 10 ms
Voltage influence: < 1 % over voltage range
Temperature influence: < 0.1 % / K

Input

Nominal voltage U_N: AC 24, 230 V
DC 24 V
Voltage range: 90 ... 110 % U_N
Release voltage: 15 % U_N
Nominal consumption
AC: 2.3 VA
DC: 1.5 W
Nominal frequency: 50 Hz
Frequency range: ± 5 %

Output

Contacts
IK 7827.81: 1 changeover contact
Contact material: $AgSnO_2$
Measured nominal voltage: AC 250 V
Release time of the contacts: < 30 ms
Thermal current I_{th}: 16 A
Electrical life At 500 switching cycles / h
Under ohmic load AC 230 V: 6 A 150 x 10^4 switching cycles
10 A 72 x 10^4 switching cycles
16 A 12 x 10^4 switching cycles
Inductive load cos φ 0.6: 10 A 10 x 10^4 switching cycles
DC load: See arc limit curve
Permissible switching frequency: 1000 switching cycles / h
Short circuit strength
Max. fuse rating: 16 A gG / gL IEC/EN 60947-5-1
Mechanical life: > 3 x 10^6 switching cycles

General Data

Operating mode: Continuous operation
Temperature range
Operation: - 20 ... + 45 °C
Storage: - 25 ... + 70 °C
Relative air humidity: 95 % at 40 °C
Altitude: < 2000 m
Clearance and creepage distances
Rated impulse voltage / 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: 8 kV (air) IEC/EN 61000-4-2
HF irradiation
80 MHz ... 2.7 GHz: 10 V / m IEC/EN 61000-4-3
Fast transients: 2 kV IEC/EN 61000-4-4
Surge voltages
Between
wires for power supply: 1 kV IEC/EN 61000-4-5
Between wire and ground: 2 kV IEC/EN 61000-4-5
HF-wire guided: 10 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: Thermplastic with V0 behaviour according to UL subject 94
Vibration resistance: Amplitude 0.35 mm, frequency 10 ... 55 Hz IEC/EN 60068-2-6
Climate resistance: 20 / 045 / 04 IEC/EN 60068-1
Terminal designation: EN 50005
Wire connection: DIN 46228-1/-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 60999-1
Fixing torque: 0.8 Nm
Mounting: DIN rail IEC/EN 60715
Weight: 100 g

Dimensions

Width x height x depth: 17.5 x 89 x 58 mm

Standard Type

IK 7827.81 AC 230 V 50 Hz 0.5 ... 10 s
Article number: 0043335
- Output: 1 changeover contacts
- Nominal voltage U_N: AC 230 V
- Time range: 0.5 ... 10 s
- Width: 17.5 mm

Variant

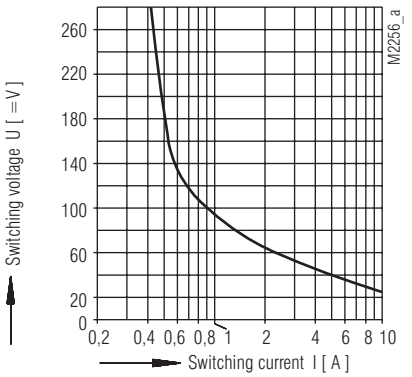
IK 7827.81/100: Start with break

Ordering example for variant

IK 7827 .81 / _ _ _ AC 230 V 50 Hz 1 s

- 1 s: Time range limit value
- 50 Hz: Nominal frequency
- AC 230 V: Nominal voltage
- _ _ _: Variant, if required
- .81: Contact
- IK 7827: Type

Characteristics



safe braking, no continuous arcing
max. 1000 switching cycles / h
contact spacing min. 0,6mm

Arc limit curve