

## Series Switch IK 8831



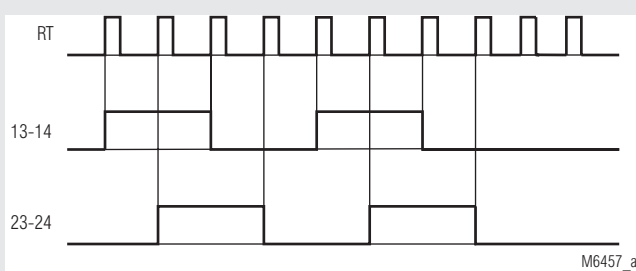
### Your Advantages

- Low energy consumption by impulse operation
- Serial switch for several local push buttons

### Features

- According to IEC/EN 60 669
- Impulse operation
- Switching function 1 - 1 + 2 - 2 - 0
- Pushbutton for manual actuation of the contacts
- 2 NO contacts
- Width 17.5 mm

### Function Diagram



### Approvals and Markings



### Applications

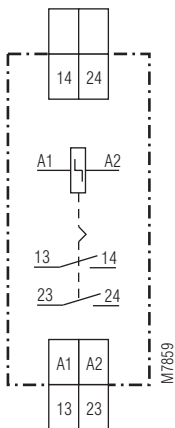
Lamps that can be switched in 2 stages.

### Function

The individual consumers are switched in the sequence 1 - 1 + 2 - 2 - 0 via pushbutton.

- 1 = Contact 13 - 14 closed
- 2 = Contact 23 - 24 closed

### Circuit Diagram



IK 8831.02

### Technical Data

#### Input

- Nominal voltage  $U_N$ :** AC 24, 230 V (other voltages available on request)
- Voltage range:** 0.9 ... 1.1  $U_N$
- Nominal consumption:** apparent power 5.2 VA, actual power 4.2 W
- Nominal frequency:** 50 or 60 Hz
- Frequency range:**  $\pm 5\%$
- Glow lamps parallel to the pushbutton:** max. 8 pieces à 0.5 mA
- Max. interference voltage at the inputs:** 2.5 kV
- Min. switching-on time:** 50 ms

#### Output

#### Contacts

- IK 8831.02:** 2 NO contacts
- Nominal output voltage:** AC 400 V
- Fluorescent lamp load:** 20 x 58 W, 5 x 10<sup>4</sup> switching cycles (duo switching)
- Bulb load:** 1500 W, 5 x 10<sup>4</sup> switching cycles
- Thermal current  $I_{th}$ :** 16 A
- Switching frequency:** 1 000 / h
- Short circuit strength max fuse rating:** 16 A gG / gL IEC/EN 60 947-5-1

### Connection Terminals

Terminal designation	Signal designation
A1	Control signal L resp. DC+ (via several local push button)
A2	Neutral N resp. DC-
13/14	NO contact 1 LOAD
23/24	NO contact 2 LOAD

## Technical Data

### General Data

**Operating mode:** Impulse operation  
in case of failure 100 to duty cycle possible

### Temperature range

Operation: - 20 ... + 45°C

Storage: - 25 ... + 55°C

**Altitude:** < 2.000 m

### Clearance and creepage distances

rated impulse voltage /  
pollution degree: 4 kV / 2 IEC 60 664-1

### EMC

Electrostatic discharge: 8 kV (air) IEC/EN 61 000-4-2

HF-Einstrahlung:

80 MHz ... 1 GHz: 10 V / m IEC/EN 61 000-4-3

1 GHz ... 2.7 GHz: 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: 1 kV IEC/EN 61 000-4-5

between wire and ground: 2 kV IEC/EN 61 000-4-5

HF wire guided: 10 V IEC/EN 61 000-4-6

Interference suppression: Limit value class B EN 55 011

### Degree of protection

Housing: IP 30 IEC/EN 60 529

Terminals: IP 20 IEC/EN 60 529

**Housing:** Thermoplastic with V0 behaviour  
according to UL subject 94

**Vibration resistance:** Amplitude 0.35 mm  
frequency 10 ... 55 Hz IEC/EN 60 068-2-6

**Climate resistance:** Humid heat IEC/EN 60 068-2-30

**Terminal designation:** EN 50 005

**Wire connection:** 2 x 2.5 mm<sup>2</sup> solid or  
2 x 1.5 mm<sup>2</sup> stranded ferruled  
DIN 46 228-1/-2/-3/-4

2 x 1 mm<sup>2</sup> stranded ferruled  
DIN 46 228-1/-2/-3/-4

**Wire fixing:** Flat terminals with self-lifting  
clamping piece IEC/EN 60 999-1

**Fixing torque:** 0.8 Nm

**Mounting:** DIN rail IEC/EN 60 715

**Weight:** 100 g

### Dimensions

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

### Standard Type

IK 8831.02 AC 230 V 50 Hz

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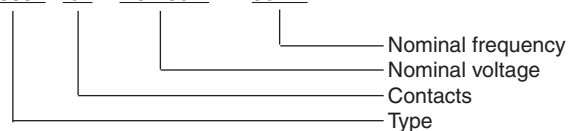
• Output: 2 NO contacts

• Nominal voltage  $U_N$ : AC 230 V

• Width: 17.5 mm

### Ordering Example

IK 8831 .02 AC 230 V 50 Hz



## Connection Example

