

Remote Switch For Central Switching Operation IK 8805, IL 8805



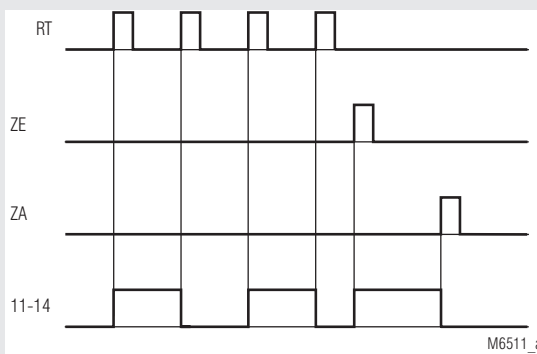
Your Advantages

- Optionally with up to max. 4 changeover contacts
- Low energy consumption by impulse operation
- Small amount of wiring required at installations with several local push buttons

Features

- According to IEC/EN 60 669
- Impulse operation
- Pushbutton for manual actuation of the contact
- Operating position display
- Max. glow lamp load: 4 mA
- IK 8805: width 17.5 mm
- IL 8805: width 35 mm

Function Diagram



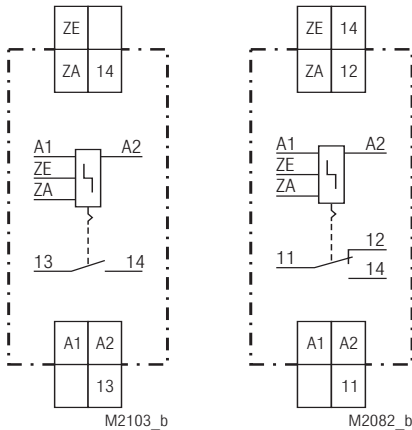
Approvals and Markings



Applications

For switching several different consumer groups on and off centrally

Circuit Diagrams

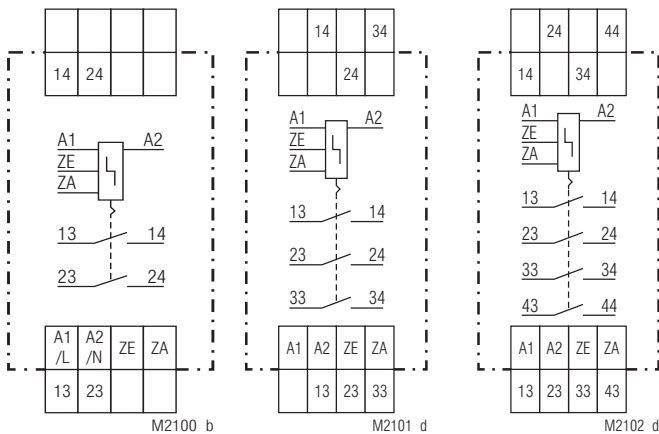


IK 8805.01

IK 8805.11

Connection Terminals

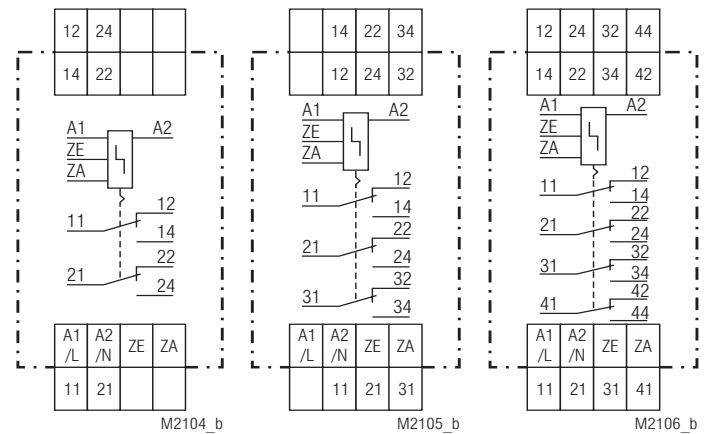
| Terminal designation | Signal designation |
|--|--------------------|
| A1 | Local button |
| A2 | Neutral N |
| ZE | Central button ON |
| ZA | Central button OFF |
| 13/14, 23/24, 33/34, 43/44 | NO contact LOAD |
| 11/12/14, 21/22/24, 31/32/34, 41/42/44 | C/O contact LOAD |



IL 8805.02

IL 8805.03

IL 8805.04



IL 8805.12

IL 8805.13

IL 8805.14

Function

The remote switch IK 8805 can be used to carry out central switching operations which make it possible to switch several different consumer groups on and off from a central location. Each consumer group needs a remote switch, that can be operated either by a local switch as well as by a central switch. To combine several of these central switches to a system a large number of devices can be switched on or off simultaneously from a central location.

This remote switch works like a stepper relay, i.e. it is controlled by short pulses. When energising the coil with a pulse on the input the contacts changeover and keep the position until the next pulse is received.

Notes

Operating Mode: The central switch is designed for pulse operation! In the case of wrong operation (permanent energisation by sticking pushbutton) a built in protection is activated.

Recovery time: When the fault protection is activated a recovery time until next operation of approx. 30 s needs to be observed.

Connection: Local button (RT) and the Central buttons (ZE/ZA) can be connected to different phases. N has to be connected to neutral.

Glowlamps: If pushbuttons with glowlamps are used the total current for glowlamps has to be limited to 4 mA (e.g. 8 Glowlamps at 0.5 mA)

Contact load: on parallel compensated fluorescent lamps and when using electronic ballast units high inrush currents can be present. Suitable fuses or line circuit breakers can be used.

Technical Data

Input

| | |
|--|---|
| Nominal voltage U_N: | AC 24, 42, 230 V DC 24 V |
| Voltage range: | 0.9 ... 1.1 U_N |
| Nominal consumption: | 11 W (Impulse power) |
| Minimum on time: | > 50 ms |
| Nominal frequency: | 50 or 60 Hz |
| Frequency range: | ± 5 % |
| Glow lamps: | 8 glow lamps à 0.5 mA via room pushbuttons 5 glow lamps à 0.5 mA via ZE / ZA |

Output

| | |
|---|---|
| Contacts | |
| IK 8805.01: | 1 NO contact |
| IK 8805.11: | 1 changeover contact |
| IL 8805.02: | 2 NO contacts |
| IL 8805.03: | 3 NO contacts |
| IL 8805.04: | 4 NO contacts |
| IL 8805.12: | 2 changeover contacts |
| IL 8805.13: | 3 changeover contacts |
| IL 8805.14: | 4 changeover contacts |
| Operate time: | < 30 ms |
| Nominal output voltage: | AC 230 V / 400 V |
| Switching capacity with lamp load: | |
| bulb load: | 2000 W 5 x 10 ⁴ switching cycles |
| fluorescent lamp load: in Duo circuit: | 20 fluorescent lamps with 58 W each 2 x 20 fluorescent lamps with 58 W each 5 x 10 ⁴ switching cycles |
| | The starting current levels can be very high in parallel compensation configurations and when electronic ballast units are being used. Automatic fuses must be incorporated in the circuit if necessary. |

Technical Data

| | |
|---|--------------------------------------|
| Nominal switching-off capacity: | 16 A |
| cos. ϕ 1 ... 0.7, AC 230 V: | 16 A |
| Thermal current I_{th}: | 5 x 10 ⁴ switching cycles |
| Electrical life: | 1000 switching cycles / h |
| Permissible switching frequency: | |
| Short circuit strength max. fuse rating: | 16 A gG / gL IEC/EN 60 947-5-1 |
| Mechanical life: | 2 x 10 ⁵ switching cycles |

General Data

Nominal operating mode: Pulse 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: 10 V / m IEC/EN 61 000-4-3
80 MHz ... 2.7 GHz: 4 kV IEC/EN 61 000-4-4
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
Amplitude 0.35 mm
frequency 10 ... 55 Hz IEC/EN 60 068-2-6
Humid heat IEC/EN 60 068-2-30

Climate resistance: EN 50 005

Terminal designation: 2 x 2.5 mm² solid or 2 x 1.5 mm² stranded ferruled DIN 46 228-1/-2/-3/-4 or 2 x 1 mm² stranded ferruled DIN 46 228-1/-2/-3/-4
Wire connection: Flat terminals with self-lifting clamping piece IEC/EN 60 999-1
0.8 Nm

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

Fixing torque: 0.8 Nm

Mounting: DIN rail IEC/EN 60 715
Weight: 100 g

Dimensions

| | |
|-------------------------------|-------------------|
| Width x height x depth | |
| IK 8805: | 17.5 x 89 x 58 mm |
| IL 8805: | 35 x 89 x 58 mm |

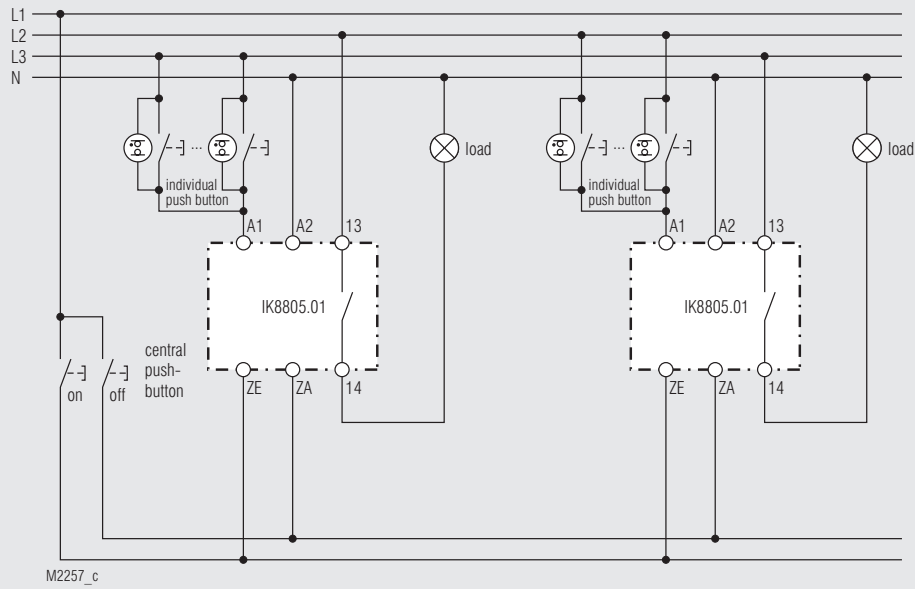
Standard Type

| | |
|---------------------------|--------------|
| IK 8805.01 AC 230 V 50 Hz | |
| Article number: | 0031148 |
| • Output: | 1 NO contact |
| • Nominal voltage U_N : | AC 230 V |
| • Width: | 17.5 mm |

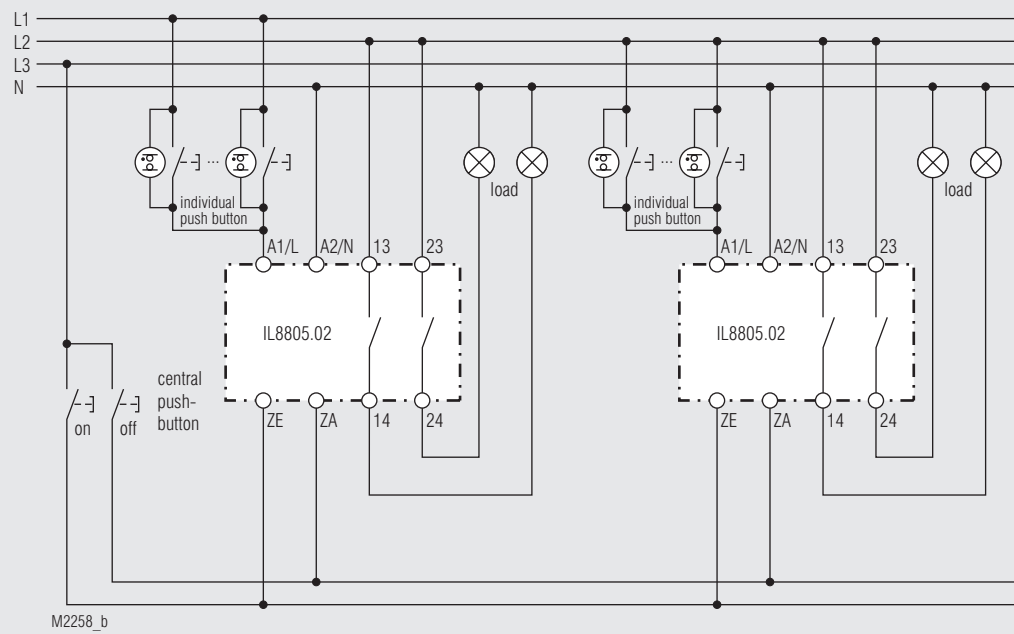
Ordering Example

| | |
|----------------------------|-------------------|
| IK 8805 .11 AC 230 V 50 Hz | |
| | Nominal frequency |
| | Nominal voltage |
| | Contacts |
| | Type |

Connection Examples



IK 8805.01



IL 8805.02

