

Remote Switch For Central Switching Operation IK 8805, IL 8805

Translation
of the original instructions



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

Approvals and Markings



Applications

For switching several different consumer groups on and off centrally

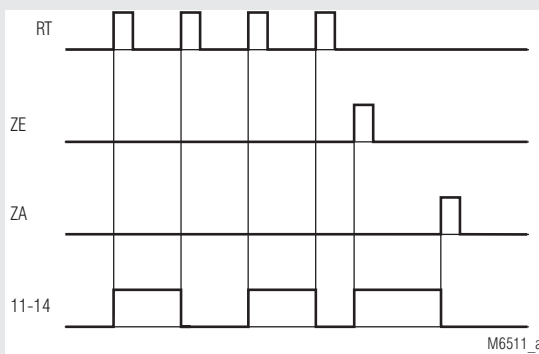
Connection Terminals

Terminal designation	Signal description
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

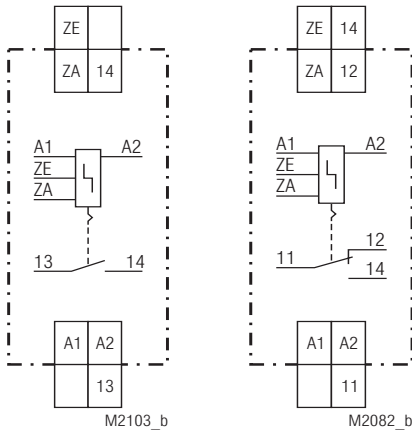
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Function Diagram

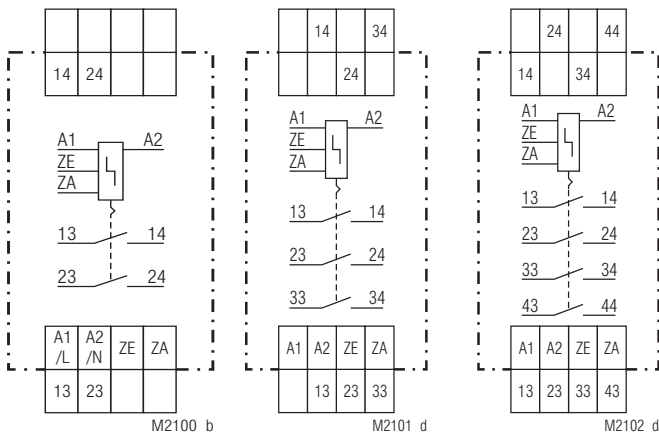


Circuit Diagrams



IK 8805.01

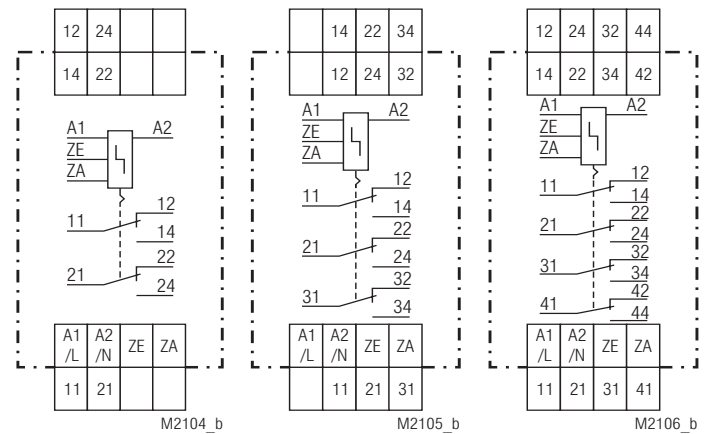
IK 8805.11



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:

cos. ϕ 1 ... 0.7, AC 230 V:

16 A

Thermal current I_{th} :

16 A

Electrical life:

5 x 10⁴ switching cycles

Permissible switching frequency:

1000 switching cycles / h

Short circuit strength

max. fuse rating:

16 A gG / gL IEC/EN 60947-5-1

Mechanical life:

2 x 10⁵ 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:

< 2000 m

Clearance and creepage distances

rated impulse voltage /

pollution degree:

4 kV / 2

IEC 60664-1

EMC

Electrostatic discharge:

8 kV (air)

IEC/EN 61000-4-2

HF-Einstrahlung:

80 MHz ... 2.7 GHz:

10 V / m

IEC/EN 61000-4-3

Fast transients:

4 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

Degree of protection:

Housing: IP 30

IEC/EN 60529

Terminals: IP 20

IEC/EN 60529

Housing:

Thermoplastic 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:

Humid heat

IEC/EN 60068-2-30

Terminal designation:

EN 50005

Wire connection:

2 x 2.5 mm² solid or

2 x 1.5 mm² stranded ferruled

DIN 46228-1/-2/-3/-4 or

2 x 1 mm² stranded ferruled

DIN 46228-1/-2/-3/-4

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

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

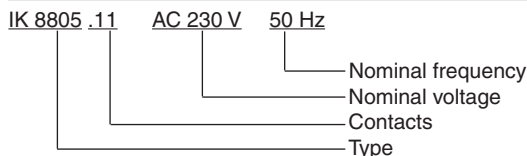
• Nominal voltage U_N :

AC 230 V

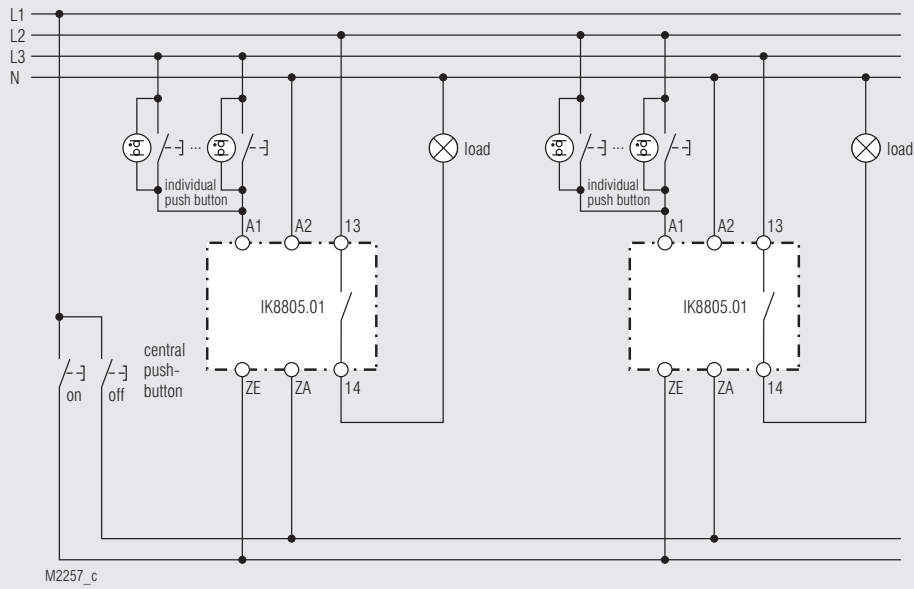
• Width:

17.5 mm

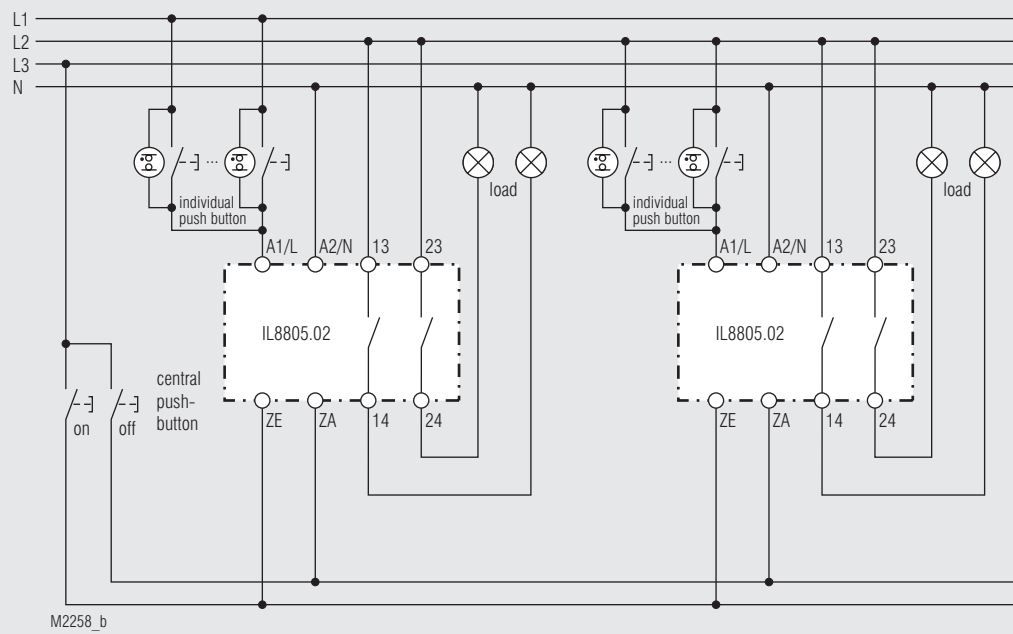
Ordering Example



Connection Examples



IK 8805.01



IL 8805.02

