

Remote Switch For Central Switching Operation IK 8805, IL 8805



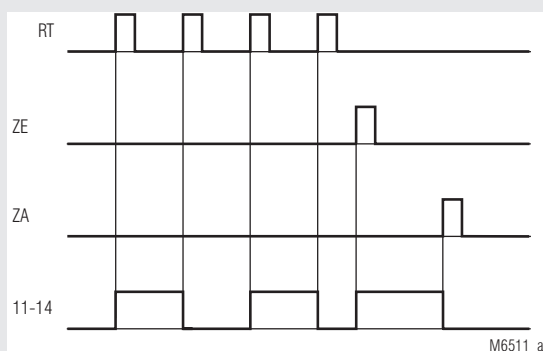
Your Advantages

- 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



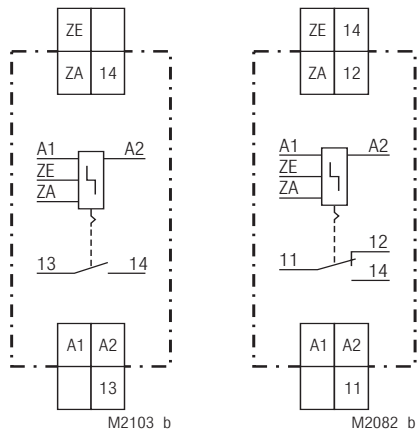
Approvals and Markings



Applications

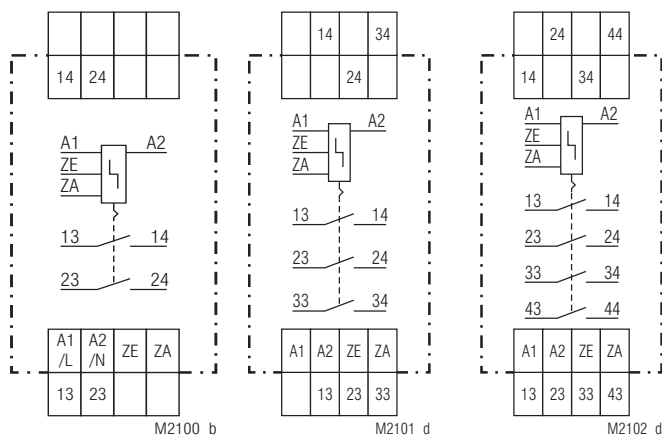
For switching several different consumer groups on and off centrally

Circuit Diagrams



IK 8805.01

IK 8805.11



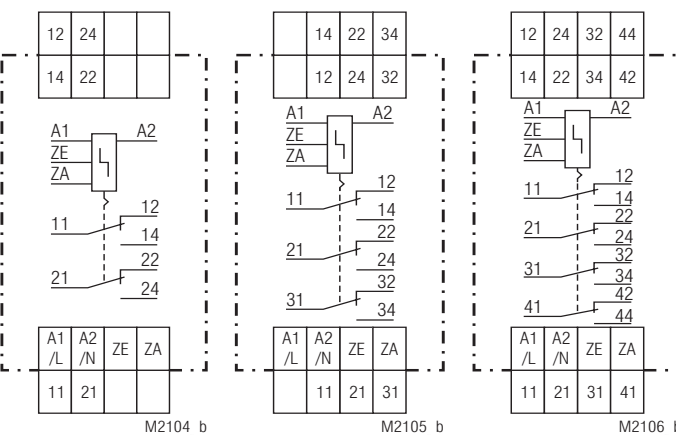
IL 8805.02

IL 8805.03

IL 8805.04

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 8805.12

IL 8805.13

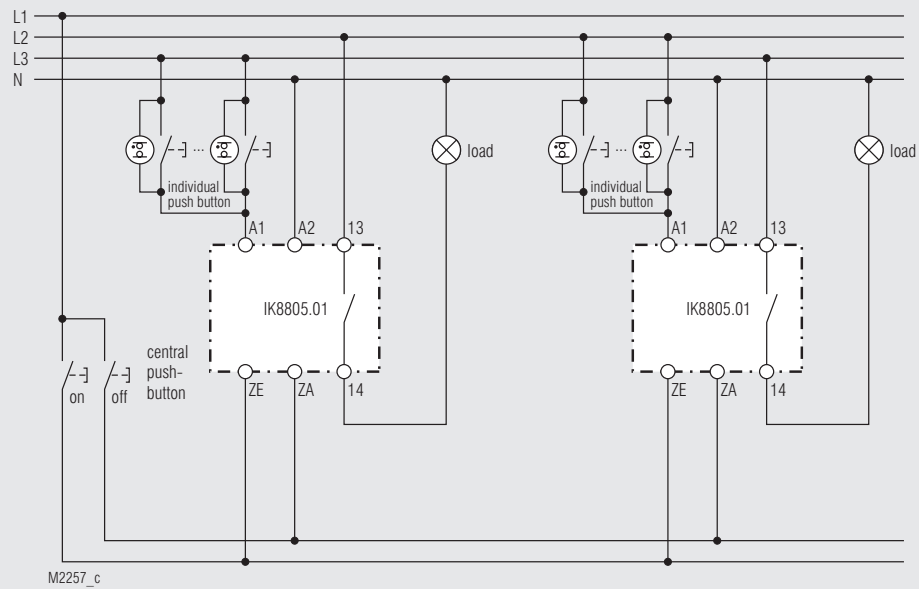
IL 8805.14

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.

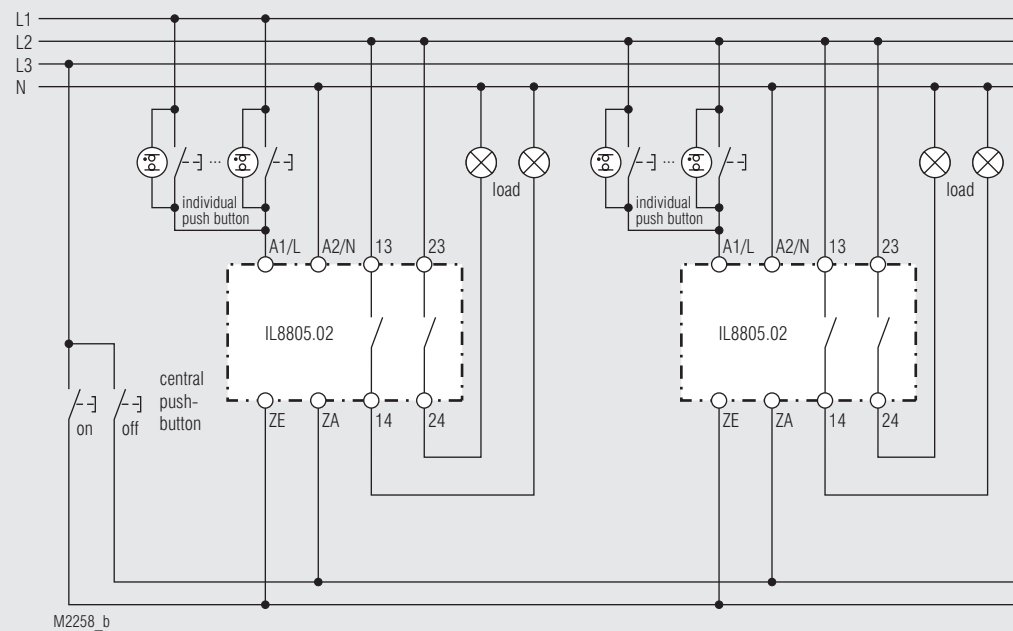
Technical Data	
Input	
Nominal voltage U_N:	AC 24, 42, 230 V DC 24 V
Voltage range:	0.9 ... 1.1 U_N
Nominal consumption:	11 W (Impulse power)
Minimum on time:	> 50 ms
Nominal frequency:	50 or 60 Hz
Frequency range:	± 5 %
Glow lamps:	8 glow lamps à 0.5 mA via room pushbuttons 5 glow lamps à 0.5 mA via 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:	20 fluorescent lamps with 58 W each
in Duo circuit:	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:	
80 MHz ... 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 ² solid or 2 x 1.5 mm ² stranded ferruled DIN 46 228-1/-2/-3/-4 or 2 x 1 mm ² 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	
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 IK 8805 .11 AC 230 V 50 Hz Nominal frequency Nominal voltage Contacts Type	

Connection Examples



IK 8805.01



IL 8805.02

