Remote Switch For Central Switching Operation
IK 8805, IL 8805

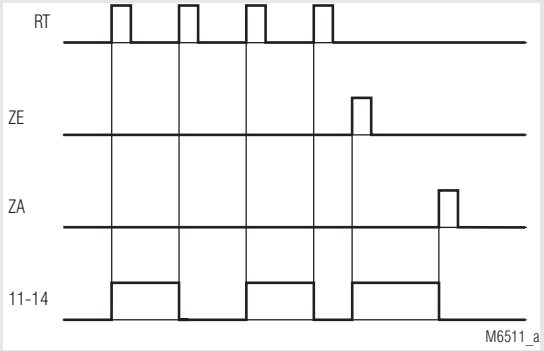
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Your Advantages
- Optionally with up to max. 4 changeover contacts
- Low energy consumption by impulse operation
- Small amount of wiring required at installations with serval local push buttons

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



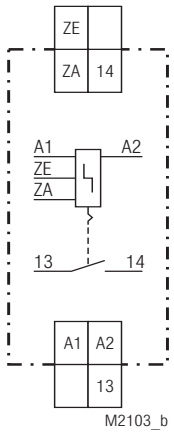
Approvals and Markings

CE

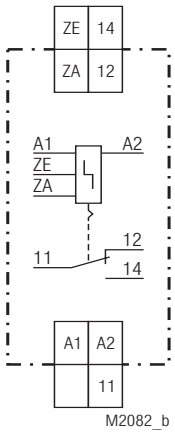
Applications

For switching several different consumer groups on and off centrally

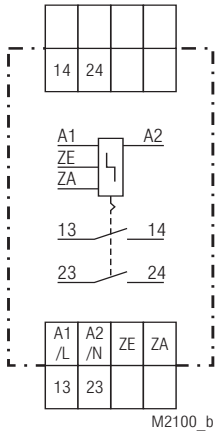
Circuit Diagrams



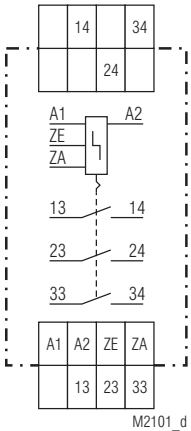
IK 8805.01



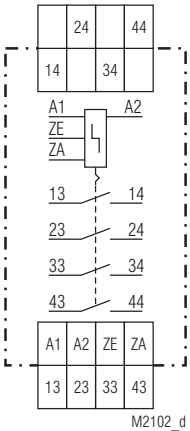
IK 8805.11



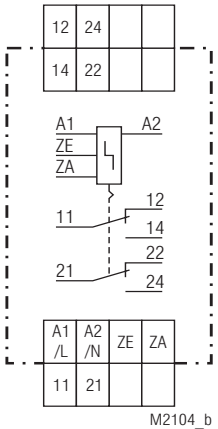
IL 8805.02



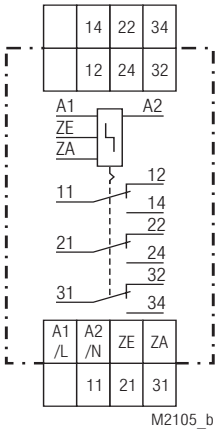
IL 8805.03



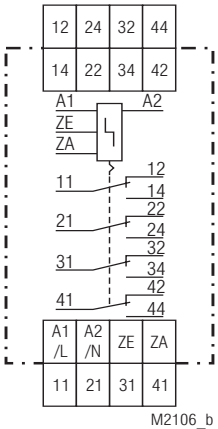
IL 8805.04



IL 8805.12



IL 8805.13



IL 8805.14

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

All technical data in this list relate to the state at the moment of edition. We reserve the right for technical improvements and changes at any time.

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 sevearl of theses central switches to a system a large number of devices can be switch 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:		
cos. φ 1 ... 0.7, AC 230 V:	16 A	
Thermal current I_{th}:	16 A	
Electrical life:	5 x 10^4 switching cycles	
Permissible switching frequency:	1000 switching cycles / h	
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 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 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

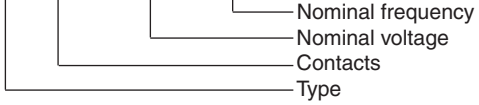
Standard Type

IK 8805.01 AC 230 V 50 Hz

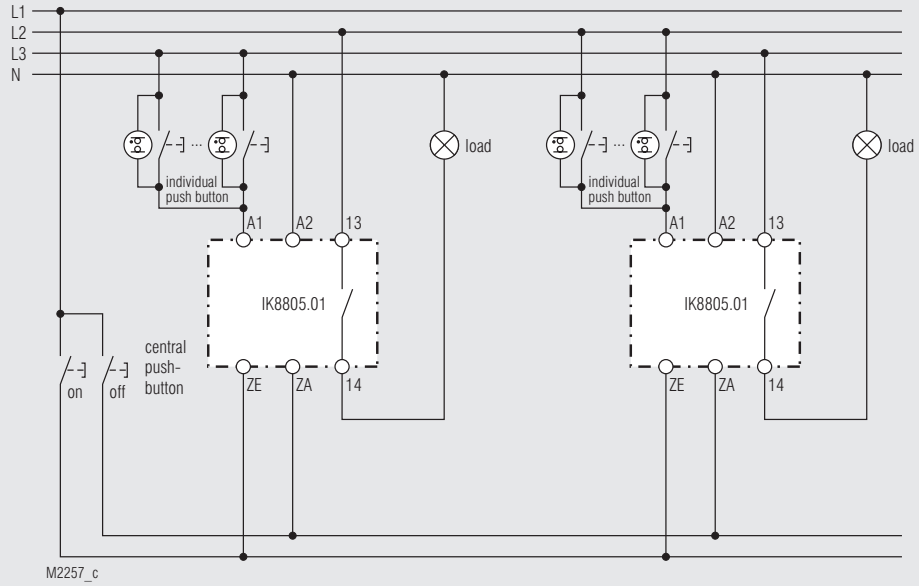
Article number:	0031148
• Output:	1 NO contact
• Nominal voltage U_N:	AC 230 V
• Width:	17.5 mm

Ordering Example

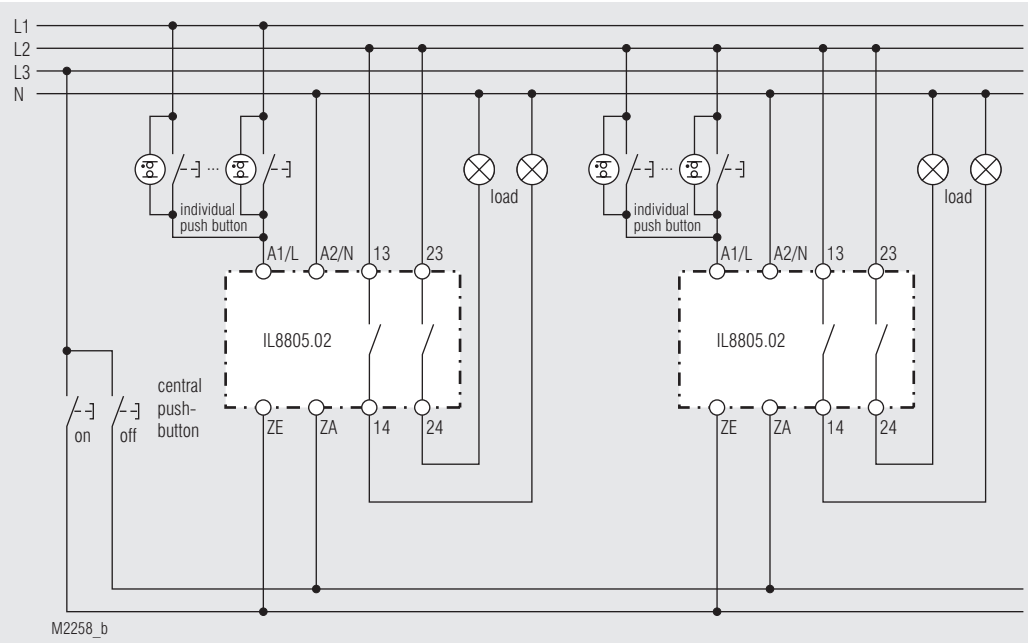
IK 8805 .11 AC 230 V 50 Hz



Connection Examples



IK 8805.01



IL 8805.02