IMPULSE MEMORY RELAYS MIR

Impulse memory relays - extra quiet

- For electric circuit switching up to 16 A by impulse command.
- Mainly for control of lighting circuits from more points in a corridor, on stairs, in the whole house etc.
- The lighting circuits can be controlled by push-buttons instead of a combination of crossbar and three-way switches.
- It saves conductors - it is possible to use smaller cross-sections for the control circuit than for power circuit.
- It brings higher comfort of control – for example it is possible to switch off all lights by one push-button when leaving the house.
- The relay does not need permanent power supply; it is supplied only for the time of control impulse duration.
- The position of the make-and-break contact can only be changed by applying an impulse on the following inputs (supply voltage failures have no effect):
- • ON/OFF input - each impulse led on this input changes the contact position (local control of the impulse relay).
  • ON input - each impulse led on this input switches the contact to position 11-14.
  • OFF input – each impulse led on this input switches the contact to position 11-12.

Control voltage U_c	Type	Order code	Number of modules	Weight [kg]	Package [pcs]
AC 230 V	**MIR-16-001-A230**	OEZ:35675	1	0.085	1

Accessories

Compensation block OD-MIR-BK

- It enables control of relay by more than 15 control push-buttons with glow discharge tube.
- Connection: parallel with MIR.
- Rated voltage: AC 230 V.
- Max. voltage: AC 400 V.
- 9 capacity: 3 x 1 µF.

Type	Order code	Number of modules	Weight [kg]	Package [pcs]
OD-MIR-BK	OEZ:35676	1	0.055	1

Multi-level central control block OD-MIR-CO

- It enables multi-level central control of MIR.
- Rated voltage: AC 230 V.
- Description: each impulse memory relay is locally controlled by push-buttons (local control); each level or set of impulse memory relays is controlled simultaneously from a point (central control); all levels are jointly controlled by a single command from a point (central control); all levels are jointly controlled by a single command from a point (central multi-level control).

Type	Order code	Number of modules	Weight [kg]	Package [pcs]
OD-MIR-CO	OEZ:35677	1	0.05	1

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Specifications

Type			MIR-16-001-A230
Standards			EN 61812-1
Approval marks			
Main circuit (contact)			
Arrangement of contacts [1) 2)]			001
Rated operating voltage	U_e		AC 250 V
Rated current	I_n	AC-1	16 A
		AC-5a	2 A
Max. switched power [2)]			4 000 VA
Lamp load max.			460 W / 230 V
Max. fluorescent tube load		compensated cos φ = 0.8	8x 36 W
		uncompensated cos φ = 0.5	25x 36 W, 13x 65 W
Min. switched power			50 mW (10 V / 5 mA)
Rated frequency	f_n		50 Hz
Mechanical endurance			10 000 000 cycles
Electrical endurance			100 000 cycles
Switching frequency			10 cycles/min
Connection			0.2 ÷ 2.5 mm^2
Torque			0.5 Nm
Control circuit			
Rated voltage	U_c		AC 230 V
Rated frequency	f_n		50 Hz
Min. excitation time			200 ms
Max. excitation time			unlimited
Min. time period between pulses			1 s
Max. number of push-buttons with glow lamp 1.1 mA			15 ks [3)]
Connection			0.2 ÷ 2.5 mm^2
Torque			0.5 Nm
Other data			
Mounting on "U" rail according to EN 60715 - type			TH 35
Degree of protection			IP20
Ambient temperature			-20 ÷ + 50 °C
Working position			arbitrary

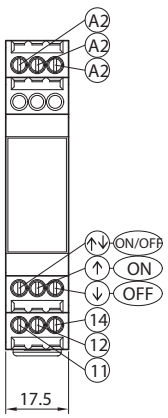
[1)] Each digit indicates successively the number of make, break and break-make contacts

[2)] Different contact sequence or load increase can be solved by the use of installation contactors RSI

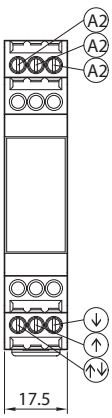
[3)] On ON input and OFF output there must be the same number of push-buttons with a glow discharge tube. For the number of push-buttons with a glow discharge tube higher than 15 it is necessary to use the compensation block OD-MIR-BK

Dimensions

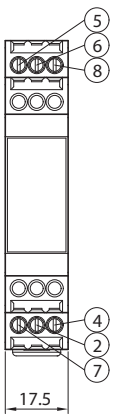
MIR-16-001-A230

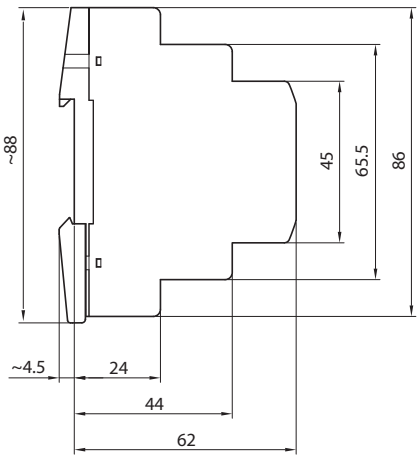


OD-MIR-BK



OD-MIR-CO





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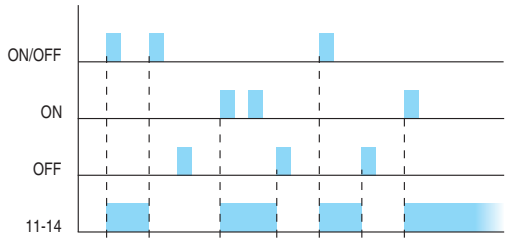
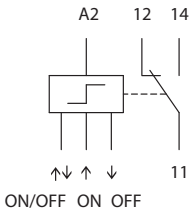
Graph

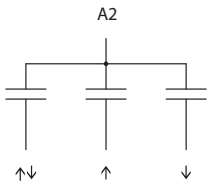


Diagram

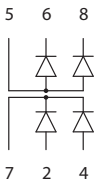
MIR-16-001-A230



OD-MIR-BK



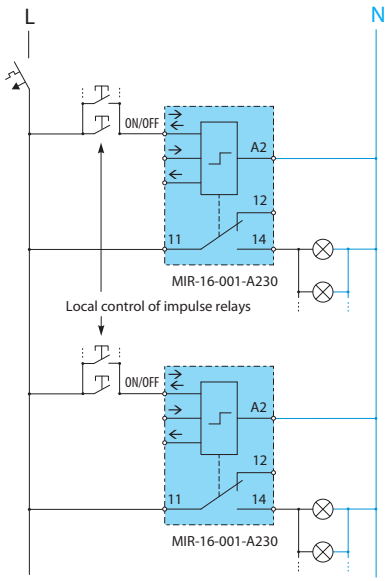
OD-MIR-CO



Connection examples

Local control

- Each impulse relay is locally controlled by push-buttons.



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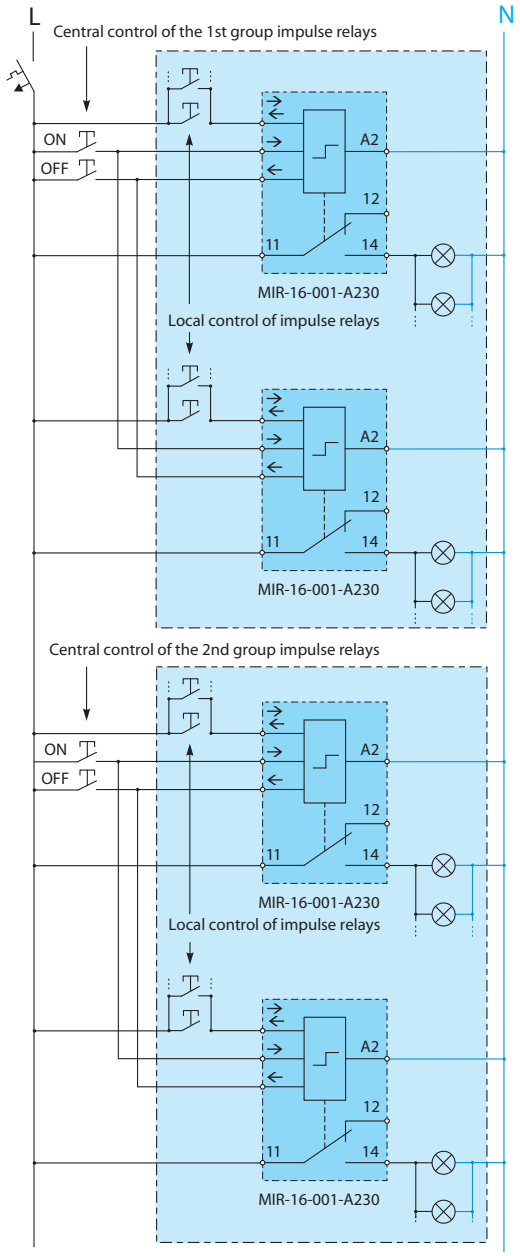
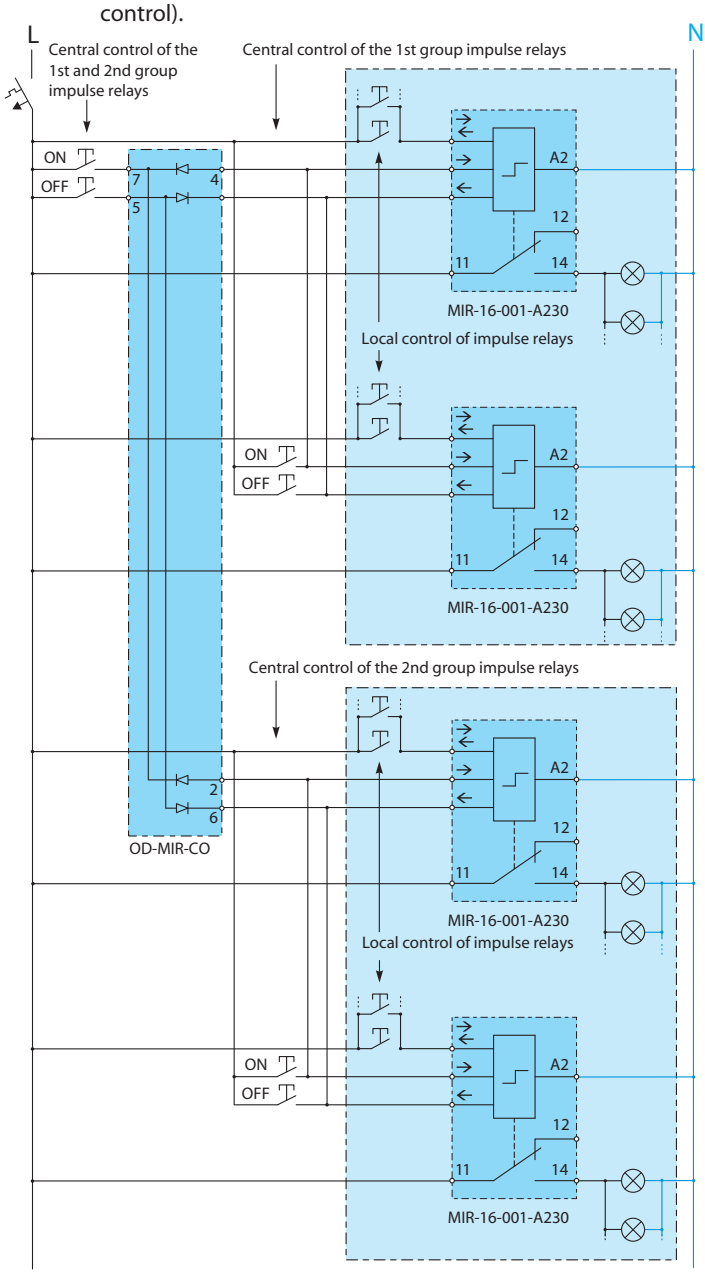
Local + central control

- Each impulse relay is locally controlled by push-buttons (local control); each level or set of impulse relays is controlled simultaneously from a point (central control).



Local + central + central multi-level control

- Each impulse relay is locally controlled by push-buttons (local control); each level or set of impulse relays is controlled simultaneously from a point (central control); all levels are jointly controlled by a single command from a point (central multi-level control).



Connection of signalling of pushed button

- When the connection of signalling of pushed button is done according to the figure relay can be controlled only by ON/OFF input. In such case of signalling connection when the ON or OFF button is pushed the current is closed through the relay electronics and thus can damage it.