

IMPULSE MEMORY RELAYS MIR



MIR-16-001-A230

Impulse relay - electronic

- For electric circuit switching up to 16 A by impulse command from more points in a corridor, on stairs, in the whole house etc.
- Mainly for control of low power lighting circuits, with accent on limitation of noise in switching.
- The lighting circuits can be controlled by push-buttons instead of a combination of crossbar and three-way switches.
- Saving on the cost of wires - 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.

Type	Order code	Number of modules	Weight [kg]	Package [pcs]
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.
- Capacity: 3x 1 µF.



OD-MIR-BK

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




OD-MIR-CO

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 60669-1		
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	1.6 A
Max. switched power ²⁾	4 000 VA		
Lamp load max.	460 W / 230 V		
Max. fluorescent tube load	compensated $\cos \varphi = 0.8$		8x 36 W
	uncompensated $\cos \varphi = 0.5$		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 operating cycles		
Electrical endurance	100 000 operating cycles		
Switching frequency	10 operating 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 pcs 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		

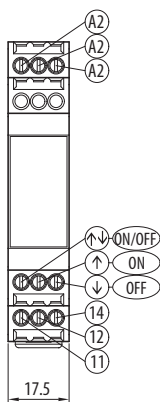
¹⁾ Each digit indicates successively the number of make, break and break-make contacts.

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

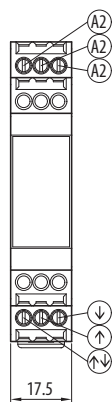
³⁾ On ON input and OFF output there must be the same number of push-buttons with a glow discharge tube. For the number of push-buttons with a glow discharge tube higher than 15 it is necessary to use the compensation block OD-MIR-BK.

Dimensions

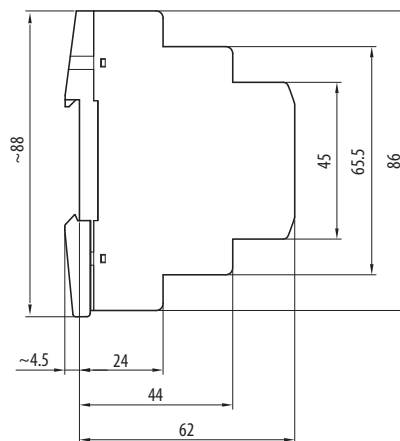
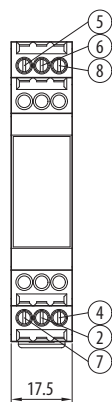
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OD-MIR-BK

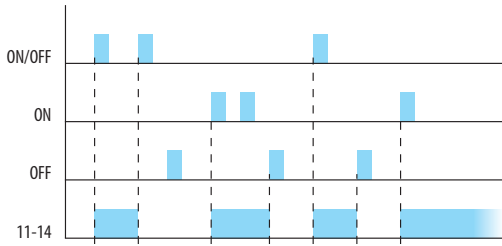


OD-MIR-CO



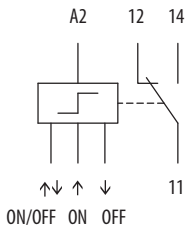
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Graph

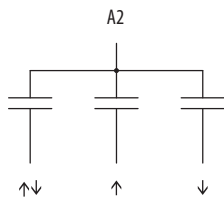


Diagram

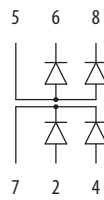
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OD-MIR-BK



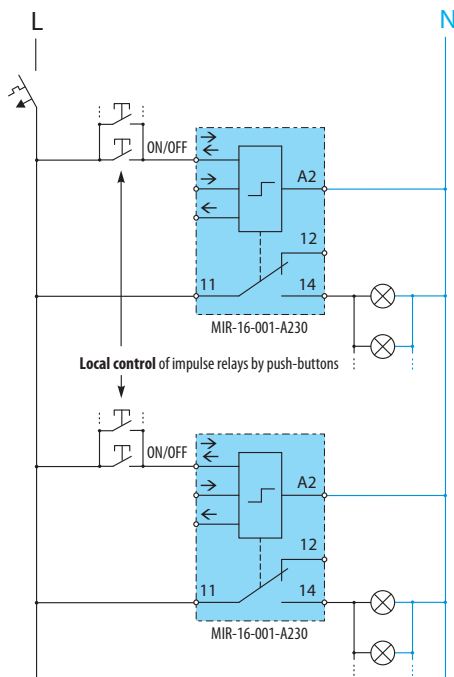
OD-MIR-CO



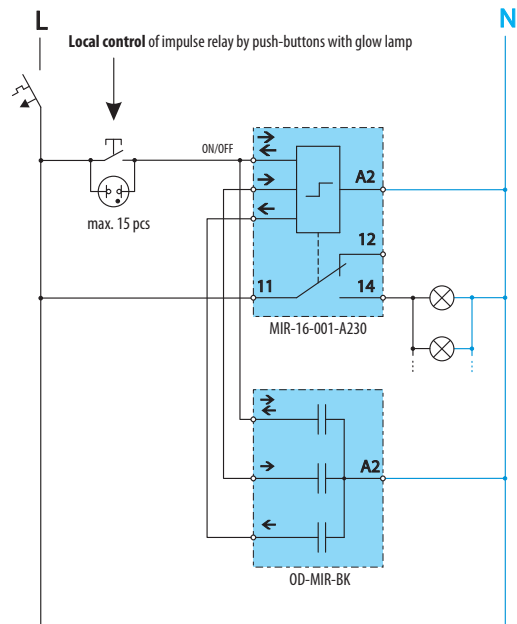
Connection examples

Local control

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



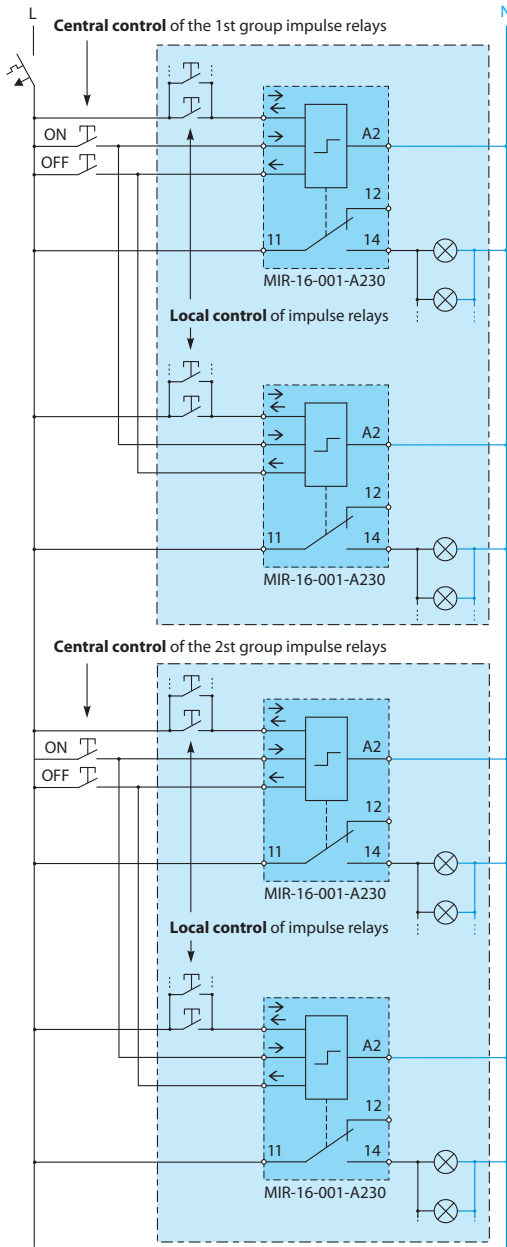
- Impulse relay is locally controlled by push-buttons with glow lamp.



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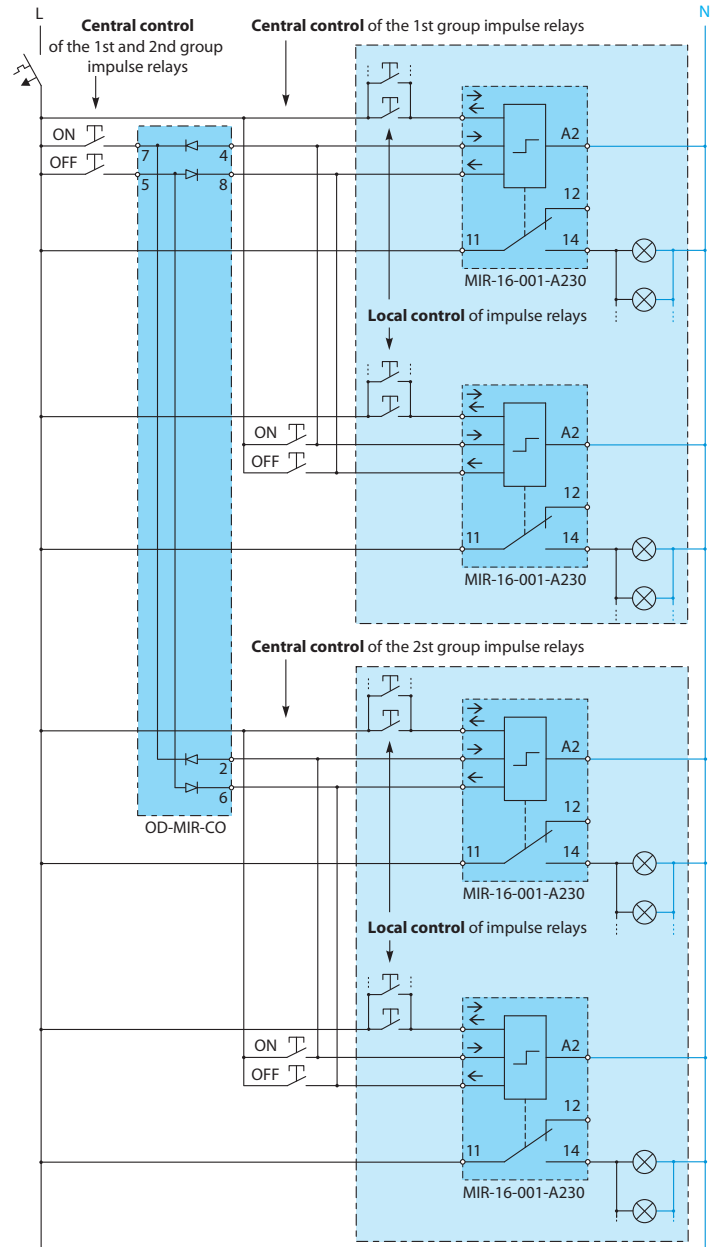
Local + central control

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



Local + central + multi-level central control

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

