IMPULSE MEMORY RELAYS

Impulse memory relay

- For switching of electric circuits up to 16 A by impulse command
- However mainly for control of lighting circuits from more points in a corridor, on stairs, in the whole house etc.
- It saves crossbar switches; the lighting 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

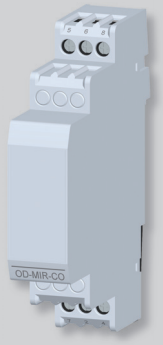
Control voltage U_n	Type	Product code	Number of modules	Weight [kg]	Package [pcs]
230	**MIR-16-001-A230**	35675	1	0.085	1

Accessories

Compensation block

- It enables control of relay by more than 15 control push-buttons with glow discharge tub
- Connection: parallel with MIR
- Rated voltage: 230 V a.c.
- Max. voltage : 400 V a.c.
- Capacity: 3 x 1 µF

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



Multi-level central control block

- It enables multi-level central control of MIR
- Rated voltage: 230 V a.c.
- 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 relevant point (central control); all levels are controlled by single command from a point (central multi-level control)

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

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Specification

Type			MIR-16-001-A230
Standards			EN 61812-1
Approval marks			
Main circuit (contact)			
Sequence [1) 2)]			001
Rated operating voltage	U_e		230 V a.c.
Rated current	I_n	AC-1	16 A
		AC-5a	2 A
Max. switched power [2)]			4000 VA
Lamp load max.			460 W
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 operating cycles
Electrical endurance			100 000 operating cycles
Switching frequency			600 operating cycles/h
Connection			0.2 ÷ 2.5 mm^2
Torque			0.5 Nm
Control circuit			
Rated voltage	U_c		230 V a.c.
Rated frequency	f_n		50 Hz
Excitation time			unlimited
Max. number of push-buttons with glow lamp			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
Seismic immunity			3 g / 8 ÷ 50 Hz

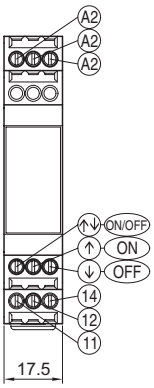
[1)] Each digit indicates successively the number of make, break and break-make contacts

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

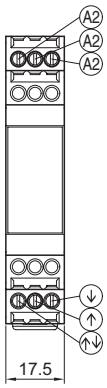
[3)] On ON input and OFF output there must be the same number of push-buttons with a glow discharge tube. For the number of push-buttons with a glow discharge tube higher than 15 it is necessary to use the compensation block OD-MIR-BK.

Dimensions

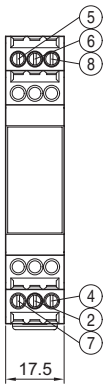
MIR-16-001-A230

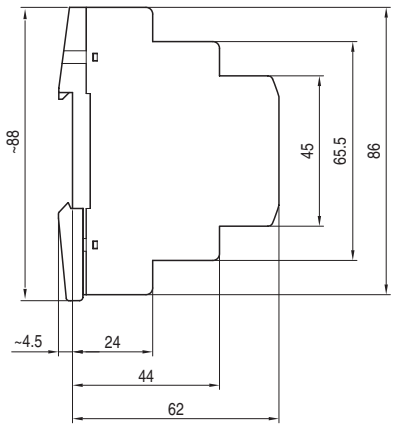


OD-MIR-BK



OD-MIR-CO





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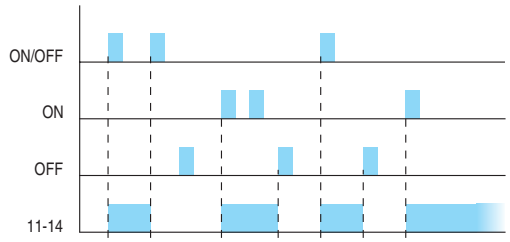
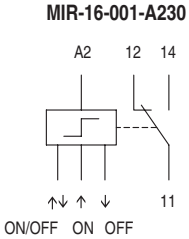
Graph

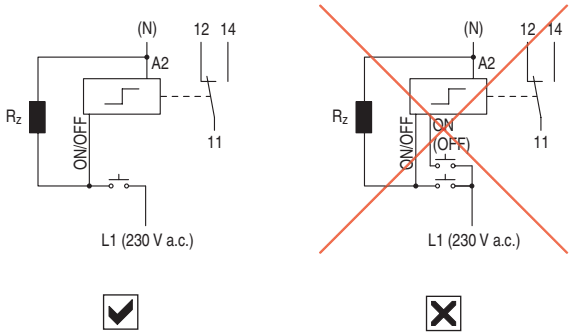


Diagram



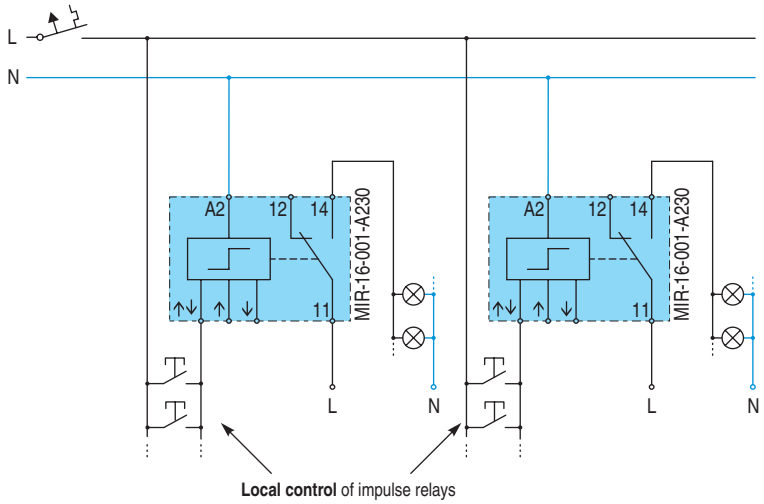
Connection examples

- With load R_z connected according to the figure, the relay can only be controlled via input ON/OFF, not via ON or OFF inputs



Local control

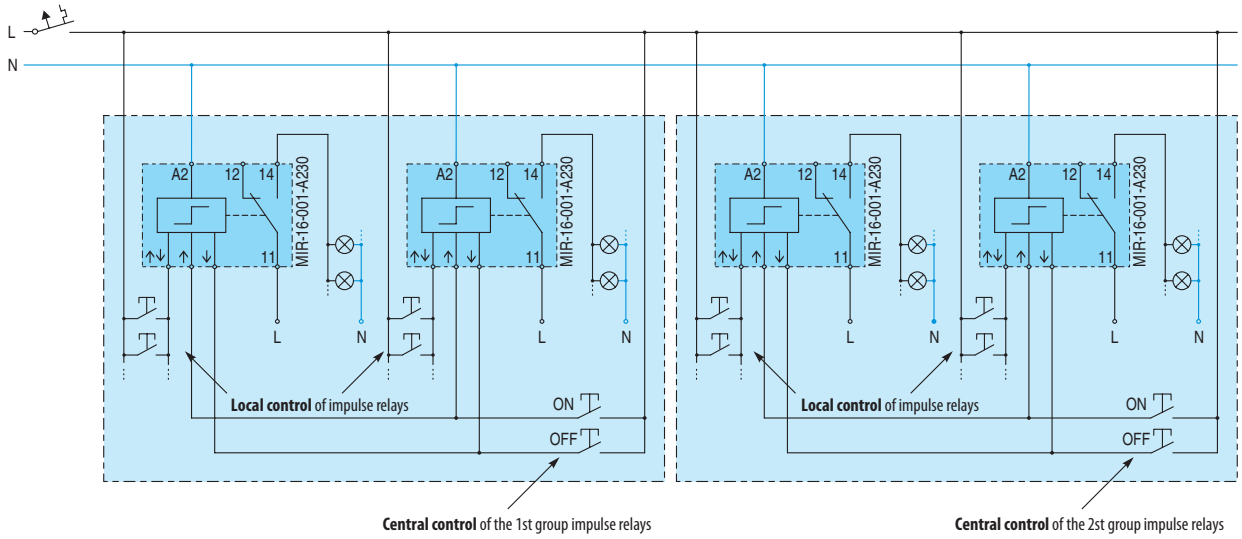
- Each relay is locally controlled by push-buttons



IMPULSE MEMORY RELAYS

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 controlled by single command from a point (central multi-level control)