



Active double isolating relay ATR 2D

2 control inputs, 2 change-over contacts, internally generated control voltage (PELV)

Simple switching of loads using control contacts which are supplied via an internally generated control voltage (24V DC PELV).

Special features ATR 2D

- ▶ No external control voltage required
- ▶ 2 control inputs
- ▶ 2 relays with potential-free change-over contacts
- ▶ Low power consumption
- ▶ Quick and uncomplicated installation



General information

The active double cut-off relay makes it very uncomplicated to switch (mains voltage) consumers through extra-low voltage contacts.

There is no need for a power supply unit, as the relay generates the necessary control voltage (24V DC PELV) internally. In this way, almost any external switching contacts can be monitored, which only have to have the necessary dielectric strength (24V DC). In conjunction with external switching contacts, it is thus possible to realise, for example, end position detection (open/closed) of garage doors, roller shutters, doors, skylights, etc. The two changeover contacts make the ATR 2D extremely versatile.

Applications

Monitoring of the opening status of gates, window monitoring in connection with extractor fans, signal switching, alarm messages, door monitoring, theft protection, etc.

Functional description

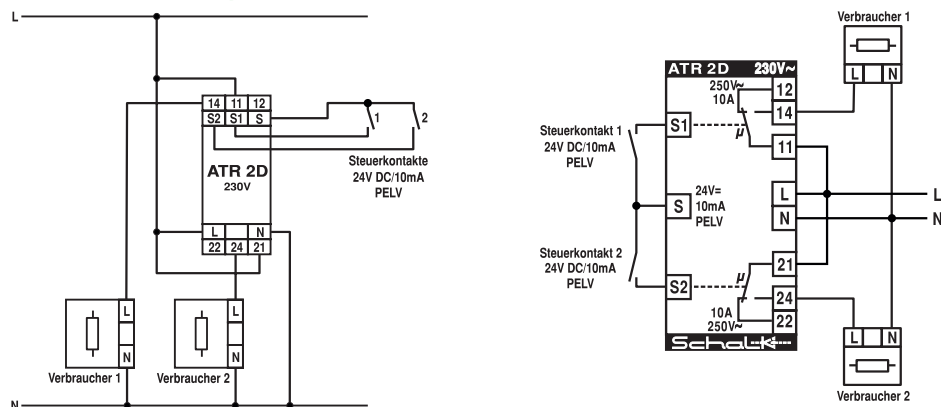
On the mains voltage side, the ATR 2D is permanently supplied via the terminals L and N. If the terminals S1 and S on the extra-low voltage side are now bridged, the first relay contact (switching state at rest: 11-12) is switched through to terminal 14 (switching state active: 11-14). The red LED lights up.

If the terminals S2 and S are bridged on the extra-low voltage side, the second relay contact (switching state at rest: 21-22) is switched through to terminal 24 (switching state active: 21-24). The green LED lights up.

If both relays are switched on, the red and the green LED light up simultaneously.

The terminal voltage between S1 and S or S2 and S is 24V DC (PELV).

Connection examples



Example „Extractor hood control“:

For this purpose, the NC contact (terminal 12) of the MKW 1 is connected (window OPEN > magnetic contact closed > extractor fan in operation).

Other possible applications:

Signal light control (red/green) on a roller shutter during the opening/closing process and at end positions,
Two separate relay outputs for evaluation of a (magnetic) contact, etc.

Matching accessories:



Magnetic contact (1 CO 24V UC) MKW 1 (incl. magnet MIG 1)

Universal changeover reed contact (incl. magnet) MKW 1 for monitoring windows, doors, etc. Internal spring clamp terminals with actuating slide. Adhesive pads included.

Item no.	Type	Specifications	Dimensions
MKW104	MKW 1	max. 24V AC/DC, reed contact, 1 CO	59,5 x 23,3 x 15,3 mm

Also available as a flush-mounted variant with one relay output / one control contact:

Active isolating relay ATR U2

The active isolating relay enables mains voltage consumers to be switched very easily using extra-low voltage contacts. There is no need for a power supply unit, as the relay generates the necessary control voltage (24V DC PELV) internally.

In conjunction with the MKW 1 magnetic contact, it is thus possible, for example, to implement the supply air monitoring (frequently required for enclosed rooms when operating exhaust fans) with little effort.
Due to the change-over contact the ATR U2 is extremely versatile.



See also: Ventilation/exhaust air set ZAS K2

Item no.	Type	Specifications	Maße
ATRU29	ATR U2	230V AC, 1 CO 10A	43x43x18.5mm

Technical data ATR 2D

Operating voltage	230 V 50/60 Hz 10 %
Power consumption	approx. 0.75 W
Voltage / current at control input	24 V DC (PELV) at 10 mA
Relay output	2 changeover contacts, potential-free, 10 A each
Switch rating AC	max. 2000 W
Glow lamp load	max. 600 W
Electrical service life	min. 100000 switching cycles
Ambient temp.	-10°C to +45°C
Connection terminals	Socket terminals with captive screws M3.5
Clamping range	0.5 mm ² - 4.0 mm ²
Strip length	6.0 mm - 6.5 mm
Screwing torque	0.80 Nm
Mounting	Snap-on mounting on 35mm top-hat rail according to EN 60715
External dimensions	18 x 88 (45) x 58 mm
Installation depth	55 mm
Weight	approx. 40 g
Colour according to RAL	grey 7035 / green 6029

Order data

Item no.	EAN	Type	Article description
ATR2D9	4 046929 601238	ATR 2D	Active double isolating relay 230V AC / 24V DC PELV, 2 CO contacts

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