

MAGNETIC CONTACTS K-1, K-2, K-3

The magnetic contacts consist of two elements: magnetic sensor (reed relay) and magnet. The reed relay, which is situated near the magnet, makes the electric circuit. Each of the magnetic contact elements is placed in an identical watertight enclosure, the part with reed relay having electric lead-outs (Fig. 1,2,3).

Individual magnetic contacts differ in the housing style and the way of mounting. The K-1 is designed for surface mounting and the K-2 & K-3 for flush mounting.

The magnetic contacts can be used wherever required for controlling the status of doors, windows and/or other movable elements, e.g. for protection or monitoring of access to particular sites, spaces, facilities; in automatic control systems, etc.



Fig. 1 Reed relay of K-1 magnetic contact in plastic housing



Fig. 2 Reed relay of K-2 magnetic contact in plastic housing



Fig. 3 Reed relay of K-3 magnetic contact in metal housing

INSTALLATION – Fig. 4

The magnetic contact element containing the magnet should be mounted on the movable part, while the reed relay – on the stationary part of protected doors, windows, etc. Elements of the K-1 magnetic contact should be attached to the surface by means of screws, suitable glue, or a two-side self-adhesive tape. The K-2 & K-3 sunk magnetic contacts are designed for face mounting in such materials as wood or plastic (Fig. 4). The walls, the magnetic contact is to be fitted in, should be at least 10mm thick, so as to ensure adequate stability for the elements mounted. To make holes for the K-2 magnetic contact, use σ 8mm drill, and for the K-3 magnetic contact – σ 9mm drill. The K-2 is to be pressed in, while the K-3, which has a thread, needs to be screwed in. The mounted magnetic contact elements can be reinforced with a suitable glue.

In order to ensure correct functioning of the magnetic contact, the distance between magnet and reed relay should not exceed 12–15mm for K-1 & K-2, and 15–18mm for K-3. Misalignment of the axes of magnet and reed relay in cylindrical magnetic contacts should not be greater than 10mm for K-2 and 12mm for K-3.

Notes:

- You are in no case allowed to shorten (cut short) the element containing the magnet.
- Special care must be taken when installing reed contact part of the detector. It should not be hammered into the slot, because the fragile component inside the detector might be damaged then.
- When screwing the K-3 reed relay in, the wire will get twisted; to prevent it from damage, make sure that it has a sufficient spare length, or twist it in the opposite direction before installation so that it can straighten out when mounted.



HOOKUP – Fig. 5

Figure 5 shows two examples of connecting the magnetic contacts to the alarm control panel. The recommended connection ensures better performance of the security system in case of tampering attempts.



TECHNICAL DATA

Magnetic contact type		NC
Maximum switchable voltage of reed relay		
Maximum switchable current		
Maximum continuous (non-switchable) current		1.5 A
Transient resistance		150mΩ
Rated power		
Minimum number of switchings under load	1V, 10mA	
C C	10V, 10mA	
	50V, 100mA	2x10 ⁶
	100V, 100mA	2x10 ⁶
Contact material	· · · · · · · · · · · · · · · · · · ·	Ru (ruthenium)
Weight: K-1 K-2	1	
	2	8ğ
К-3	3	24g

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