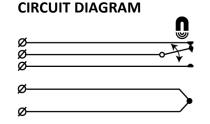
Instruction Manual

Magnetic Contact Recessed mounting

MC 272





OPERATING PRINCIPLE

MC 272 magnetic contact has two parts: the contact part with a reed switch and the magnet part. In its neutral position the reed switch remains closed under the force of the magnetic field. Opening the monitored object increases the distance between the reed switch and the magnet. This causes a change in position of the reed switch and as a result – a path of the signal.

MC 272 has an extra sabotage reed switch to protect the contact from sabotage with an external magnet. When an external magnet is applied to the contact, the sabotage reed switch opens and activates an alarm. The sabotage switch can be also opened by the corresponding (friendly) magnet. The distance between the contact and the corresponding magnet, at which the sabotage reed switch opens is called sabotage distance.

Magnetic contacts should not be installed in the vicinity of strong magnetic fields.

DESCRIPTION

MC 272 is a versatile high security magnetic contact used in both alarm and security access control systems for protection of doors, gates and windows against unauthorized opening and against external magnetic field. A range of accessories makes the contact suitable for a variety of applications.

MOUNTING INSTRUCTIONS

TECHNICAL DATA

- Contact and magnet should be installed axially, corresponding to each other (the distances in table below are when contact and magnet are moved away from each other axially).
- Self-cutting and self-locking thread enables direct installation in ϕ 10 mm holes in wood and plastic.

| Working environment | Wood (Y direction) ¹⁾ | Wood (Z direction) ¹⁾ | Steel | |
|--------------------------------------|---|----------------------------------|-----------------|--|
| Sabotage distance | max. 5 mm | max. 5 mm | not recommended | |
| Make distance | typ. 20 mm ± 40 % | typ. 25 mm ± 40 % | not recommended | |
| Break distance | typ. 26 mm ± 40 % | typ. 31 mm ± 40 % | not recommended | |
| Contact type | form C, SPDT | | | |
| Switching voltage max. | 48 V DC/AC | | | |
| Switching current max. | 250 mA DC/180 mA AC | | | |
| Contact rating max. | 5 W | | | |
| Cable | φ 3,6 mm, 5x0,182 mm ² | | | |
| Environmental class (EN50130-5:2011) | Class IIIA | | | |
| Operating temperature range | -40°C to +55°C | | | |
| Operating humidity range | max. 95% r. h. | | | |
| Housing material | aluminum alloy | | | |
| Housing protection class | IP 67, IK04 | | | |
| Dimensions: | | | | |
| Contact part | φ 11 x 36 mm | | | |
| Magnet part | φ 11 x 36 mm | | | |
| Approvals: | | | | |
| Security grade (EN50131-2-6:2008) | 3 | | | |
| Approvals | VdS EN-ST-000271, SBSC 9-206, NF&A2P 2134030001D0 | | | |
| | | | | |

¹⁾ Make distance is always shorter than break distance

INSTALLATION

Contact and magnet must be aligned axially in the frames and leaves of the monitored objects (windows, doors etc.). Offset will reduce the working distances and may result in faulty operation or lower security. The contact should be mounted in the stationary part of the monitored object (ex. door frame) and the magnet in the movable part (ex. door leaf). Before mounting, holes must be drilled. The selfcutting and self-locking thread of the housing enables easy and reliable installation in ϕ 10 mm holes in wood and plastic.

Twisting the contact housing counterclockwise 2-3 times before mounting will protect the cable from mechanical stress.

For sites where it is impossible to mount the contact directly, a range of accessories is available.

Only non-ferromagnetic screws may be used when mounting the contact using accessories.

For the most adequate distance for mounting, magnetic part should be placed close to the contact part to get Sabotage distance, then move away magnetic part to get minimum Make distance. After the installation, use an ohmmeter to check the electrical connections and test the function of the magnetic contact.

Warning: applying excessive force to the housing of the contact may damage the glass body of the reed switches inside

DISTANCES / DIRECTIONS

