

## DESCRIPTION

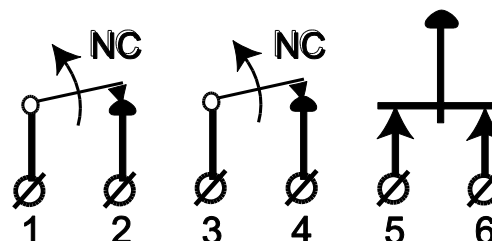
MC 447 is a versatile surface-mounted magnetic contact used in both alarm and security access control systems for protection of doors and windows against unauthorised opening. MC 447 is equipped with two reed switches and an opening protection switch.

**MC 447 is certified according to EN 50131-2-6:2008.**

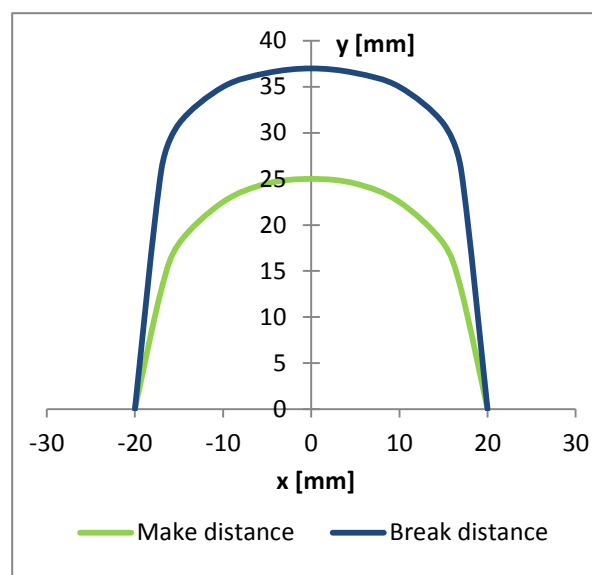
## MOUNTING INSTRUCTIONS

- Contact and magnet should be installed in parallel, corresponding to each other. Offset will reduce the working distances.
- Spacers must be used for installation on ferromagnetic surfaces.

## CIRCUIT DIAGRAM



## DISTANCE DIAGRAM - WOOD



## TECHNICAL DATA

Working environment	Wood	Steel
Make distance (both switches closed)	typ. 25 mm +/- 40 %	typ. 12 mm +/- 40 % <sup>a)</sup>
Break distance (both switches open)	typ. 37 mm +/- 40 %	typ. 21 mm +/- 40 % <sup>a)</sup>
Contact type	form A, SPST	
Switching voltage max.	48 V DC/AC	
Switching current max.	400 mA DC/peak AC	
Contact rating max.	10 W	
Estimated life expectancy	>20 million switching operations at 10 V/4 mA	
Environmental class (EN50130-5:2011)	II	
Operating temperature range	-10°C to +55°C	
Operating humidity	max. 95% RH	
Housing material	plastic ABS	
Dimensions:		
Contact part	65 x 15,6 x 19,6 mm	
Magnet part	65 x 15,1 x 16,1 mm	
Security grade (EN50131-2-6:2008)	2	
Approvals	ITR 23/2013	

<sup>a)</sup> - measured with spacers MC 400-3 and MC 400-4 (included in the set)

## OPERATING PRINCIPLE

MC 447 magnetic contact has two parts: the contact part with two reed switches and the magnet part. In its neutral position the reed switches remains closed under the force of the magnetic field. Opening the monitored object increases the distance between the reed switches and the magnet. This reduces the influence of the magnetic field on the reed switches until they open and activate an alarm.

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

## INSTALLATION

Contact and magnet should be installed in parallel, corresponding to each other. Offset will reduce the working distances. Arrows on the contact and magnet inner housings must point to each other. The contact should be mounted on the stationary part of the monitored object (ex. door frame) and the magnet on the movable part (ex. door leaf).

For sites where it is impossible to mount the contact directly, spacers and aluminium brackets are available. Spacers enable installation of the contact on ferromagnetic surfaces. Brackets can be used to mount the contact parts away from a ferromagnetic surface or to solve problems with aligning the contact with the magnet. Contact and/or magnet should be screwed to the oval slots in the brackets and adjusted to a suitable position.

Only non-ferromagnetic screws may be used for mounting the contact.

After the installation, use an ohmmeter to check the electrical connections and test the operation of the magnetic contact. Make sure both reed switches operate correctly as their make and break distances may not be identical.

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

**Warning: appropriate accessories must be used for installation in ferromagnetic environment.**