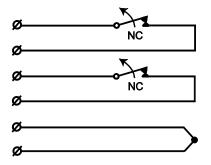
Magnetic Contact
Recessed mounting

Instruction Manual MC 347



## **CIRCUIT DIAGRAM**



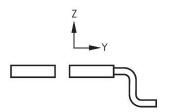
### **DESCRIPTION**

MC 347 is a versatile magnetic contact used in both alarm and security access control systems for protection of doors, gates and windows against unauthorized opening. Two reed switches enable a single MC 347 magnetic contact to be connected to two separate systems. A wide range of accessories enables the contact to be recessed- or surfacemounted on a variety of surfaces, including ferromagnetic materials.

## **MOUNTING INSTRUCTIONS**

- Contact and magnet should be installed axially, corresponding to each other.
- Catch-bolts on the housing enable direct installation in φ 8 mm holes in wood.
- Appropriate accessory must be used for installation in ferromagnetic environment.

# **DISTANCES/DIRECTIONS**



### **TECHNICAL DATA**

Working environment	Wood (Y direction) 1)	Wood (Z direction) 1)	Steel <sup>1)</sup>			
Make distance (both switches closed)	typ. 18 mm ±40 %	typ. 19 mm ±40 %	see distance table			
Break distance (both switches open)	typ. 25 mm ±40 %	typ. 22 mm ±40 %	see distance table			
Contact type	form A, SPST					
Switching voltage max.	48 V DC/AC					
Switching current max.	500 mA DC/peak AC					
Contact rating max.	10 W					
Cable	φ 3,9 mm, 6x0,182 mm <sup>2</sup>					
Environmental class (EN50130-5:2011)	IIIA					
Operating temperature range	-40°C to +70°C					
Operating humidity range	max. 95% r. h.					
Housing protection	IP67, IK04					
Housing material	plastic ABS					
Dimensions:						
Contact part	ф 9 x 36 mm					
Magnet part	φ 9 x 25,5 mm					
Security grade (EN50131-2-6:2008)	2					
Approvals	VdS EN-ST-000260, SBSC 9-204, INCERT B-582-1003, NF&A2P 2124030002C0					

<sup>1)</sup> Make distance is always shorter than break distance

MC 347 Instruction Manual 4-MC347-01

### **OPERATING PRINCIPLE**

MC 347 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 reduces the influence of the magnetic field on the reed switch until it opens and activates an alarm.

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

### **INSTALLATION**

Detailed installation instructions can be found in MC 347 Installer Manual.

Contact and magnet should be aligned axially in the frames and leaves of the monitored objects (windows, doors etc.). Offset will reduce the working distances. 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. Catchbolts on the housing enable direct installation in  $\varphi$  8 mm holes in wood.

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

Accessories with a strong magnet provide a bigger working distance for more demanding applications and maintain the parameters of the magnetic contact when mounted in ferromagnetic environment.

Accessories for surface mounted applications provide installation solutions for sites where recessed mounting is not suitable.

The working distances of the magnetic contact will be decreased in the proximity of ferromagnetic surfaces. The closer the contact/magnet is installed to the ferromagnetic surface, the lower the working distances

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

After the installation, use an ohmmeter to check the electrical connections and test the function of the magnetic contact. Make sure both reed switches operate correctly.

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.

#### **DISTANCE TABLE**

Contact	Accessory	Distance on wood [mm] (Y direction)		Distance on steel [mm] (Y direction)	
		Make	Break	Make	Break
MC 347	-	18	25	X	Х
	MC 300-S1	18	25	X	Х
	MC 300-S3	17	25	13 <sup>a)</sup>	18 <sup>a)</sup>
	MC 300-S11	18	25	X	X
	MC 300-S12	34	43	18	23
	MC 300-S21	18	25	X	X
	MC 300-S22	34	43	22	28
	MC 300-S31	18	25	X	X
	MC 300-S32	34	43	18	23
	MC 300-S35	17	25	X	X

X - not recommended

a) measured with spacers (included in the MC 300-S3 set)