INTERPRETATION SHEET

FEUILLE D'INTERPRETATION

INTERPRETATIONSBLATT

CLC/TS 50131-11/IS1

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ICS 13.310

English version

Alarm systems - Intrusion and hold-up systems - Part 11: Hold-up devices

Systèmes d'alarme - Systèmes d'alarme contre l'intrusion et les hold-up - Partie 11: Exigences pour bouton anti-agression

Alarmanlagen - Einbruch- und Überfallmeldeanlagen - Teil 11: Anforderungen an Überfallmelder

This Technical Specification was approved by CENELEC on 2013-12-23.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

This Interpretation Sheet to the European Standard CLC/TS 50131-11:2012 was prepared by CLC/TC 79 "Alarm systems".

Text of IS1 to CLC/TS 50131-11:2012

Clause:

Annex A and Figure A.1

Question:

Would it be allowed for test purposes (for test houses and manufacturers) to use the NeoDym magnet listed below instead of the AlNiCo version described in Annex A and Figure A.1 for reproducible tests ?

Interpretation:

Yes, because this will allow stable and reproducible test results, which is not guaranteed while using the AlNiCo magnet due to the nature of the magnet material. Furthermore, the test magnet described below allows a high-level degree of backward compatibility for already tested products, while it gives the stability required.

Therefore, when the NeoDym magnet is used for test purposes (for test houses and manufacturers), the text below may be used in place of Annex A.

Validity:

This interpretation remains valid until an amendment or updated standard dealing with this issue is published by CENELEC.

Annex A
(normative)

Dimensions & requirements of the standardised test magnets

A.1 Normative references

The interference test magnets shall comprise a magnet identical to the corresponding magnet supplied with the detector and one of the following specified independent test magnets according to whether the detector is surface or flush mounted.

The following standards will form the base for the selection of the independent test magnet:

EN 60404-5, *Magnetic materials – Part 5: Permanent magnet (magnetically hard) materials – Methods of measurement of magnetic properties (IEC 60404-5)*

EN 60404-14, *Magnetic materials – Part 14: Methods of measurement of the magnetic dipole moment of a ferromagnetic material specimen by the withdrawal or rotation method (IEC 60404-14)*

IEC 60404-8-1, *Magnetic materials – Part 8-1: Specifications for individual materials – Magnetically hard materials*

A.2 Requirements

The field strength of the magnet determined by the magnetic material, by remanence (B_r) in mT and the product of energy $(BH)_{max}$ in kJ/m³, which are material dependent as the values describe the full saturation of that material should be measured before any calibration took place.

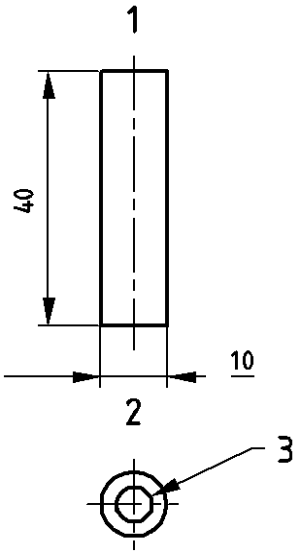
The field strength of the test magnet needs to be adjusted at the polarization of the working point in mT as defined.

The relevant value, dimensions and measurement point for the test magnet can be found in the following drawings and tables. For calculations, measurements and calibration of the test magnets, the norms cited above shall be used.

The independent test magnet for Test Magnet Type 1 is described in Figure A.1.

To get the magnets in question adjusted to the proper values and calibrated (e.g. polarization in working point), it is strongly suggested to perform adjustments of the magnetic values for ordered magnets performed by an accredited test house for magnetic fields. One potential source could be the following:

MAGNET-PHYSIK
Dr. Steingroever GmbH
Emil-Hoffmann-Strasse 3
50966 Cologne, Germany
www.magnet-physik.de



Key
1 North pole
2 South pole
3 North pole

Material	NdFeB N40 (REFeB 310/130 - Code number R5-1-11)
Remanence B_r min	1 275 mT ± 2 %
Product of energy $(BH)_{max}$	310 kJ/m^3 ± 3 %
Polarization of working point	0,835 T ± 2 %

Figure A.1 – Magnet Type 1