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SPECIFICATION FOR AUTOMATIC INTRUDER ALARM TERMINATING EQUIPMENT IN POLICE STATIONS

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BRITISH STANDARDS INSTITUTION

SPECIFICATION FOR
AUTOMATIC INTRUDER ALARM
TERMINATING EQUIPMENT
IN POLICE STATIONS

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BRITISH STANDARDS INSTITUTION

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THIS BRITISH STANDARD, having been approved by the Electrical Industry Standards Committee and endorsed by the Chairman of the Engineering Divisional Council, was published under the authority of the General Council on 15th May, 1967.

The Institution desires to call attention to the fact that this British Standard does not purport to include all the necessary provisions of a contract.

In order to keep abreast of progress in the industries concerned, British Standards are subject to periodical review. Suggestions for improvements will be recorded and in due course brought to the notice of the committees charged with the revision of the standards to which they refer.

A complete list of British Standards, numbering over 9,000, fully indexed and with a note of the contents of each, will be found in the BSI Catalogue which may be purchased from BSI Sales Department. The Catalogue may be consulted in many public libraries and similar institutions.

This standard makes reference to the following British Standards:

- BS 31. Steel conduits and fittings for electrical wiring.
- BS 397. Primary cells and batteries.
- BS 440. Stationary batteries (lead-acid Planté positive type) for general electrical purposes.
- BS 731 : Part 1. Flexible steel conduit and adaptors for the protection of cable.
- BS 1335. Air-depolarized primary cells.

British Standards are revised, when necessary, by the issue either of amendment slips or of revised editions. It is important that users of British Standards should ascertain that they are in possession of the latest amendments or editions.



The following BSI references relate to the work on this standard:
Committee reference FHM/45 Draft for comment D64/13517

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CO-OPERATING ORGANIZATIONS

The Electrical Industry Standards Committee, under whose supervision this British Standard was prepared, consists of representatives from the following Government departments and scientific and industrial organizations:

- Associated Offices' Technical Committee
- Association of Consulting Engineers
- Association of Mining Electrical and Mechanical Engineers
- Association of Supervising Electrical Engineers
- British Electrical and Allied Manufacturers' Association
- British Railways Board
- Crown Agents for Oversea Governments and Administrations
- Electric Cable Makers' Confederation
- Electric Lamp Industry Council
- Electric Light Fittings Association
- *Electrical Contractors' Association (Incorporated)
- Electrical Contractors' Association of Scotland
- Electrical Research Association
- Electricity Council, the Central Electricity Generating Board and the Area Boards in England and Wales
- *Electronic Engineering Association
- Engineering Equipment Users' Association
- Institution of Electrical Engineers
- Ministry of Defence
- Ministry of Defence, Army Department
- Ministry of Defence, Navy Department
- Ministry of Labour (H.M. Factory Inspectorate)
- Ministry of Power
- *Ministry of Public Building and Works
- Ministry of Technology
- Municipal Passenger Transport Association (Incorporated)
- National Inspection Council for Electrical Installation Contracting
- National Physical Laboratory (Ministry of Technology)
- Oil Companies Materials Association
- *Post Office
- Public Transport Association (Incorporated)
- South of Scotland Electricity Board

The Government department and scientific and industrial organizations marked with an asterisk in the above list, together with the following, were directly represented on the committee entrusted with the preparation of this British Standard:

- Association of Burglary Insurance Surveyors
- British Insurance Association
- Home Office
- Incorporated Association of Architects and Surveyors
- Metropolitan Police, Borough and County Police Forces
- Telecommunication Engineering and Manufacturing Association
- Manufacturers of burglar alarms

BRITISH STANDARD SPECIFICATION FOR AUTOMATIC INTRUDER ALARM TERMINATING EQUIPMENT IN POLICE STATIONS

FOREWORD

To facilitate the efficient handling of burglar alarm signals received in Police Stations, it is essential that Police Officers, who have many duties to perform, should be provided with a simple device which is straightforward in operation and has the minimum number of facilities consistent with the provision of adequate information. A multiplicity of systems, differing in physical design and operating procedures, militates against this and it is therefore necessary to produce standard terminating equipment suitable for wall or console mounting in Police Stations.

This standard has been prepared, in co-operation with manufacturers, the Police and the Home Office, to provide a terminating unit, indicating panel and control set with a degree of uniformity of appearance, of operating procedures, and of facilities provided, without limiting the method of providing the facilities. However, the use of d.c. signalling is deprecated and the means of signalling should be such that substitution of a signal does not prevent the transmission of an alarm indication.

The object has been to produce a standard indicator board which is subdivided into a number of panels, each of which will be installed and maintained by an individual company. This approach meets the police requirement for compactness, standardization of appearance and uniformity of operation and avoids the difficulties which would arise from divided responsibility for maintenance, etc.

The terminating units are normally connected to the protected premises by Post Office private circuits, and should conform to the relevant Post Office requirements.

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The need for the equipment covered by this British Standard has been reviewed and it has been decided that, in the interests of rationalization, it should be regarded as obsolescent and not therefore used for new installations. The standard will be withdrawn in due course.

SPECIFICATION

SCOPE

1. This British Standard specifies the requirements for provision, installation and maintenance and describes the facilities necessary for directly connected intruder alarm terminating equipment for use in Police Stations. It specifies the dimensions, appearance and mounting so that all such units will be identical,

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irrespective of manufacturer. The method of indicating an unauthorized entry and certain testing arrangements for line interruption indication are specified and the necessary instructions for operating the facilities are given. The power supply requirements are also defined. The frequency of maintenance visits, and the tests to be used, are indicated.

It is not considered necessary to specify circuit conditions because each company's equipment is independent of other equipment in the Police Station.

This standard includes provision for fitting more than one indicator panel on a single mounting frame, thus allowing more than one Alarm Company to use a single 24-way frame without the disadvantage of divided responsibility for maintenance etc.

DEFINITIONS

- 2 For the purposes of this British Standard the following definitions apply:
- a. Indicator panel.* An assembly of one or more terminating units, an annunciator sub-panel, an alarm buzzer and an equipment fault indicator plate. Each indicator panel is provided, installed, used and maintained by one alarm company.
 - b. Indicator board.* An assembly of one or more indicator panels, provided by one or more alarm companies.
 - c. Terminating unit.* A plate bearing the name of a subscriber or installation and having the necessary lamps to indicate an alarm, a line interruption, and a reset condition, together with a switch.
 - d. Control set.* An equipment comprising the components, circuits and supply of electric energy necessary to produce alarm or test conditions on one or more indicator panels of the same alarm company.

FACILITIES

3. The following facilities shall be provided:

a. Indicator panel.

(i) A red lamp on the annunciator sub-panel or annunciator/fault-indicator sub-panel which lights when action is called for by any of the terminating units on the panel.

(ii) An internal buzzer which sounds when the red lamp lights.

(iii) When required, provision for an external bell or buzzer, by separate contacts. This bell or buzzer is to be placed in a supervised area when the panel cannot be in a supervised area.

(iv) At the top of the indicator panel, an annunciator sub-panel, giving brief instructions (see Fig. 1).

(v) Mounting space for 10 or 24 terminating units.

(vi) At the bottom of the panel, an equipment fault plate, having a replaceable label, giving the name, address and telephone number of the service organization responsible for the panel and both unit and common fault indicator functions as described in Subclause 3c (see Fig. 2).

(vii) Where more than one indicator panel is fitted to a single mounting frame it shall have the facilities specified in Items (i) to (iv) inclusive and (vi) except that the annunciator sub-panel and equipment fault plate shall be combined into an annunciator/fault-indicator sub-panel (see Fig. 1A). Mounting space remaining below such a sub-panel shall be sufficient to accommodate at least four terminating units.

b. Terminating unit. The terminating unit shall consist of:

(i) A red lamp designated POLICE ACTION which flashes when an alarm condition is extended to it from an automatic intruder alarm system.

(ii) An amber lamp designated LINE INTERRUPTED which flashes when a line interruption occurs. Because this condition could well indicate tampering prior to an unauthorized entry, the red lamp shall flash at the same time, indicating police action. The periodicity of the flashing shall be between one half second and one second, on or off.

(iii) A three-position switch having NORMAL, BUZZER-OFF and TEST positions. The TEST position shall simulate a faulty line condition and switch on the green lamp, so testing the facilities on the terminating unit. When the switch is operated to BUZZER OFF with an alarm condition on the unit, the flashing of the red and amber lamps shall change to continuous illumination and the red lamp shall go out.

(iv) A green lamp designated RESET SWITCH which lights when an alarm or line interruption condition is corrected. When the green lamp lights the buzzer sounds and the red indicator lamp lights to indicate that action is necessary by restoring the key to normal, which cancels the lights and buzzer.

(v) A space in which the address of the premises to which the terminating unit is connected is clearly indicated.

c. Fault indication.

(i) Each terminating unit and control set (where individual control sets are provided) shall be individually fused, a fuse operation shall be indicated on a unit fault lamp which lights and an audible indication shall be given. All other fuse operations shall be indicated on a common fault lamp which shall light and by an audible indication which shall be given.

The unit fault lamp, the common fault lamp, the buzzer and a switch to mute the buzzer, shall be assembled in the equipment fault indicator plate.

(ii) The common fault indicator lamp shall light to show a power supply fault in any of the following:

- A. D.C. power supply.
- B. Output from the trickle charger (if used) (see Subclause 3c(v) below).

C. Common control equipment (if used).

D. All terminating units and control sets (wherever individual sets are provided) within one panel.

(iii) Audible indication shall be given when either of the fault lamps are lit.

