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BSI Standards Publication

**Pin codes for BR 930 series relays –
Specification**

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Date	Text affected
February 2016	C1. The following pin codes have been amended: 0290, 0292, 0870, 0871, 1121, 1124, 1126, 1128, 1130, 1154, 1156, 1219, 1220, 1224. The following arrangements have been amended: 2, 20, 74, 75, 76, 144, 160, 161, 162, 179, 181, 182, 206, 256.
March 2019	C2. The following arrangements have been corrected in Table A.1: 18, 19, 20.
January 2020	A1. See Foreword

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to ii, pages 1 to 203, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 December 2013. It was prepared by Subcommittee GEL/9/1, *Railway Electrotechnical Applications – Signalling and communications*, under the authority of Technical Committee GEL/9, *Railway Electrotechnical Applications*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 8586:2013, which is withdrawn.

Information about this document

The start and finish of text introduced or altered by Amendment No. 1 is indicated in the text by tags **A1** and **A1**. Minor editorial changes are not tagged.

If a previously unallocated pin code is to be used, details of the intended use need to be communicated to the secretariat of BSI Committee GEL/9/1 in order that it can be authorized for inclusion in a future revision of this document. Details of any error or omission discovered in this standard also need to be reported.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

1 Scope

This British Standard specifies the pin code configurations and contact arrangements for signalling equipment that uses BR 829 [1] plugboards.

The standard does not cover installation or maintenance requirements.

2 Terms and definitions

For the purposes of this British Standard, the following terms and definitions apply.

2.1 pin code

unique numerical (or alphanumeric) reference allocated to a particular pin code configuration.

NOTE The pin code is sometimes referred to as the 'registration pin code'.

2.2 pin code configuration

unique pattern of locating pins assembled such that the item bearing this pattern of pins can only be connected to a corresponding item of equipment containing a matching unique pattern of holes

3 BR 930 series pin code registration

COMMENTARY ON CLAUSE 3

To ensure correct interchangeability of relay units, an interlocking pin system is used which is designed to prevent a relay unit being plugged-in to a fixed plugboard where it could give rise to an unsafe condition. Pins on the rear of the relay/unit locate in holes drilled in the BR 829 plugboard.

Table 1, Table 2 and Table 3 list the applications to which pin code configurations have been allocated, and the configurations shall be used for no other application than that listed. Where a common chassis is provided for a number of potential applications, a separate pin code shall be allocated to each of those applications.

The pin code only covers relay functionality and does not cover all the characteristics of the relay, such as coil resistance, which might vary. It is the responsibility of the end user to establish that the relay is appropriate for the particular application.

NOTE 1 Table 1 lists the numerical codes and pin configurations and the relays and the applications to which they have been allocated for Great Britain (GB) mainline use. Configurations using five pins are allocated to safety critical applications and configurations with six pins to safety related applications. The configurations in both cases are chosen from pins A, B, C, D, E, F, G, H, J, K, L, M, N.

NOTE 2 The configurations described in Note 1, together with additional pins P and/or Q are generally used for Reed frequency division multiplex (FDM) equipment. Equipment allocated configurations that contain both pins P and Q are exchangeable with universal spares. The universal spare with pin code 1360 will fit any base whose configuration includes pins P and Q. The universal spare with pin code 7360 will fit any base whose configuration includes pins A, P and Q.

NOTE 3 Table 2 lists the numerical codes and pin configurations using pins S, T, W, X, Y, Z, for applications other than GB mainline, which have been allocated to specific suppliers. FDM NV equipment allocated configurations that contain both pins X and Z or Y and Z are exchangeable with universal spares. The universal spare with pin code X700 will fit any base whose configuration includes pins X and Z. The universal spare with pin code Y500 will fit any base whose configuration includes pins Y and Z.