

# 3000 Type Relay Data Sheets

[Sections 1 and 2 are reproduced from the Data Sheets pages i & ii]

## 1. Introduction

This book provides detailed information in a list of preferred 3000-type relay designs to enable Post Office design engineers to select relays without reference to a specialist relay group. Information is given on individual designs in the form of relay data sheets indexed in contact action order.

- 1.1. With the advent of the preferred list a new series of P.O. codes has been initiated commencing from 20,000. These designs are not approved by the Bulk Supply Agreement (B.S.A) manufacturers and do not therefore carry B.C.C. numbers.
- 1.2. Communication concerned with this document should be addressed to the Relay Applications Group, THQ/TD 1.2.3.

## 2. General

- 2.1. The relay data sheets are filed in contact action order using the following sequence: Make (M)/Break (B)/Changeover (C)/Make before Break (K) On each data sheet the relationship is given between contact action and spring numbering.
- 2.2. Relays available with a particular contact action are listed on each data sheet in the order of:
  - i) single winding coils - plain, with slugs or nickel iron sleeves.
  - ii) double winding coils -
  - iii) treble winding coils -
  - iv) quadruple winding coils.Within these sections coils are placed in decreasing order of resistance.
- 2.3. All the relay designs shown are based on either 12 or 14 mil spring thickness, these are identified by green (G) or white. M colour labels respectively on which is printed the P.O. code number. Red label relays requiring special adjustments for current tests are not included and any advice on these designs should be sought from the relay applications group.
- 2.4. Two attached cross references are available which provide a quick guide to all combinations of coils and contact actions appearing in the P.O. Preferred List of Relays, viz:

Circuit Function/ Contact Action/ Coil Cross Reference, special Applications.  
Suggested Contact Action Cross Reference, General Purpose Applications.

Use of these cross references may assist in the choice of a preferred relay design to suit a specific application before selection from the data sheets.

2.5. The relay codes quoted in the Data Sheets form the Post Office preferred list of relays. This list is divided into two main categories:

- i) General Purpose (or Donkey) relays comprising seven different types of coil:
  - Single plain coils - 6500, 2000, 1000, 500 ohms
  - Double " " - 2000 + 2000 ohms
  - Slugged coils - 1" Front End, 1500 ohms 11/2"
  - Heel End, 800 ohms

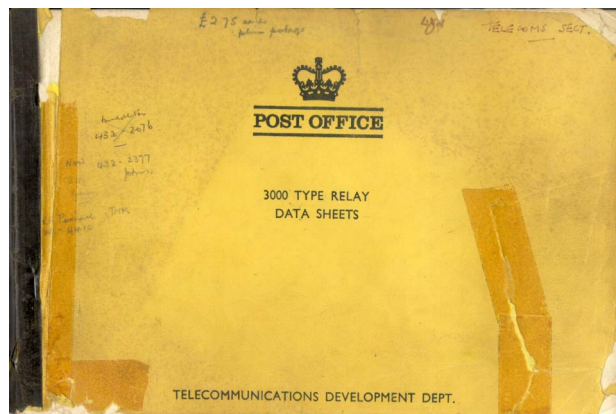
Three of these coils, viz. 2000, 1000 and 2000 + 2000 ohms are available with all the preferred contact actions. The other coils are restricted to specific actions in the preferred list of contact actions.

The contact actions (71 in number) have been selected from the full range up to and including eight actions and are based on a knowledge of those most widely used.

- ii) Special Applications. These relays are used in the standard functions of guard (B), pulse control (B, CD), high impedance bridging (D, I, L), ring-trip (F), release alarm (RA), routiner test (TL), testing-in (SA, SK) and wiper switching (H, HA/HB). Investigation of previous usage has determined the number of designs selected for each circuit application.

### 3. About the Scanned Document

The 3000 Relay Data Sheets are reproduced from a set originally held by the British Railways Board. The cover was rather battered and looked like this



The introductory pages were typewritten whereas the main data sheets appear to have been produced by a computer printer. The pages are 297mm wide by 203mm high, except pages xvi & xvii, which are only 173mm wide.

As there is no contents list I have prepared a table (on the following page) showing which contact sets appear on which page. If the list for one contact set runs to more than one sheet then the pages numbers have a decimal suffix (eg 14.1, 14.2).

The pages have been scanned at 200 dpi, making the main document, relay\_data.pdf nearly 4 MB in length even in Adobe Acrobat format.

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