

CASE NO. 200A AND ASSOCIATED ITEMS - DESCRIPTION

1 INTRODUCTION

1.1 The associated items discussed in this Instruction are:-

Mounting D 79021
Test-Unit No. 4A
Test-Unit No. 4B (not yet available)
Mounting, Attenuator No. 8A
Label No. 489A
Kit No. 165A
Kit No. 165B

1.2 Case No. 200A and associated items are intended to allow small quantities of passive line-terminating transmission equipment to be wall mounted at customers premises for the provision of private circuits. With the introduction and availability of Case No. 200A and associated items, the necessity to produce mountings locally for non-documented arrangements should be reduced.

1.3 The test units described in this Instruction provide test access and line transmission looping facilities on the line terminations of private circuits at customers premises. The line transmission looping facility is provided on 4-wire line terminations, so that the customer may assist the PO in locating circuit faults and in determining where responsibility lies in clearing circuit faults. The need for PO staff to be present initially at the customers premises for the purpose of locating a reported fault is therefore reduced. Test access facilities are provided for lining-up and maintenance and to provide an interface between the PO facilities and the customer-owned equipment.

2 DESCRIPTION

2.1 Case No. 200A is styled to harmonize with contemporary furnishings and PO customer station apparatus found in offices and commercial surroundings. The case is a light grey assembly of a flat rigid moulded base and a main 3 inch deep moulded cover.

The case includes two small snap-in moulded covers fitted to conceal apertures in the main cover. The apertures control the degree of access to apparatus mounted in the case (eg Test sockets, links, keys and buttons) which may be provided for use by the customer or PO maintenance staff. Access to other items in the case requires the use of a screwdriver to remove the main cover.

The customer is not normally expected to have access to apparatus mounted in a case except that available through the apertures in the cover.

An assembled case has an overall size of $7\frac{1}{4}$ inches x $6\frac{1}{2}$ inches x 3 inches deep. For general purposes the case will accommodate any item of equipment meeting the dimensional and fixing requirements depicted in Drawing RPA 6951.

The case may be used for mounting other items, (such as Switching Unit No. 24A) but these are not discussed in this Instruction. The case is not generally suitable for accommodating items that continuously dissipate power, ie there are no ventilation apertures incorporated in the cover to allow cooling.

2.2 Mounting D 79021 is a metal frame for use in a Case No. 200A. It will enable the case to accommodate standard 62-type sub-units up to a total of 6 inches in length. The depth of sub-units which may be accommodated is restricted to those items which will normally fit onto 62-type card frames having front plate widths of up to 2.4 inches (12 modules or less).

The mounting is fixed in a Case No. 200A so that when it is holding flat-based units there will be sufficient clearance with the moulded base for running cables.

2.3 Test-Unit No. 4A (Diagram RP/RPW 6944) The unit is suitable for use with one 4-wire circuit termination or with a one or two 2-wire circuit termination. (For 4-wire arrangements, Test Unit No. 4A will be superseded by Test Unit No. 4B when available).

In the two 2-wire circuit application, test access may be achieved for each circuit separately since 2 way links are used throughout the unit.

The use of the unit in various 2-wire or 4-wire line termination applications is shown in Diagram RP/RPW 6902.

External wiring to the unit and strapped connections on the unit are made on a screw terminal block.

The unit is fitted in a Case No. 200A with associated items Label No. 489A and Kit No. 165A and B where required in accordance with the instructions given on Drawing RPA 6902. When used in a 4-wire application the unit allows the customer or visiting PO staff to provide a zero loss transmission loop towards the line and equipment, together or separately, by means of repositioned links as indicated on the labels provided for the particular installation.

The links used for providing a transmission loop are situated behind a snap-in cover when the unit is mounted in a Case No. 200A. Care must be taken to minimise the inadvertent or unnecessary looping of the line in order to reduce the risk of circuit instability. The facility of providing a transmission loop towards the equipment allows the customer to perform back-to-back tests on his own equipment during fault location. It is intended that the customer should not have access to the socket strip SKA on the unit. Access to SKA is prevented when the unit is used in an assembled Case No. 200A thereby providing protection, since, external lines are usually connected directly to the socket strip.

2.4 Test-Unit No. 4B (Diagram RP/RPW 7091) when available, will supersede Test-Unit No. 4A for 4-wire arrangements and will not require the use of Label No. 489A, Kits No. 165A and B or Mounting Attenuator No. 8A. The unit will be suitable for use with one 4-wire circuit termination. The use of the unit in various 4-wire line termination applications is shown in Diagram RP/RPW 6902 and fitted in accordance with the instructions given in Drawing RPA 6902.

The unit will differ from Test-Unit No. 4A as follows:-

(a) All external wiring connections and internal strapped connections are soldered.

(b) The customer cannot simultaneously loop towards the PO line and the equipment. This minimises the inadvertent or unnecessary looping of the line and therefore reduces the risk of circuit instability.

(c) Transmission looping is carried out by the simple movement of a 5-way link as indicated on the label provided with the unit. A 5 dB attenuator is automatically connected into the transmission loop to reduce the risk of circuit instability when the 5-way link is moved to the appropriate position.

(d) One or two Attenuators No. 53/.. dB may be fitted directly on the unit and connected into each transmission path for level adjustment.

2.5 Label No. 489A, Kit No. 165A and B Kit No. 165A and B each consist of three Labels No. 489A specially marked for use on Test-Unit No. 4A for standard 4-wire and 2-wire line termination applications respectively. For certain miscellaneous uses of Test-Unit No. 4A it may be required to requisition Label No. 489A separately and mark locally.

2.6 Mounting, Attenuator No. 8A is used with Test-Unit No. 4A when it is required to provide attenuators in the 4-wire transmission path for level adjustment. The mounting provides space for up to five Attenuators No. 53/.. dB. The mounting and Attenuator No. 53/.. dB in association with Test-Unit No. 4A is fitted as indicated on Drawing RPA 6944.

3 INSTALLATION, CABLING AND MAINTENANCE

3.1 It is considered that a single installation of up to six Cases No. 200A is acceptable when fitted in one cluster. For installations requiring more accommodation, a 62-type rack should be considered.

3.2 Specific units may be fitted to a Mounting D 79021 before or after its attachment to a Case No. 200A. This will permit units to be pre-assembled and interwired at area workshops or other locations before delivery to the installation site.

3.3 Fixing to wall The moulded base has a countersunk hole in each corner so that it can be fixed directly to a wall using No. 8 countersunk head screws. As an alternative, four slotted holes are situated near the centre of the base so that the base may be fixed directly to a BS standard flush knockout box (Square $2\frac{3}{8}$ inch fixing centres) in a wall using 4BA round head or cheese head screws.

3.4 Cabling The case has side cable-entries in the base with corresponding knockouts in the sides of the cover to suit different cable sizes. The cable entry knockouts will accommodate standard instrument cord grommets. The moulded base also has a one inch diameter hole in its centre for cable entry from a flush conduit outlet.

External cables are led in through any of the case side entries to apparatus mounted in the case. In multiple installations, the bases of each case are fixed to the wall with side edges touching. Cables may be led into any convenient case and distributed through to any other case via the corresponding side entries without resulting in unsightly appearance.

The main covers of the cases with appropriate knockouts removed, will conceal all intercase cables.

Cables must be adequately secured before entering a case because provision is not made for clamps except for the facility to accommodate instrument cord grommets.

3.5 On completion of installation work or maintenance a snap-in cover must be replaced in each case cover aperture to minimise the ingress of dust, spilt liquids etc. A recovered or damaged Case No. 200A should be salvaged if suitable for re-use or disposed of locally.

*4 **SELF-ADHESIVE LABEL FOR COVER** To assist the customer and PO staff in circuit identification, a self-adhesive label (Label No. CC2/E) is available for fixing on the front of the Case No. 200A. The layout of the label allows for the entry of the circuit designation and destination, the telephone number of the fault-reporting point and any special out-of-hours numbers.

For information:-

Requisitions (Forms A1097) for Self-Adhesive Labels No. CC2/E should be sent to:-

Post Office Purchasing and Supply Department
Factories Division
Cwmcarn
Crosskeys
NEWPORT
Monmouthshire
NP1 7ZB

*5 **OPERATING INSTRUCTIONS FOR USE BY CUSTOMER** A Datel Services leaflet giving general information and operating instructions has been introduced for use by customers.

The leaflet (Form A4440) may be requisitioned in the normal way for A Series forms.

A copy of the leaflet will be given to each customer having a Case No. 200A installation by the CWC installation engineer who will also give assistance where necessary to ensure that the customer understands the purpose and use of the Case No. 200A (see C3P 3000).

*6 Maintenance procedures for the use of Case No. 200A with data circuits are covered in E8 A0020.

THQ/NPD/NP1.3.2

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