Chapter 52

SENSITIVE WARNING UNIT, ELLIOTT, TYPE 3C/183

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LIST OF ILLUSTRATIONS

LEADING PARTICULARS

Sensitive warning unit, Type 3C/183

Voltage	*112 volts d.c.*
Incorporating—	
Resistor R1	*variable resistor*
Resistor R2	*450 ohms*
Resistor R3	*10·5 K*
Resistor R4	*10 K*
Overall dimensions	*4·7 in. × 4·4 in. × 3·5 in.*
Weight	*14 oz.*

Introduction

1. The sensitive warning unit, Type 3C/183, is used in 112-volt d.c. systems to detect abnormal or dangerous conditions in an electrical circuit.

DESCRIPTION

2. This unit (*fig.* 1) incorporates a polarized relay, which is energized by the differential voltage from two coils. One of these coils, the reference coil (*fig.* 2) is connected to the main power supply, and the other, the monitor coil, is connected to the particular circuit being monitored. Under normal conditions, the two coils are in balance, and the relay remains in the de-energized position. Any change in voltage across the monitor coil, however, causes the relay to operate, and give an indication on a warning lamp or other device.

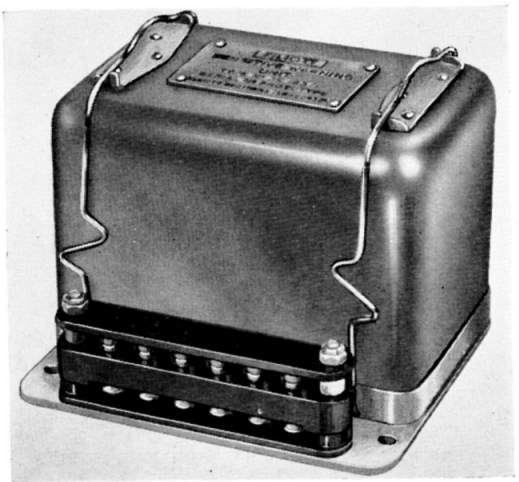

Fig. 1. Sensitive warning unit, Type 3C/183
(A.L.103, Apr. 57)

3. The value of the resistors incorporated is shown under Leading Particulars. R1 is a variable resistor, which has been set initially to the correct value. A push-switch can be connected for test purposes as shown in fig. 2, where by shorting out R4, a check can be made for correct operation of the relay and warning device.

4. Electrical connection is made to a 6-way terminal block, the correct connections being as shown in the circuit diagram.

INSTALLATION

5. The unit is designed for mounting on three anti-vibration mountings, and may be installed in any convenient position, including inverted.

SERVICING

6. No servicing is possible on this unit, apart from a general inspection for freedom from damage and security of connections. The relay and warning device may be tested for correct operation by depressing a test push-switch, connected as shown in fig. 2.

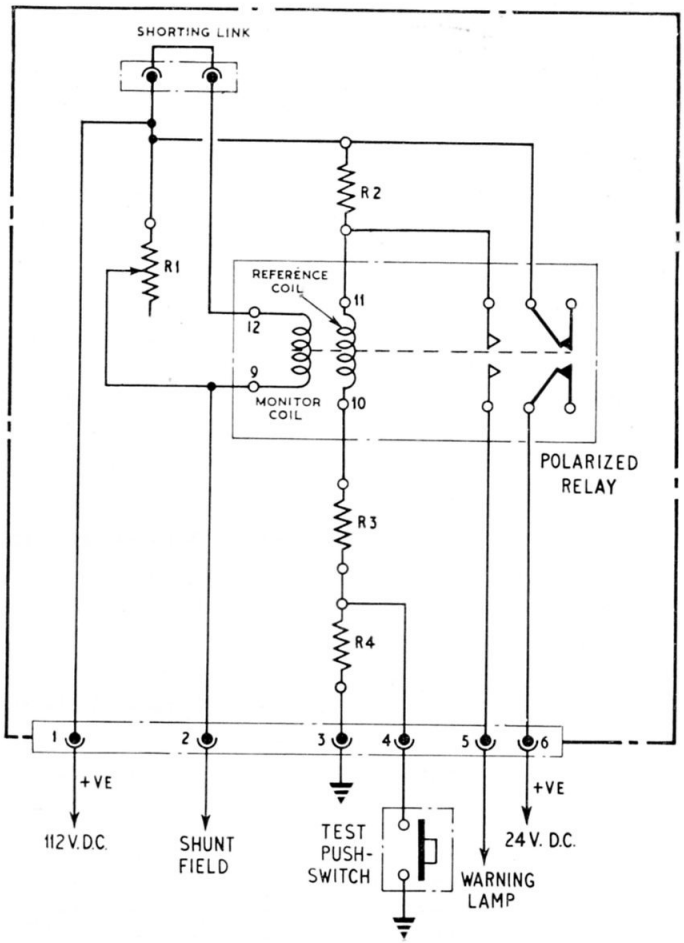

Fig. 2. Circuit diagram