Chapter 7

RESISTOR UNITS, ROTAX, ZA3600 SERIES

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Introduction

1. Units in the ZA3600 series are heavy-duty resistor units suitable for applications such as a starter resistance in circuit with a motor. The difference between individual types within the series lies in the value of the the resistance, as follows:—

Type	Ref. No.	Total resistance (ohms)
ZA3601	5CZ/4761	$0.12 \pm 10 \text{ per cent} \\ (0.1+0.02)$
ZA3602	5CZ/5248	$0.15 \pm 10 \text{ per cent}$

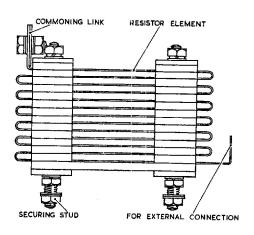


Fig. 1. General view of ZA3601 resistor unit

DESCRIPTION

2. Each unit consists of two folded "Brightray B" strip elements supported side by side by two columns of insulating spacers, which are secured to an insulating base by long bolts extending to the height of the columns. The bolts extend below the base to form four securing studs. At one end the two elements are commoned by a link and the remaining ends are free for external connection.

INSTALLATION

3. Dimensional details of the four $\frac{1}{4}$ in. B.S.F. securing studs are as follows:—

Type	Free length of stud (in.)	Stud centres (in.)
ZA3601	0.562	3·250 x 3·000
ZA3602	0.75	6.000 x 1.625

When the unit is supplied from Stores, securing nuts, plain washers and spring washers are in position on the studs. The free ends of the elements each have one 0.257in. dia. clearance hole.

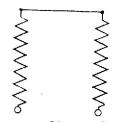


Fig. 2. Diagram of internal connections

RESTRICTED

SERVICING

4. Ensure by visual inspection that the unit is in good condition, that it is secure on its mounting and that the external connections are secure.

Resistance test

5. With a current of 50 amp, flowing in the circuit, the resistance measured between the terminals, using the voltmeter/ammeter

method, should be within ± 10 per cent of the nominal value.

Insulation resistance test

6. The insulation resistance between the terminals and the frame, measured with a 500-volt insulation resistance tester, should be not less than 0.5 megohm (for R.N.), or 5 megohms (for R.A.F.).