

## Chapter 19

## TRANSFORMER, ENGLISH ELECTRIC, TYPE AE5721

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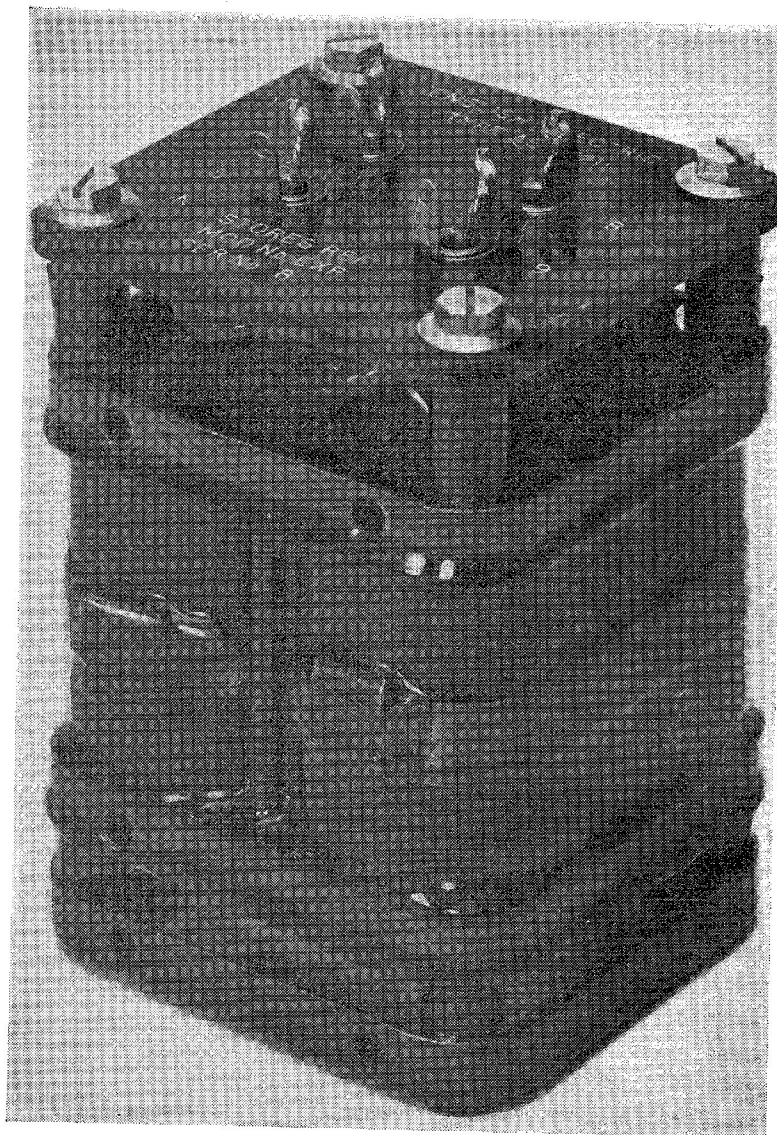
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## LEADING PARTICULARS

<i>Type of winding</i> ....	Single phase, double wound
<i>Input voltage</i> ....	200 V
<i>Input frequency</i> ....	400 c/s $\pm$ 5%
<i>Output voltage</i> ....	80 V (nominal)
<i>Output (power)</i> ....	950 W
<i>Rating</i> ....	Intermittent
<i>Resistance of primary winding</i> ....	0.970 ohms $\pm$ 10% at 20° C.
<i>Resistance of secondary winding</i> ....	0.181 ohms $\pm$ 10% at 20° C.
<i>Dimensions</i>	
<i>Height</i> ....	3.8 in.
<i>Length</i> ....	2.43 in.
<i>Width</i> ....	2.39 in.
<i>Weight</i> ....	2 lb. 4 oz.

RESTRICTED



**Fig. 1. Transformer, Type AE5721, general view**

#### **Introduction**

1. The Type AE5721 transformer (*fig. 1*) is a single phase, double wound transformer which is naturally cooled and designed to supply an intermittent load nominally at 80 volts from a 200 V, 400 c/s supply.

#### **DESCRIPTION**

2. The transformer consists of primary and secondary windings assembled on a double loop "C" core. The cores are clamped by two sets of brackets, one set having the terminal board and name-plate attached to it.
3. The ends of the windings are soldered to tags on the terminal board, which are marked 4 & 5, 8 & 9 for the primary and secondary windings respectively.

#### **INSTALLATION**

4. The transformer may be mounted in any

position by means of four 4B.A. screws or bolts, screwed into the tapped holes in the tie rods, but must not be installed where it will be subject to high temperatures.

#### **SERVICING**

5. The soldered connections to the tags should be checked for security and the terminal board and windings inspected for any signs of damage or indications of overheating.

#### **Insulation resistance test**

6. The insulation resistance should be measured using a 500 volt insulation resistance tester, the minimum permissible reading measured between windings and windings and earth should be 5 megohms.

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