

Chapter 28**CURRENT TRANSFORMER**
(English Electric, Type AE5700)**LIST OF CONTENTS**

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LEADING PARTICULARS

Current transformer, Type AE 5700	<i>Ref. No. 5UB/6827</i>
<i>Ratio</i>	125:1 $\pm 5\%$
<i>Load</i>	6 VA
<i>Frequency</i>	400 c/s
<i>Temperature range</i>	-65°C to + 70°C
<i>Altitude (max.)</i>	60 000 ft.
<i>Height</i>	2½ in.
<i>Width (including base)</i>	2⅛ in.
<i>Length</i>	2¼ in.
<i>Weight</i>	6 oz.

RESTRICTED

Introduction

1. The Type AE5700 current transformer is used in protection and load sharing circuits in 200 volt, 3-phase, 400 c/s, multi-channel systems.

DESCRIPTION

2. The core of the transformer is spirally wound in ring form, and is manufactured from cold rolled grain oriented silicon steel of high permeability.

3. The primary is the line bus-bar whose current is to be transformed or sensed, and is therefore not included in the build up of this current transformer.

4. The secondary is evenly wound around the core with 20 s.w.g. copper wire insulated with vinyl acetate. The complete assembly is covered with black nylon tape and impregnated with varnish. The secondary terminals protrude from this insulation in the form of two short lengths of strip with $\frac{7}{32}$ in. dia. holes drilled in them.

5. The feet, at the base of the unit, have slots machined in them for mounting the unit to the airframe. On the side of the feet, that is against the wound core, are two plates. On one side is the identification plate, and on the other the rating plate.

SERVICING

6. Little servicing can be carried out other than to inspect the transformer for signs of

deterioration of the insulation, and to check the security of the attachment screws, nuts, and electrical connections.

Insulation resistance test

7. The insulation resistance between the mounting feet and the secondary terminals when measured at a pressure of 500V, d.c. should be not less than 5 megohms.

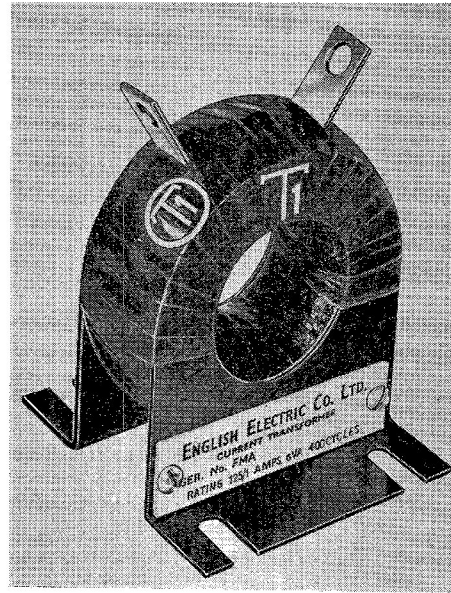


Fig. 1. Current transformer Type, AE5700

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