Chapter 14

CURRENT TRANSFORMER
(English Electric, Type AE5712)

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LIST OF ILLUSTRATIONS

LEADING PARTICULARS

Current transformer, Type AE5712	*Ref. No. 5UB/6656*
Ratio	125:1
Load	6 *VA*
Frequency	400 *c/s*
Temperature range	−65°*C to* +70°*C*
Altitude range	0-65,000 *ft.*
Dimensions overall	
Height	$3\frac{3}{8}$ *in.*
Width	$2\frac{1}{8}$ *in.*
Length	$2\frac{5}{8}$ *in.*
Weight	12 *oz.*

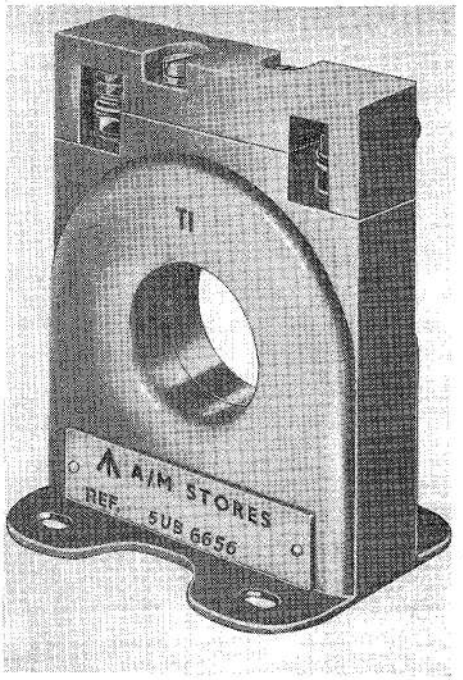

Fig. 1. Current transformer, Type AE5712

Introduction

1. The Type AE5712 current transformer is used in protection and load sharing circuits in 200-volt, 3-phase, 400 c/s multi-channel systems.

DESCRIPTION

2. The ring form core is a continuous wound cold rolled grain oriented silicon steel strip, and is insulated from the secondary windings by an expoxy resin case. The 125 turn secondary winding is toroid wound and evenly distributed round the core in two layers, the terminals being of different size in addition to being clearly marked to prevent incorrect connections being made. The core and windings are encapsulated in synthetic resin which increases the inherent strength, and seals the windings from humid conditions. The mounting flanges and terminals are manufactured from stainless steel. The direction of the aircraft cable run forming the primary is indicated to ensure correct installation.

SERVICING

3. Little servicing can be effected other than to check the security of attachment bolts, screws and electrical connections.

Insulation resistance test

4. The insulation resistance measured between the secondary winding and mounting feet should be measured using a 500-volt insulation resistance tester. The minimum permissible reading is 5 megohms.