

Chapter 4

COMPOUNDING AND MERTZ-PRICE TRANSFORMER, ROTAX, TYPE P8002 and P8005

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LEADING PARTICULARS

Overall dimensions:—

<i>Length</i>	6.312 in. Max.
<i>Width</i>	5.812 in. Max.
<i>Height</i>	6.250 in. Max.
<i>Estimated weight</i>	5.5 lbs.

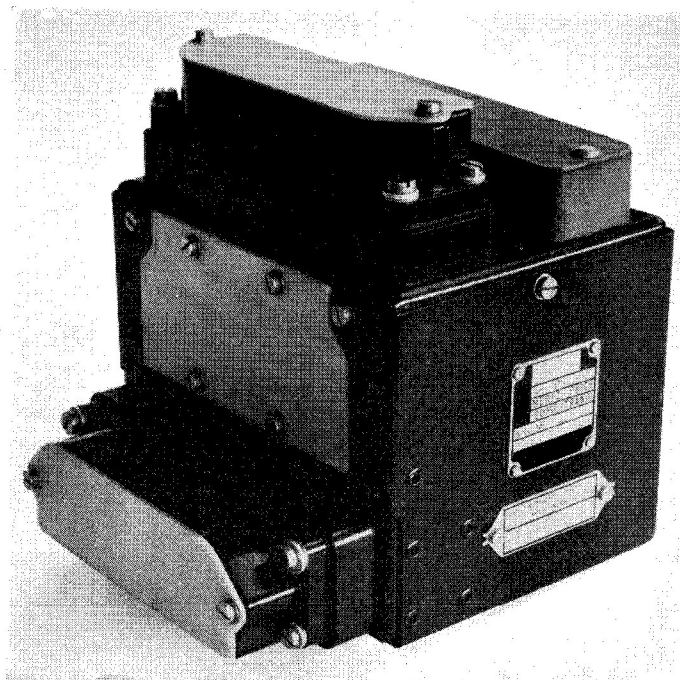


Fig. 1. Type P8002 transformer

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(A.L.10, Dec. 58)

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Introduction

1. The type P8002 transformer unit has been designed to provide compounding and Mertz-Price protection in certain aircraft generating systems. The P8002 is used in conjunction with the P8005 compounding and Mertz-Price protection transformer, the latter catering for reverse phase sequence of supply. The two units are basically similar and may be identified by reference to their respective name plates.

DESCRIPTION

2. Each unit consists of two 3-phase current transformers. One of these is star connected and provides a component of alternator excitation proportional to the load current. The other is delta connected to provide Mertz-Price protection. The output of the latter

is designed to operate an external relay in the generator system, the function of the relay being to switch off the associated generator in the event of a line to line, or a line to neutral fault developing.

3. The two transformers (*para.* 2) of each unit are housed within a common casing and their terminal connections are contained in moulded shrouds. The terminals are annotated to conform with those shown in fig. 2 and 3, for the P8002 and P8005 respectively.

INSTALLATION

4. The unit is mounted to the aircraft frame and secured by 4-2 B.A. screws locating in stiff anchor nuts integral with the case assembly.

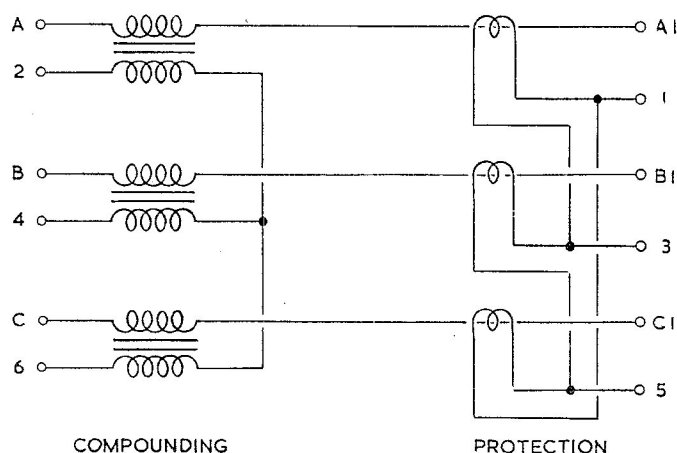


Fig. 2. Diagram of connections, P8002

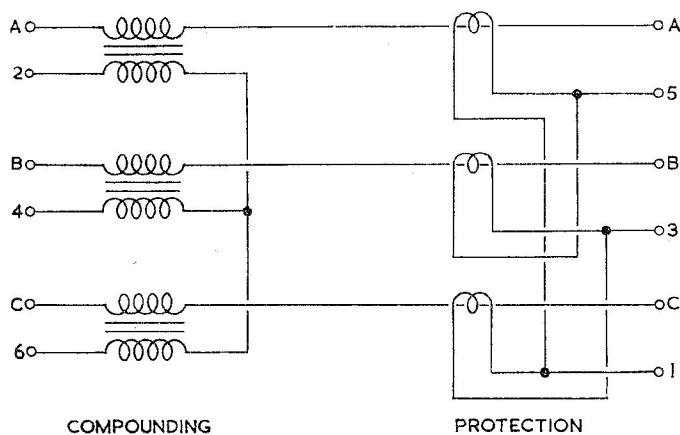


Fig. 3. Diagram of connections, P8005

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