

See AP 113D-0747-1

not held 'c'

A.P.4343B, Vol. 1, Book 2, Sect. 7 (A.L.I)

Chapter 19

CONTROL PANEL, TYPE 38

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LEADING PARTICULARS

| | | |
|---|-----|--|
| Control panel, Type 38 | ... | Stores Ref. 5UC/6164 |
| Used with inverter Type 206 | ... | Stores Ref. 5UB/6442 |
| Controlled voltage in conjunction with inverter Type 206 | ... | 115 V, a.c. $\pm 2\frac{1}{2}$ per cent |
| Contents:— | | |
| Regulator unit, Type 1008 | ... | Stores Ref. 5UC/543 |
| Trimmer resistor (R1), 100 ohms | ... | Stores Ref. 5UB/5267 |
| Ballast-resistor (R2) (2 off), 300 ohms | ... | Stores Ref. 5UC/306 |
| Capacitor, 3 μ F | ... | Stores Ref. 5UC/6432 |
| Rectifier | ... | Stores Ref. 5UC/305 |
| Contactors, Type LDA30-B4/1 | ... | Stores Ref. 5UB/6047 |
| Overall length | ... | 9 $\frac{1}{8}$ in. |
| Overall width | ... | 7 in. |
| Overall height | ... | 5 $\frac{1}{8}$ in. |
| Fixing centres | ... | 3 $\frac{3}{4}$ in. \times 9 $\frac{1}{8}$ in. |
| Fixing holes | ... | 4, each $\frac{9}{32}$ in. dia. |
| Weight | ... | 8 lb. (approx.) |

Introduction

1. The control panel Type 38 (fig. 1) is used to control the output of the Type 206 inverter at 115 V, a.c. $\pm 2\frac{1}{2}$ per cent. The control panel is, in fact, electrically identical to the control box on the Type 200 inverter and the Type 206 inverter is electrically the same in all respects to the Type 200 inverter. The separation of the control box from the inverter has occurred purely through installation difficulties in certain aircraft.

DESCRIPTION

2. The control panel (fig. 2) is housed in a sheet metal box. The d.c. positive supply enters through one side and is connected to a terminal marked + on a small

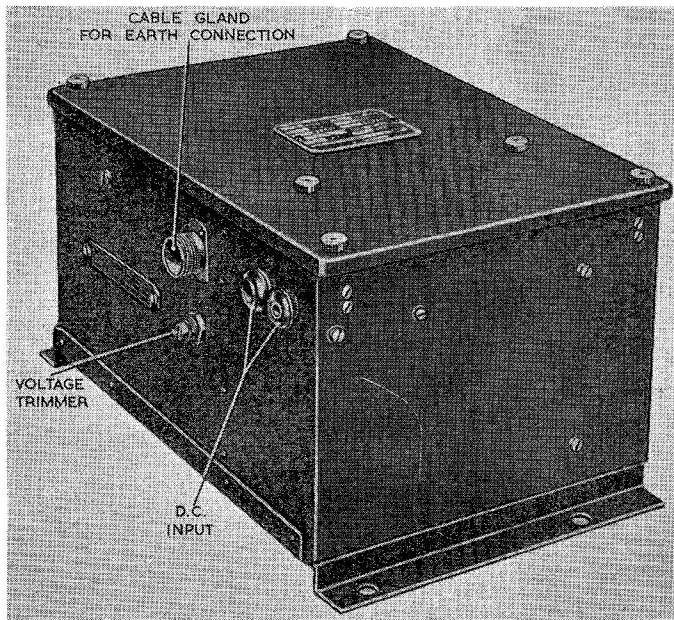


Fig. 1. General view, control panel Type 38

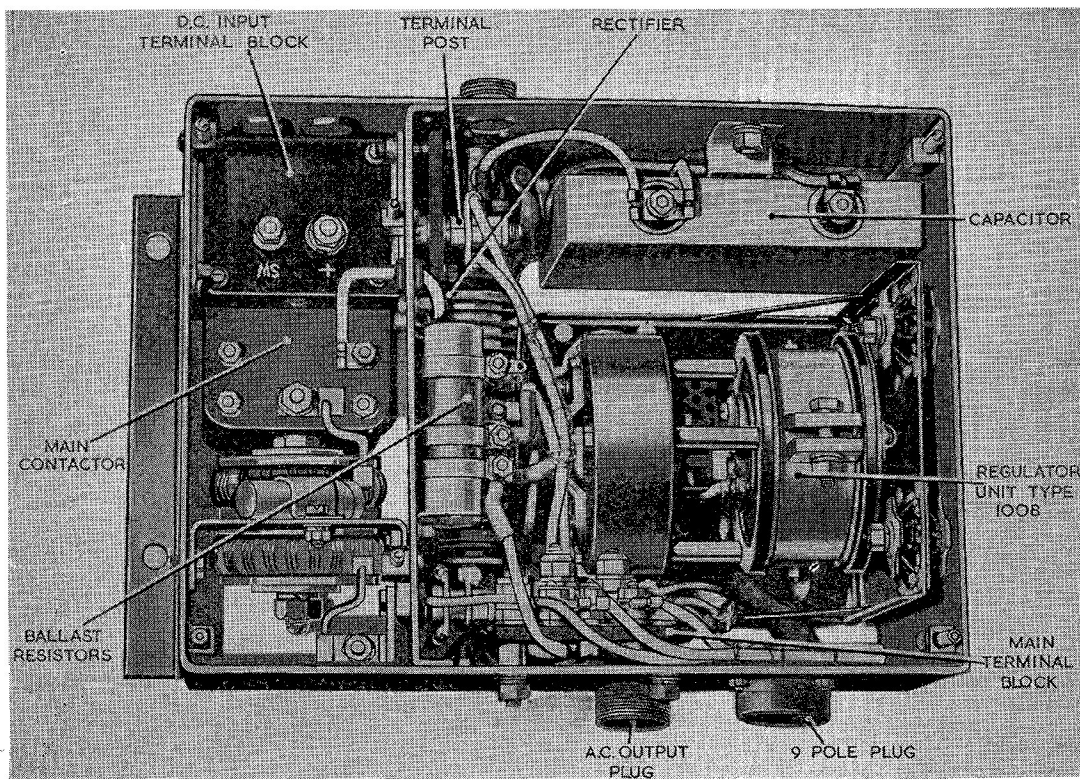


Fig. 2. Control panel with cover removed

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and fixing devices are tight and free from corrosion.

Note . . .

Attention is drawn to the danger of internal short-circuiting, caused by chafing of the cables within the control panel. Maintenance personnel are advised to take adequate precautions during servicing periods against defects of this nature occurring.

Testing

8. The control panel can only be tested in conjunction with an inverter Type 206 (Stores Ref. 5UB/6442). Run the inverter for 15 minutes on full load with an input of 25 V, d.c. With the machine warm, check that

the output voltage is within the limits of 112.1 and 117.9 volts:—

- (1) With an input of 28 V, d.c. when the full load is switched from no load to full load, and back to no load.
- (2) At three quarters full load when the applied voltage is varied from 25 to 28 V, d.c. and back to 25V.

9. Check that with an input of 25V, d.c. and full load applied, the input current does not exceed 30 amp.

10. The a.c. output voltage is adjusted externally by means of the voltage trimmer R1.

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