## VALVE ELECTRONIC CV 68

| Specification MAP/CV68/Issue 4.                    | SECURITY      |               |  |  |
|--|---------------|---------------|--|--|
| Dated 15.1.49 To be read in conjunction with K1001 | Specification | <u>Val ve</u> |  |  |
| ignoring clauses: - 5.2, 5.3, 5.8.                 | RESTRICTED    | UNCLASSIFIED  |  |  |

| <del>&gt;</del> | Indi | .cates | a, | change |
|-----------------|------|--------|----|--------|
|-----------------|------|--------|----|--------|

| TYPE OF VALVE - Magnetron  CATHODE - Indirectly heated  ENVELOPE - Copper  PROTOTYPE - E.1198 |                    |      | MARKING<br>See K1001/4<br>PACKING<br>See K1005 |
|---|--------------------|------|--|
| RATING  |                    | Note | <u>BASE</u><br>None                            |
| Heater Voltage Heater Current Nom. Operating Frequency  | 6.0<br>1.2         |      | DIMENSIONS AND CONNECTIONS                     |
| (Mo/s) Max. Anode Dissipation (W)   | 3297<br>150        | A    | See drawing on page 3                          |
| TYPICAL OPERATING CONDITIONS  Peak Anode Voltage (approx.)  (kV)                              | 8.0                | A    |  |
| Peak Anode Current (A) Field Strength (gauss) Peak Power Output (kw)                          | 7.0<br>1050<br>7.0 | A    |  |

## NOTES

- When operating under these conditions, the magnetron must be air cooled such that the temperature of the block does not exceed 140°C.
- B This valve is a selected CV38 for a particular application.

To be performed in addition to those applicable in K1001

|    | Test  | Condit | ions                               | Test  |                | Limits                |            | No.    | Note |  |
|----|---|--------|------------------------------------|---|----------------|-----------------------|------------|--------|------|--|
|    | Field<br>Strength<br>(gauss)  | ۷ħ     | Peak<br>Ia                         |   |                | Min.                  | Max.       | Tested | Mora |  |
| tu | For the following tests the magnetron block shall be maintained at a temperature of 100 $\pm$ 20°C by means of air cooling. |        |                                    |   |                |                       |            |        |      |  |
| a. | 0   | 6.0    | -                                  | Ih  | (A)            | 1.0                   | 1.5        | 100%   |      |  |
| ъ  | 1050  | 6.0    | 7.0                                | Peak Va   | (kV)           | 7.0                   | 10.0       | 100%   | 1    |  |
| 0  | 1050  | 6.0    | As in test (b).                    | Output Frequ  | ency<br>(Mc/s) | <b>3</b> 2 <b>9</b> 3 | 3300       | 100%   | 1    |  |
| đ  | 1050  | 6.0    | Varied over<br>range 5.0<br>to 9.0 | The output f smoothly wit and shall shover this rourrent. | 100%           | 1                     |            |        |      |  |
| в  | 1050  | 6.0    | 7.0                                | Peak output   | power (kw)     | 5.0                   | . <b>-</b> | 100%   | 1    |  |

## NOTE

1 - Test to be carried out under approved conditions. Modulation conditions shall be:-

Repetition Frequency 500 per sec. Pulse Length  $0.75~\mu sec.$ 

