

VALVE ELECTRONIC CV 1733

GENERAL POST OFFICE: E-IN-C (S)

(PO TCR1)

Specification: G.P.O./CV 1733/Issue 1

Dated: 11-4-47

To be read in conjunction with K 1003

SECURITYSpecificationValve

Restricted

Restricted

---> indicates a change

| | | | | |
|--|-------------|------------------------------------|--|--|
| <u>TYPE OF DEFLECTION:</u> Electrostatic <u>CATHODE:</u> Directly heated <u>ENVELOPE:</u> Unmetallised glass <u>PROTOTYPE</u> 4018 AG | | | <u>MARKING</u> See K 1003/7 | |
| <u>RATING</u> | | Note A | <u>BASE</u> See drawing on page 3 | |
| Filament voltage | (V) 0.7 | | <u>CONNEXIONS</u> See drawing on page 3 | |
| Nominal filament current | (A) 0.85 | | | |
| Anode voltage | (V) 300.0 | | | |
| Shield voltage | (V) 60.0 | | <u>DIMENSIONS</u> See drawing on page 3 | |
| X - plate sensitivity | (mm/V) 1.15 | | | |
| Y - plate sensitivity | (mm/V) 1.0 | | | |
| Afterglow of screen | (mS) 10.0 | <u>PACKING</u> See K 1003/8 | | |
| <u>NOTE</u> A. Green spot for visual work. | | | | |

TESTS

To be performed in addition to those applicable in K 1003

| | TEST CONDITIONS | | | TEST | LIMITS | | No. Tested | Note |
|-----|---|-----|--------|--|-------------------------------------|------|---------------|------|
| | If (A) | Va | Vs | | Min. | Max. | | |
| (a) | 0.85 | - | - | Vf (V) | - | 0.7 | 100% | |
| (b) | 0.85 | 300 | Read | Vs (V) | - | 70.0 | 100% | 1 |
| (c) | A sinusoidal 50 c/s voltage of 23 volts R.M.S. shall be applied between the X & Y plates via a suitable phase-splitting device, adjusted to produce a circular trace upon the fluorescent screen. | | | | - | - | 100% | |
| (d) | 0.85 | 300 | Note 2 | Diameter of circular trace (mm) | 50.0 | 60.0 | 100% | 2,3 |
| (e) | 0.85 | 300 | Note 2 | Spot diameter (mm) | - | 1.0 | 100% | 2 |
| (f) | 0.85 | 300 | Note 2 | Deviation of spot from centre of screen (mm) | - | 10.0 | 100% | 2 |
| (g) | 0.85 | 300 | Note 2 | Focus and brilliance | To be no worse than a standard tube | | 100% | 2 |
| (h) | The complete trace shall be visible in detail and of stationary pattern when a sinusoidal 5000 c/s voltage of 25 volts R.M.S. is introduced in series with the anode potential. | | | | - | - | 100% | |

NOTES

1. Vs adjusted to produce optimum brilliance and definition of the circular trace
2. Vs = value obtained in test (b)
3. The diameter of the circular trace produced shall not deviate by more than 3 mm.

OUTLINE DRAWING

