VALVE ELECTRONIC

ADMIRALTY SIGNAL AND RADAR ESTABLISHMENT

CV2868.

	Specification AD/CV2868 Issue No. 8 dated 8.11.56. To be read in conjunction with KlOOl, ignoring clause 5.2.	SECURITY Specification Valve Unclassified Unclassified							
	Indicates a change								
	TYPE OF VALVE: - Thyratron; Triode; Xenon filled.		MARKING See Klool/4						
	CATHODE: - Directly heated. ENVELOPE: - Class. PROTOTYPES: - E.E.V./AFX203; MIL/ (See Not		<u>BASE</u> USM4B						
	RATINGS (All limiting values are absolute)	Note	CONNECTIONS PIN ELECTRODE						
*	Filament Voltage (V) 2.5 Max.Filament Current (A) 6.5 Max. PIV (V) 340 Max. Peak Anode Current (A) 7.7	В	1 2 3 4 TC	f NG g f a					
	Max. Mean Anode Current (A) 0.64 Normal Mean Anode Current (A) 0.4 Min. Grid Control Ratio 40		TOP CAP See Kl001/A.1/D.5.5.						
	Max. Arc-drop at Ia = 0.4A (V) 11.0 Approx.Grid Volts to cut- off Ia (V) -1.5		DIMENSIONS See Kl001/A.1/D.1						
	Ambient Temperature Range (°C) -55 to +70		Dimension (mm) M		Min.	Max. 176 57.15			

NOTES

- A. CV.2868 is electrically the same as the U.S.A. valve CIA, but it should be noted that the former can be dimensionally larger than the latter as the specified maximum permissible values of the dimensions A and B for the CIA are, respectively, 172 and 43 mm.
- B. Filament heating time: 20 Secs(min.)
- C. Measured with respect to the centre of the filament at

Va = 75V r.m.s.

CV2868.

TESTS

To be performed in addition to those applicable in K1001. The nominal frequency of alternating voltages shall be 50 c/s. For all tests. $\mathbf{Vf} = 2.5 \text{ r.m.s.}$ Filament heating time = 20 secs.

	Test Conditions			Lim	its	No.	
	Va (V)	V _B (V)	Test	Min.	Max.	Tested	Note
а	_	-	If (A)	-	6.5	100%	
ь	DC and adjusted to give Ia = 0.	O .4A	DC Arc Drop (V)	-	11.0	100%	1.2
С	110 r.m.s.	+ 2.0 Then increase Vg in a negatidirection unti Ia is just cut			ween 35 and 75	100;6	1
đ	llo r.m.s. Then decreas Va until Ia is just cut off.		Va (r.m.s.) at which Ia is just cut off. (V)	-	45	100%	1
e	135 r.m.s.	Increase from zero in a negative direction unt Ia is just cu off.	off Ia. (V)		5•3	100%	1
f	A.C. Property and adjusted to give Ia = 0.64A at Vg = 0	Adjusted (See Note 3)	Grid Current Ig (/UA)	-	5.0	100%	1,3

Am UL.

NOTES

- 1. The anode and grid circuit returns shall be to the centre tap of the filament and Va and Vg shall be measured with respect to this point. Resistance in the anode circuit shall suffice to ensure that Ia does not exceed 0.64A in any test. In all tests except 'f', Rg = 1000 ohms.
- 2. Operate valve for 1 minute before taking the reading.
- 3. With Ia at 0.64A and with a grid resistance of value Rgl = 1 Megohm, the grid supply voltage Eg shall be increased from zero in a negative direction until it just suffices to stop Ia, and its corresponding numerical value is Egl. The grid supply voltage shall then be reduced to zero, the grid resistance reduced to zero, and the anode current again made 0.64A. Then the grid supply voltage shall again be increased in the negative direction until it just suffices to stop Ia, and its numerical value is Eg2. The grid current Ig shall be calculated from the equation:-

 $Ig = \frac{Egl - Eg2}{Rgl}$, the value of Rgl being 1 Megohm.

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION AD/CV2868 ISSUE 8 DATED 8.11.56

AMENDMENT No.1

Page 2 Tests, Clause (f)

N.230078

In Test Conditions, Va Column amend
 "D.C." to read "A.C."

T.V.C. for A.S.W.E.

March 1966