

ADMIRALTY SIGNAL ESTABLISHMENT

Specification AD/CV74/Issue 4. Dated 13.11.46. To be read in conjunction with K1001, ignoring clause:- 5.2.	<u>SECURITY</u>	
	<u>Specification</u> Restricted	<u>Valve</u> Unclassified

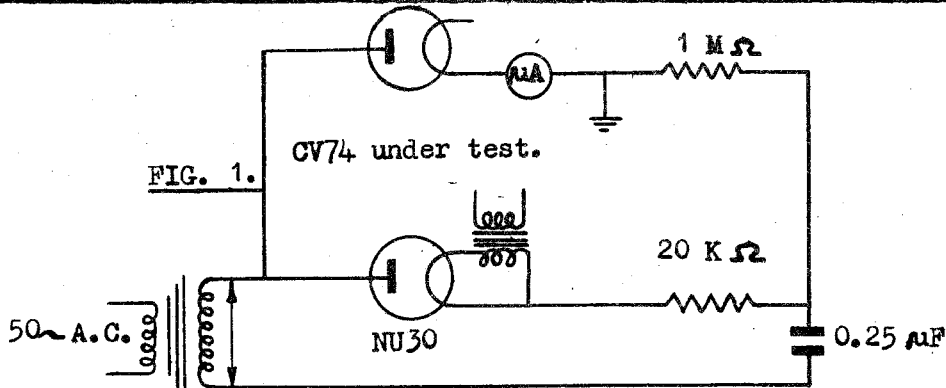
<u>TYPE OF VALVE:-</u> High Vacuum Rectifier, half-wave.			<u>MARKING</u>		
<u>GATHODE:-</u> Directly Heated, Thoriated Tungsten.			See K1001/4.		
<u>ENVELOPE:-</u> Hard Glass.			<u>BASE</u>		
<u>PROTOTYPE:-</u> (A. S. E. Type XP).			GES Connections:- Base thread : F Base button : F TC : A		
<u>RATING</u>			<u>TOP CAP</u>		
		Note	Dimension	Min.	Max.
Filament Voltage (V)	4.0	A	Dis. mm	8.79	9.4
Filament Current (A)	11.75		Overall length mm	13.97	16.51
Min. Total Emission (A)	2.5		<u>DIMENSIONS</u>		
Max. Continuous Anode Dissipation (W)	50		See K1001/Al/D1		
Max. Peak Inverse Voltage (kV)	40	B	Dimension	Min.	Max.
Max. Anode Voltage RMS (V)	14,500		A mm	-	250
Max. Rectified Current (mA)	80		B mm	-	60
<u>NOTES</u>			<u>MOUNTING</u>		
A. When dissipating 50 W the anode shows no visible sign of heating.			See Note C.		
B. At the maximum input voltage of 14.5 kV, in a single-phase half-wave circuit with a normal condenser input-filter.			<u>PACKING</u> <u>PACKAGING</u>		
C. If possible, the holder of the valve should be slightly sprung, to avoid the transmission of sharp shocks to the valve. This is on account of the intrinsic brittleness of carbonised tungsten filament.			See K1001/7. SEE K1005		

TESTS

To be performed in addition to those applicable in K1001 and in the order given below.

	Test Conditions		Test	Limits		No. Tested
	Vf (V)	Va		Min.	Max.	
a	4.0	0	If (A)	11	12	100%
b	0	-50 kV	High voltage. Suitable circuit for test shown in Fig. 1.	No sparking or field currents exceeding 20 μ A, as indicated by the microammeter, to be observed		100%
c	4.0 Time : 5 mins.	Adjusted so that anode dissipation = 50 W. (Va about 230 V).	Vacuum.	No visible ionisation glow and no need to re-adjust Va in the last 3 mins.		100%
d	4.0	3 kV applied momentarily. See K1001/AV.	Emission (A)	2.5	-	100%

FIG. 1.



Output variable up to 18 kV.RMS.