VALVE ELECTRONIC CV 1602

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

(POVT 36)

Specification: G.P.O./CV1602/Issue 1 Dated: 25.4.47 To be read in conjunction with K 1001	SECURITY Specification: Restricted Valve: Restricted

——> indicates a change

TYPE OF VALVE: Vacuum half-wave rectifier, water-cooled
CATHODE: Directly heated tungsten filament
ENVELOPE: Metal-glass
PROTOTYPE CAR4

MARKING
See K1001/4
Additional markings required (See Notes A,B,C)
Serial No. .....
Filament Volts .....

RATING		Note
Filament voltage (V)	As marked	B
Nominal filament current (A)	72.5	
Max. peak inverse voltage (kV)	37.5	
Max. D.C. Output voltage (kV)	12.5	
Max. rectified output current (A)	2.0	
Max. anode dissipation (kW)	10.0	
Min. rate of water flow (gals/min)	2.0	

BASE
None

CONNEXIONS
See drawing on page 3

DIMENSIONS
See drawing on page 3

PACKING
See K1001/7.3

NOTES

A. The serial number will be allotted by the Inspecting Officer

B. The Marked Voltage is defined on page 2, test (a)

C. It is not essential that the additional markings shall appear within the frame.

TESTS

To be performed in addition to those applicable in K1001

	TEST CONDITIONS		TEST	LIMITS		No. Tested	Note
	Vf(V)	Va(DC)		Min.	Max.		
(a)	Read	-	Vf Minimum required for peak emission of 7 amps To be known as "Marked Voltage" (V)	17.5	20.0	100%	1
(b)	M.V.	0	If (A)	70.0	75.0	100%	
(c)	M.V.	15 kV	D.C. output per valve (A)	2.0	-	100%	2

NOTES

1. (a) The voltage applied to the anode shall be sufficient to draw from the filament a peak emission of 7 amps.
The test shall be performed in accordance with K1001/A V.

   (b) Alternatively, the voltage applied to the anode shall be sufficient to draw from the filament a peak emission of 3 amps, and the filament voltage required for this emission shall be multiplied by 1.13 to determine the test result.

2. The test shall be conducted in a bi-phase half-wave circuit, and its duration shall be 30 minutes.
No sparking or flash-over shall occur.

CV 1602

OUTLINE DRAWING.