

VALVE ELECTRONIC CV 439

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

Specification: G.P.O/CV.439/Issue 1. Dated: September, 1950. To be read in conjunction with K 1001	<u>SECURITY</u>	
	<u>Specification</u> Unclassified	<u>Valve</u> Unclassified

—————> indicates a change

<u>TYPE OF VALVE:</u> Electrostatic Deflection and Focus <u>SCREEN:</u> WWK <u>ENVELOPE:</u> Bulb internally coated with conductive coating <u>PROTOTYPE</u> 22/11 BXA			<u>MARKING</u> See K 1001/4	
			<u>Base</u> B12D	
<u>Rating</u>		<u>NOTE</u>	<u>Connections</u>	
Heater Voltage (V)	4.0		<u>Pin</u>	<u>Electrodes</u>
Heater Current (A)	1.05		1	G
Max. final Anode Voltage (Kv)	6.0		2	C
			3	H
			4	H
			5	A1
			6	A2
			7	Internal coating
			8	X1
			9	Y1
			10	A3
			11	Y2
			12	X2
<u>TYPICAL OPERATING CONDITIONS</u>				
Final Anode Voltage (Kv)	6.0			
First Anode Voltage (Kv)	2.0			
X - plate sensitivity (mm/v)	1150			
	Va3			
Y - plate sensitivity (mm/v)	1950			
	Va3			
			<u>Dimensions</u> (See drawing on page 3.)	

	TEST CONDITIONS					TEST	LIMITS		No. TESTED	NOTE
	Vh	Va3 (Kv)	Va2	Va1 (Kv)	Vg		MIN.	MAX.		
a						<u>Capacitances</u> 1. Each X or Y plate to all other electrodes. 2. One X plate to one Y plate. 3. Grid to all other electrodes.	Measurements to be recorded and collated.  Limits to be specified later.	100%		
b	4.0	0	0	0	0	Ih (A)	.95	1.15	100%	
c	4.0	6.0	Adjust for optimum focus	2.0	Adjust as convenient	Va2 (V)	800	1100	100%	
d	4.0	6.0	ditto	2.0	Adjust to cut-off	Vg (V)	-40	-80	100%	
e	4.0	6.0	ditto	2.0	Adjust	<u>SCREEN EFFICIENCY (c/w)</u>	1.5	-	100%	1.
f	4.0	6.0	ditto	2.0	ditto	<u>DEFLECTION SENSITIVITY</u> 1. X plate (mm/v) 2. Y plate (mm/v)	1800 Va3	2100 Va3	100%	
g	4.0	6.0	ditto	2.0	ditto	<u>Deviation of spot from centre of screen (mm)</u>	-	10	100%	
h	4.0	6.0	ditto	2.0	ditto	<u>SPOT SIZE (mm)</u>	-	1	100%	
j	0	0	0	0	0	<u>ELECTRODE INSULATION RESISTANCE</u>  1. g/c (MΩ) 2. g/H (MΩ)	10		100%	
k	Set Vg to Cut off as per test d Then readjust as Note 1.					Reduction in V mod as compared with test d	25	45.	100%	1.

NOTES 1. Vg adjusted to give 5 e.f.c. on a 20 cm/16 cm raster.

