Valve Electronic **C.V.1069**

MINISTRY OF SUPPLY D.L.R.D./R.A.E.

SPECIFICATION MOS/CV1069 ISSUE NO. 7 DATED 14.9.59 To be read in conjunction with K1001 & BS1409	SECURITY	
	SPECIFICATION	VALVE
	Unclassified	Unclassified

→ Indicates a change

TYPE OF VALVE:- Voltage Stabiliser

CATHODE:- Cold

ENVELOPE:- Glass unmetallised

PROTOTYPE:- STV 280/80

MARKING

See K1001/4

RATINGS

			NOTES
Max. Striking Voltage	(V)	363	
Max. Cathode Current	(mA)	80	
Nominal Operating Voltage at Ik = 40 mA			
Anode 1 - Cathode	(V)	73	
Anode 2 - Cathode	(V)	143	
Anode 3 - Cathode	(V)	205	
Anode 4 - Cathode	(V)	282	

BASE

B5 See K1001/AIV/Drg 5.2

CONNECTIONS

PIN	ELECTRODE	
1	Anode 4	a4
2	Cathode	k
3	Anode 2	a2
4	Anode 3	a3
5	Anode 1	a1

DIMENSIONS

See K1001/A1/Drg 1

DIMENSIONS	MIN	MAX	
"A" Overall length	-	150	←
"B" Diam.	-	63	←

Packaging

K1001/14

To be performed in addition to those applicable in K1001.

The valve, unless otherwise stated, shall be tested in the circuit shown in Fig.1. Should the valve fail in any of the following tests, it shall be retested after a period of 15 minutes operation at Ik = 80 mA.

	Test	Test Conditions	Insp. Level	Symbol	Limits Min	Limits Max	Unit
	Va 4 Strike Voltage	The applied voltage to be increased from zero until current flows.	100 %	Vs	-	363	V
	Operating Voltages	Current through A = 40 mA. After 15 minutes operation the running voltages to be measured.	100 %				
		1) Va 1		Va 1	60	87	V
		2) Va 2		Va 2	120	167	V
		3) Va 3		Va 3	185	226	V
		4) Va 4		Va 4	250	314	V
	Impedance	Record Va 3 with current through A adjusted for a) 80 mA, b) 20 mA and c) 10 mA.	100 %				
		1) Va 3 @ 80 mA - Va 3 @ 10 mA.		Va 3	-	14	V
		2) Va 3 @ 20 mA - Va 3 @ 10 mA.		Va 3	-	2	V
→	Noise		100 %				
	A calibrated amplifier detector having a substantially uniform response over the range 50 - 5000 c.p.s. shall be connected between A4 and the cathode. The current through A shall be varied from 10 mA to 80 mA. At no point in the range shall the noise input to the amplifier exceed 100 mV r.m.s.						

FIG.1. Circuit Drawing

NOTES.
A = LOW RESISTANCE MILLIAMETER
R1 = R2 = R3 = 100K Ω.