

MINISTRY OF SUPPLY (S.R.D.E.)

Specification MOS/CV287/Issue 6 Dated:- 11.1.52 To be read in conjunction with K1001 ignoring clause 5.2. →				<u>SECURITY</u>		
				<u>Specification</u> Unclassified		<u>Valve</u> Unclassified
→ indicates a change						
<u>TYPE OF VALVE:-</u> Gas filled voltage stabiliser. <u>CATHODE:-</u> Cold. <u>ENVELOPE:-</u> Glass-unmetallised. <u>PROTOTYPE:-</u> None.				<u>MARKING</u>  See K1001/4		
<u>RATING</u>				Note	<u>BASE</u> B7G	
					Pin	Electrode
→ Max. anode take-over voltage (V) 170				A	1)	Cathode
→ Max. anode current (mA) 20					2)	
Min. anode current (mA) 2					3)	
→ Mean voltage drop across valve operating at 10mA. (V) 150				A	4	Priming Anode
Max. priming anode current (mA) 0.5				B	5)	Anode
					6)	
					7)	
<u>NOTES</u>				<u>DIMENSIONS</u>		
A. These conditions apply with the priming electrode connected to 240V positive through 0.25 MΩ.  B. If not required for use, the priming electrode shall be joined to the main anode through a resistance of 70,000Ω.				See K1001/AI/D4		
				Dimensions	Min.	Max.
				A. mm.	-	54
	B. mm.	-	19			

TESTS

To be performed in addition to those applicable in K1001.

	Test Conditions			Test	Limits		No. tested
					Min.	Max.	
a	Priming anode voltage	Main anode voltage	Main anode current (mA)	The valve must conduct.			100%
	240V through 0.25 M $\Omega$	120V	-				
b	240V through 0.25 M $\Omega$	Increased until current flows	-	Anode take-over voltage (V)	-	170	100%
c	240V through 0.25 M $\Omega$	Adjust	10	Voltage drop between main anode and cathode (V)	145	160	100%
d	240V through 0.25 M $\Omega$	Adjust	Changed from 2 to 20mA	Regulation (V)	-	5	100%
e	The valve is to be tested for freedom from noise during operation. For this purpose, a calibrated amplifier-detector, having a response within $\pm 2$ db of its response at 400 c/s over the range of 50-5000 c/s, is to be connected between the anode and cathode. The cathode current is to be varied slowly from 20 mA to 2 mA and at no point in this range must the R.M.S. noise input voltage to the amplifier exceed 15 mV.						100%