## MINISTRY OF SUPPLY - DLRD(A)/TRE

## VALVE ELECTRONIC CV403

Specification MOS(A)/CV403	SECUR	SECURITY			
Issue 3 Dated 26.11.52 To be read in conjunction with K1001, excluding clauses 5.2 and 5.8.	Specification UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED			

				_
_	Indi	cates	a	change

TYPE OF VALVE - Enclosed Triggered Spark Gap	<del>                                     </del>		MARI	(ING	
CATHODE - Cold			See K1001/4		
ENVELOPE - Glass - unmetallised (Protected -	See No	te B)	·	<del></del>	
PROTOTYPE - VX6113			<u>BASE</u> B15A3		
RATING		Note	CONNE	CTIONS	
Max. Trigger Voltage (kV) Min. Working Voltage (kV) Peak Output Power (kW)	6.0 9.0 470	A	Pin  1 2 to 7 8 9 to 14 15 TC	Electrode Trigger Omitted Anode Omitted No Connection Cathode	
			See K1001/A1/  DIMEN See Drawing,	NSIONS	

## NOTES

A. Measured under the following conditions:-

Main Gap Voltage = 10,2 kV peak Pulse Length = 0.5 µsec. Repetition Frequency = 800 pps.

Constant current charging is used and the load and line are matched.

B. The valve shall be provided with adequate splinter proofing.

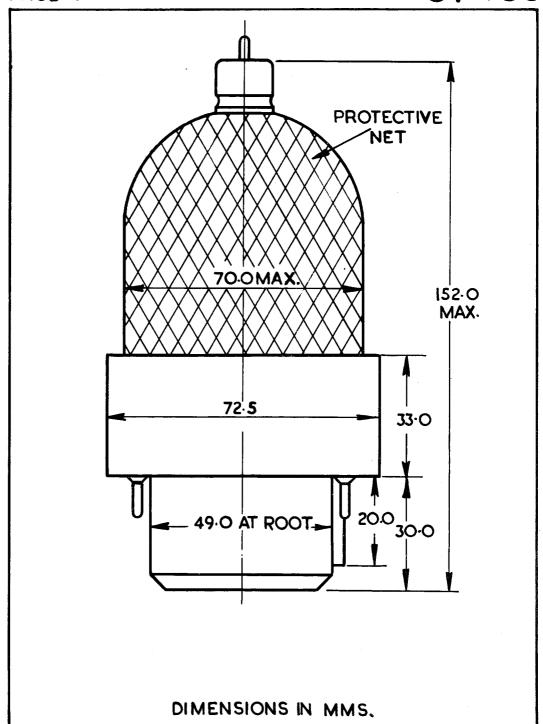


## To be performed in addition to those applicable in K1001

	Test Conditions	Test	Limi Min.		No. Tested	Note
a	Cathode Voltage = -6.0 kV max.  Trigger voltage shall be derived from an approved pulse generator supplying a positive pulse of 10 kV ± 10% on open-circuit at a repetition frequency of 800 pps and with a build-up time to max. voltage of 0.5 - 0.75/usec. The line shall have an impedance of 50 ohms and designed for a pulse length of 0.5 usec, and shall be charged through a choke of 180 H. The external load shall be matched to the line.	A spark shall occur which also delivers power to the load circuit.			100%	
b	Cathode Voltage = -10.2 kV Other conditions as in Test (a).	Trigger breakdown voltage (kV)	-	6.0	100%	
C	Cathode Voltage = ~9.0 kV Other conditions as in Test (a).	1. Jitter (usec) (Total lateral movement of the trailing edge of the monitored pulse). 2. Fluctuations of amplitude.	-	0.2 ±10%	100%	
đ	Cathode Voltage = -11.2 kV Other conditions as in Test (a).	1. Jitter (usec) (Total lateral movement of the trailing edge of the monitored pulse). 2. Fluctuations of amplitude.	-	0 <b>.</b> 2 <u>+</u> 10%	100%	
е	With the set-up as in Test (a), the cathode voltage shall be increased until unstable operation occurs.	Cathode Voltage at (kV) which irregular breakdown occurs at a rate of between 1-6 times per sec. (i.e. breakdown not correlated with the trigger pulse).	-14.0	-	100. or S.	

NOTE

1. Test (a) must be performed first in the test schedule.



CV403/3/3