VALVE ELECTRONIC **CV2174**

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

Specification: GPO/CV 2174/Issue 1. Dated: November 1950 To be read in conjunction with K 1001	SECURITY Specification: Unclassified Valve: Unclassified

——→ indicates a change

TYPE OF VALVE: 3 electrode Gas-filled Relay
CATHODE: Cold
ENVELOPE: Glass
PROTOTYPE G 240/2D

MARKING

See K 1001/4

PACKING

See K 1005

RATING

		NOTE
Control gap breakdown Voltage(nom)(V)	75	
Control gap maintaining voltage(nom)(V)	65	
Main gap breakdown voltage (min)(V)	240	
Main gap maintaining voltage(nom)(V)	90	
Transfer current @ Va = 200V (µA)	10	
Max direct cathode current (mA)	30	
Max Peak cathode current (mA)	50	
Optimum operating current (mA)	20	

BASE

I.O. wafer metal shell.
See K1001/A1V/D2
M Dimension (iv) applies

PIN	ELECTRODE
1	Metal base shell
2	Not connected
3	Anode
4	Not connected
5	Trigger
6	Internally strapped
7	
8	Cathode

DIMENSIONS

See K 1001/A1/D1

	mms. Min.	mms. Max.
A		98.4
B	-	33.3

CV2174

TESTS

To be performed in addition to those applicable in K 1001

	TEST CONDITION	TEST	LIMITS		No.
			Min.	Max.	TESTED
a	A D.C. voltage not exceeding 65 volts shall be applied between trigger electrode and cathode, the trigger positive with anode floating. This voltage shall be increased steadily at a rate not exceeding 25 volts per sec. until the valve strikes.	Control gap striking voltage (Volts D.C.)	-	90	100%
b	With conditions as for test a adjust control gap current to 20 mA	Control gap maintaining voltage (Volts D.C.)	-	75	100%
c	A D.C. voltage not exceeding 200 volts shall be applied between anode and cathode, the anode positive and with trigger floating. This voltage shall be increased steadily at a rate not exceeding 25 volts per sec. until the valve strikes.	Main gap breakdown voltage (Volts D.C.)	230	-	100%
d	With conditions as for test c adjust the main gap current to 20 mA.	Main gap Maintaining voltage (Volts D.C.)	-	110	100%
e	With 200 volts D.C. applied to the anode and with a microammeter in series with a 10 megohm resistance connected in series with the trigger electrode the voltage to this electrode shall be increased steadily until the valve strikes. The current flowing in the trigger/cathode circuit immediately before the valve strikes shall not exceed the value specified.	Transfer current (μA)	-	15	100%

NOTES

1. The ripple content of the D.C. supply for tests a to e shall not exceed 0.5 per cent.
2. A protective resistance of 5000 ohms shall be connected in series for all these tests.

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AMENDMENT NO. 1.

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RATINGS

Against "Main gap break down voltage (min)"

amend 240 to read 230

November, 1952.

T.V.C. Office
(for G.P.O.)

N.6101.