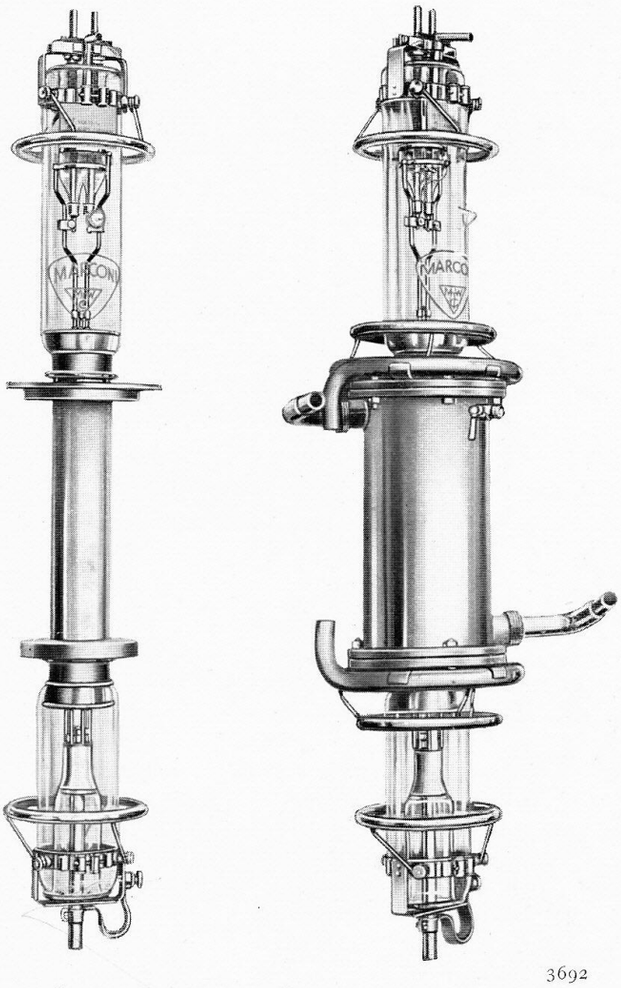
Transmitting Valve

TYPE C.A.T.4

(Cooled Anode)



3692

(*Approximate overall dimensions :* 800 × 125 *m/m.*)

A double ended transmitting valve in which the anode forms part of the envelope, designed for cooling by water circulated in direct contact with the anode. The rate of flow should not be less than 2½ gallons per minute.

Air cooling of the grid seal and the anode to glass seals is essential.

This valve is designed for use on short wavelengths. It is capable of operation at a maximum input under normal oscillating conditions on telegraphic load of 1.6 amperes mean anode current at 8,000 volts D.C., at wavelengths exceeding 15 metres. At lesser wavelengths the anode voltage should be reduced.

The maximum continuous anode dissipation is 8.0 kw.

Marked Volts. Individual valves are marked with the filament voltage which gives 10 amperes emission current at 90% saturation.

Approximate Data :

Filament volts	... 18—20	Emission amperes at 90% saturation	10
Filament current (amps.)	... 75	*Amplification factor ...	45
Anode volts (max.) D.C. ...	... 10,000	*Impedance (ohms)	5,500

* *Taken about anode volts* 8,000 *and grid volts* 0.

Code Word : IWCIS

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MARCONI OFFICES, ELECTRA HOUSE,
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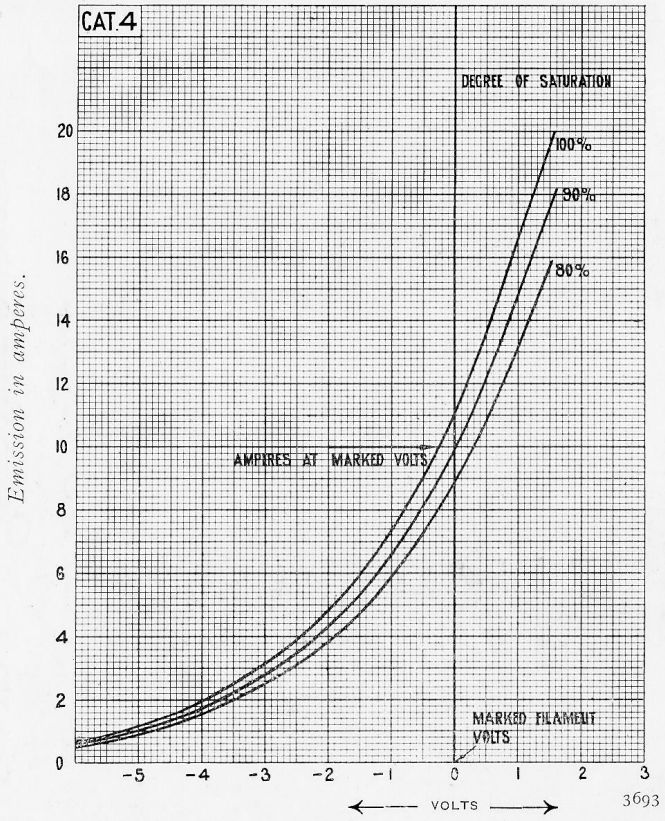
LONDON, W.C. 2.

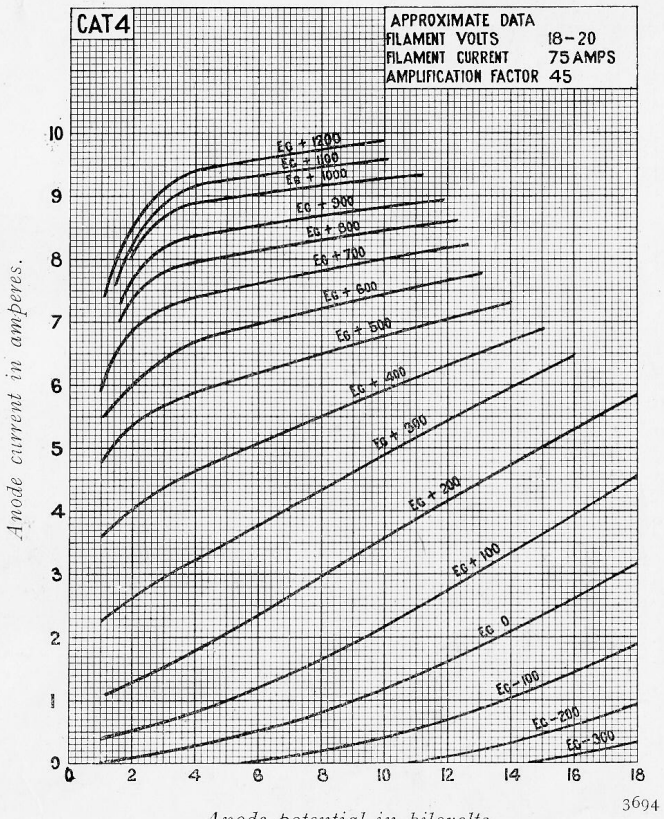
JANUARY, 1934.

Variation of emission with filament volts as related to marked filament volts for various degrees of saturation of emission current.



Marked volts to be decreased by above amount.

Marked volts to be increased by above amount.



Anode potential in kilovolts.

Taken at filament volts to give 10 amperes emission at 90 per cent. saturation.

Characteristic Curves of Average Valve.

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