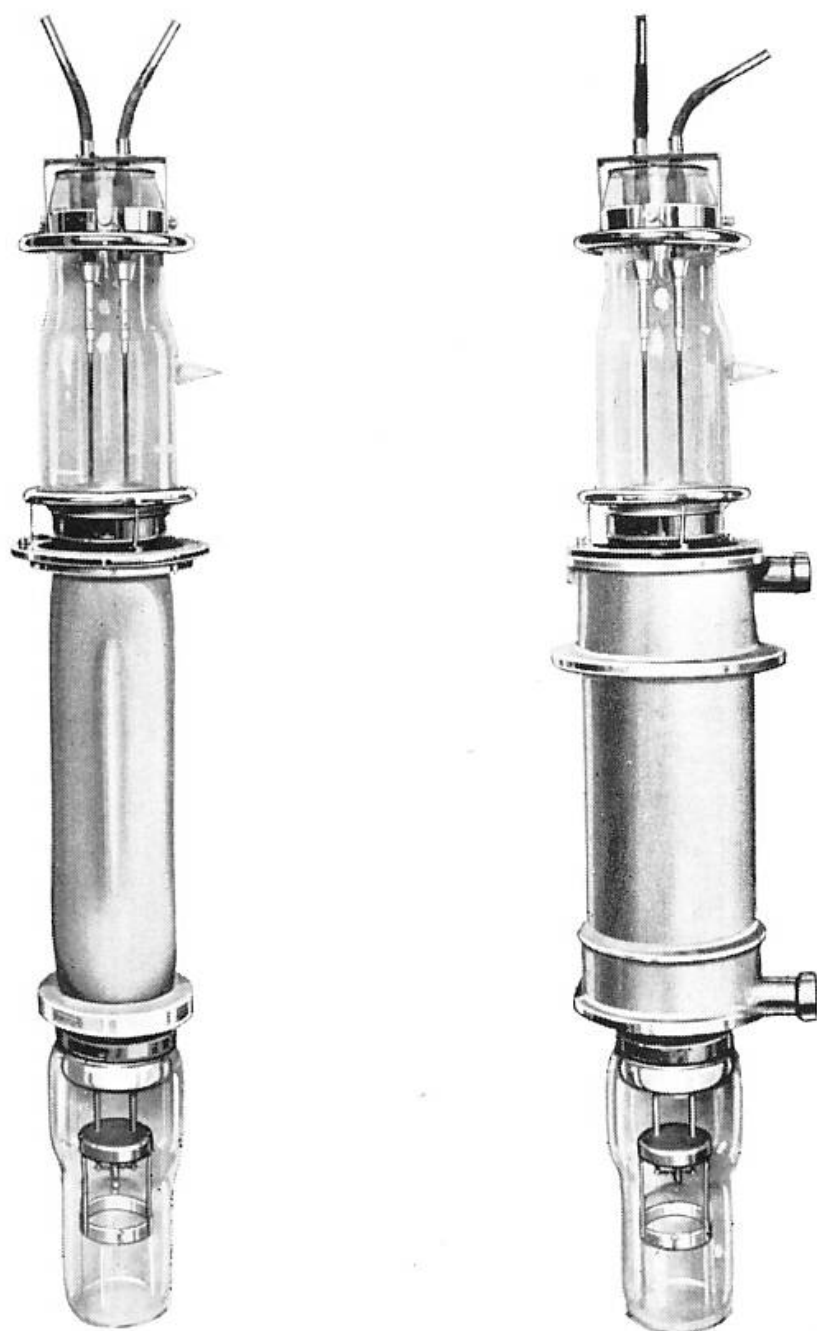


Rectifying Valve

TYPE C.A.R.6

(Cooled Anode.)



(Approximate overall dimensions : $1,220 \times 180$ m/ms). ³⁸²³

A cooled anode rectifying valve of double ended construction capable of operating in rectifier circuits where the output voltage does not exceed 20,000 volts D.C.

The anode forms part of the valve envelope. For the purpose of cooling, water flowing at the rate of not less than 5 gallons per minute should be circulated in direct contact with the anode.

When used in suitably designed circuits the following maximum outputs from the circuits may be obtained:—

Three phase half wave circuit : 17 amperes at 20 k.v. D.C.

Three phase double " Y " circuit : 34 amperes at 20 k.v. D.C.

These are maximum outputs based on the assumption that the smoothing circuit is so designed and arranged that the ratio of the total emission required from all valves to the D.C. output of the rectifier unit does not exceed 3.5/1 ; the valves being operated at 90% of the saturated emission. The maximum permissible continuous anode dissipation in operation is 20 k.w.

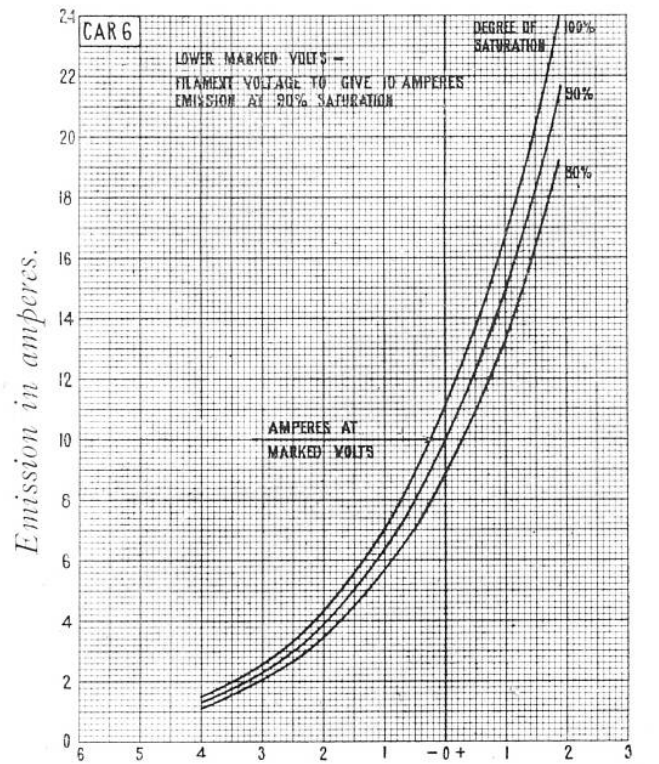
Marked Volts. Individual valves are marked with the filament voltages which give 10 and 20 amperes emission currents at 90 % saturation.

Approximate Data :

| | | | | | | | | |
|--------------------------|----|----|----|----|----|----|----|--------|
| Filament Volts | .. | .. | .. | .. | .. | .. | .. | 20 |
| Filament Current (amps.) | .. | .. | .. | .. | .. | .. | .. | 120 |
| Output Volts (max.) D.C. | .. | .. | .. | .. | .. | .. | .. | 20,000 |

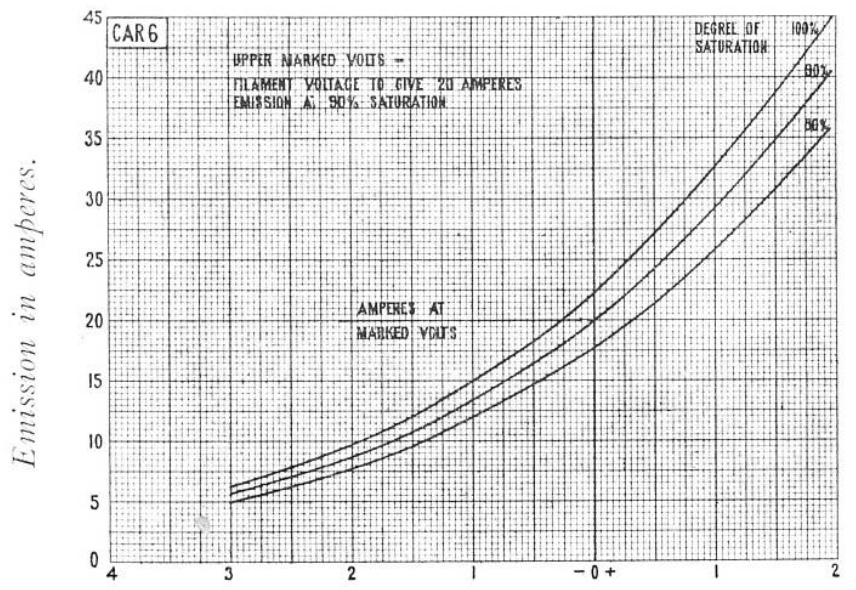
Code Word : IWDUP.

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

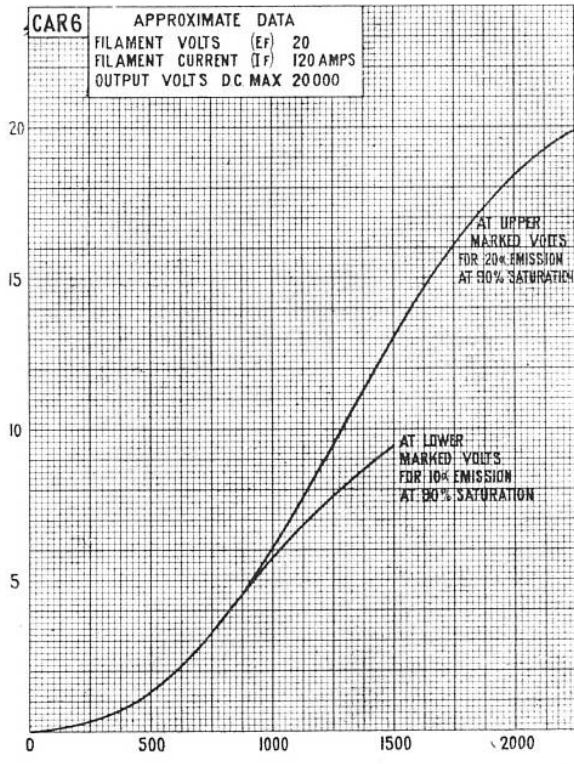


← VOLTS →
 Marked volts to be decreased by above amount. Marked volts to be increased by above amount.

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



← VOLTS →
 Marked volts to be decreased by above amount. Marked volts to be increased by above amount.



Anode potential in volts.

Characteristic Curves of Average Valve.

TYPE C.A.R.6