# EHT 15

**MERCUry VAPOUR RECTIFIER**

## Rating

- Filament Voltage: 4.0
- Filament Current (Amps): 25
- Maximum Inverse Peak Anode Voltage (kV): 30
- Peak Anode Current (Amps): 15

## Dimensions

- Maximum Overall Length: 470 mm.
- Maximum Diameter: 150 mm.

## Basing

- Top Connexion (Goliath Cap): Cathode
- Bottom Connexion (Special Cap): Anode

## General

The EHT 15 is a high voltage half-wave rectifier of the hot mercury vapour type. It is capable of rectifying up to 30 kw. of power at a D.C. voltage of 10,000—12,000. Owing to the very low and constant voltage drop in the rectifier good regulation is obtained with high efficiency. The valves will give long and efficient service provided that the operating instructions below are observed and the rated peak current and reverse anode voltages are not exceeded.

## Application

Standard smoothing circuits may be used with the valves, whether operated singly or in pairs for full-wave rectification. The latter arrangement is recommended as being more efficient. To guard against damage from overload it is necessary to include a fuse as a connexion to the anode cap and this should be mounted as close to the anode cap as possible. To avoid the possibility of flash-back on reverse voltage, the temperature of the rectifier should never be allowed to exceed 40° C.
For this reason it is essential that the valve be mounted in a cool well-ventilated position, and if the air temperature is liable to reach a high value a draught from an ordinary domestic fan should be applied to the bulb. The cathode voltage should be 4.0 and not be allowed to fall below this value.

IMPORTANT NOTE.

It is important that the cathode be allowed to attain full operating temperature before the H.T. voltage is applied to the anode, and a delay of at least a minute should elapse before the anode supply is switched on. When switching off, disconnect the H.T. supply before the cathode supply.

When rectifiers are kept as spares it is recommended that they be run under operating conditions at frequent intervals to ensure that they have suffered no deterioration through being kept in stock.