

# MERCURY VAPOUR RECTIFIER

# BD12

June 1966

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**ENGLISH ELECTRIC**

## ABRIDGED DATA

Hot Cathode Full Wave Mercury Vapour Rectifier

Peak Inverse Anode Voltage .. .. .	1.0 kV Max
Peak Anode Current (per anode) .. .. .	50 A Max
Mean Anode Current (per anode) .. .. .	16.5 A Max

## GENERAL

(See also Preamble to Rectifier Section of this Catalogue)

### Electrical

Cathode .. .. .	Indirectly Heated
Heater Voltage .. .. .	5.0 V
Heater Current .. .. .	35 A
Cathode Heating Time (Minimum) .. .. .	5.0 min
Voltage Drop (Approx) .. .. .	12 V
Condensed Mercury Temperature Rise above Ambient (Approx):	
At no load .. .. .	52 °C
At full load .. .. .	60 °C

### Mechanical

Overall Length (excluding leads) .. .. .	16.437 inches (417.5 mm)	Max
Overall Diameter .. .. .	6.437 inches (163.5 mm)	Max
Net Weight .. .. .	3½ pounds (1.6 kg)	Approx
Mounting Position .. .. .	Vertical, base down	
Connections .. .. .	Flexible leads	

## MAXIMUM AND MINIMUM RATINGS

(Absolute Values)

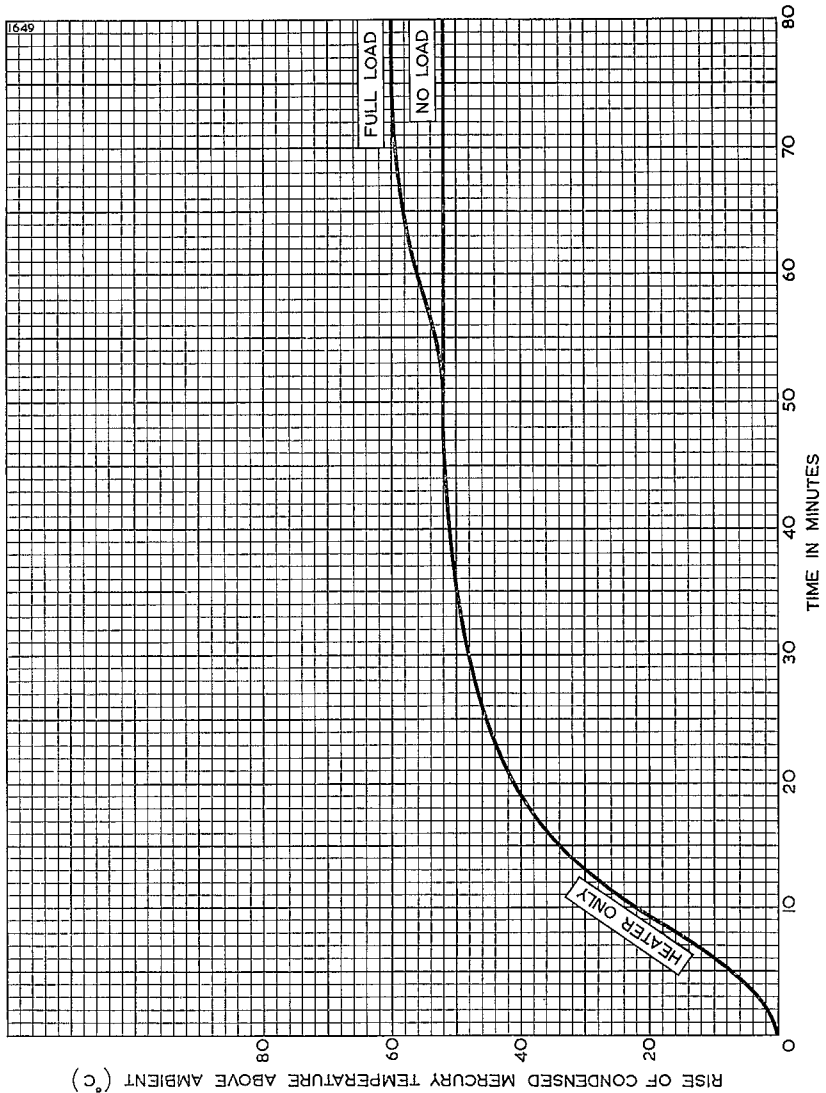
Peak Inverse Anode Voltage .. .. .	1.0 kV Max
R.M.S. Voltage between Anodes .. .. .	250 V Max
Peak Anode Current (per anode) .. .. .	50 A Max
Mean Anode Current (per anode) (averaging time 30sec max)	16.5 A Max
Surge Anode Current (per anode) (0.1sec maximum duration)	500 A Max
Condensed Mercury Temperature (on load) .. .. .	40 °C Min
	100 °C Max

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**HEATING CHARACTERISTIC**



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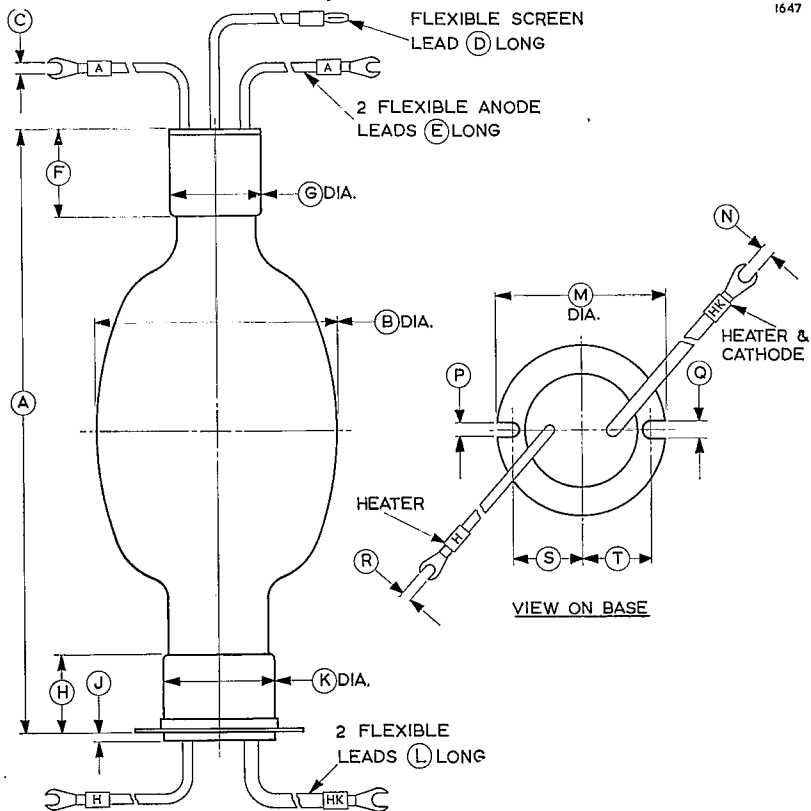
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### OUTLINE



1647

Ref.	Inches	Millimetres	Ref.	Inches	Millimetres
A	15.625 ± 0.500	396.9 ± 12.70	K	2.875 Max	73.03 Max
B	6.437 Max	163.5 Max	L	7.750 ± 0.250	196.9 ± 6.35
C	0.265	6.73	M	4.375 Max	111.1 Max
D	6.250 ± 0.250	158.8 ± 6.35	N	0.328	8.33
E	7.750 ± 0.250	196.9 ± 6.35	P	0.344	8.74
F	2.250	57.15	Q	0.437	11.10
G	2.875 Max	73.03 Max	R	0.265	6.73
H	2.000	50.80	S	1.813	46.05
J	0.250 ± 0.062	6.35 ± 1.57	T	1.813	46.05

Millimetre dimensions have been derived from inches.

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