



# Half-Wave Gas-Filled Rectifier

Code: 2G/473C (CV2399)

The 2G/473C is a xenon-filled, half-wave rectifier designed for operation in high voltage circuits where extremes of ambient temperature are encountered.

It is well suited for mobile applications since its construction permits the valve to be mounted in any position and heaters, fans and thermostats are not required for the close control of bulb temperature.

A mercury-vapour rectifier with similar electrical ratings and dimensions is available under the code 4049D (CV5).

## CATHODE

Oxide-coated filament

Filament voltage	4	V
Nominal current	11	A
Minimum cathode heating time	30	sec

## DIMENSIONS

Maximum overall length	258	mm
Maximum bulb diameter	60	mm
Base	Goliath Edison Screw	
Top cap	CT9	
Net weight	240	g
Mounting position	Unrestricted	

## MAXIMUM RATINGS

Maximum peak inverse voltage	13	kV
Maximum peak anode current	6	A
Maximum average anode current	1.25	A
Maximum fault anode current	25	A
Maximum duration of fault anode current	0.1	sec
Maximum voltage drop	13	V
Maximum frequency	150	c/s
Ambient temperature range	-55 to +75 °C	

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## TYPICAL OPERATING CONDITIONS

Circuit	No. of Valves	Maximum A.C. Input Voltage (Vr.m.s.)	Maximum D.C. Output Voltage (V)	Maximum D.C. Output Current (A)
Single Phase Full Wave Circuit No. 1	2	4550	4100	2.5
Single Phase Full Wave Bridge Circuit No. 2	4	9100	8200	2.5
Three Phase Half Wave Circuit No. 3	3	5300	6200	3.75
Three Phase Double Y Parallel Circuit No. 4	6	5300	6200	7.5
Three Phase Full Wave Circuit No. 5	6	5300	12400	3.75

The above tables suitable circuits for this rectifier, and shows their safe maximum input and output conditions. The values are based on sine wave input and the use of a suitable choke input filter.

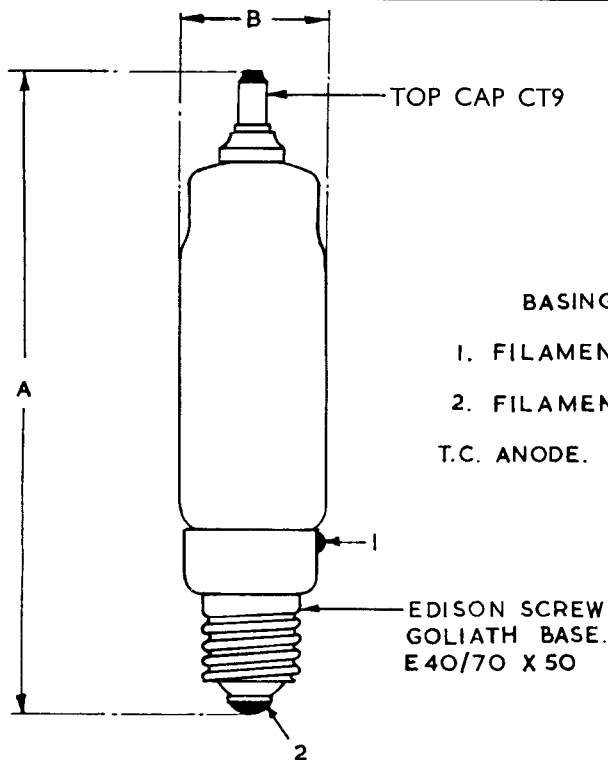
This rectifier being directly heated, it is recommended that the output circuit be taken from the mid-point of the filament supply transformer secondary winding.

For details of the circuits referred to see sheet K—8 in the introduction to this handbook.



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DIM	INCHES	MILLIMETRES
A	10 <sup>5</sup> / <sub>32</sub> MAX:	258·0 MAX:
	9 <sup>1</sup> / <sub>16</sub> MIN:	230·0 MIN:
B	2 <sup>11</sup> / <sub>32</sub> MAX:	60·0 MAX:
	2 <sup>5</sup> / <sub>32</sub> MIN:	55·0 MIN:

NOTE: BASIC FIGURES ARE MILLIMETRES.