



### Recommended Method of Applying Air Blast

For both the above conditions of operation it is best to use a  $\frac{1}{4}$ -in. bore air pipe delivering air at a pressure of  $\frac{1}{2}$  in. The air tube should include a section of insulating material at least 12 in. long to avoid the danger of a flash-over between the filament cap and earth.

### Tables of Pre-heating Times for Filaments

The mercury condensation temperature is raised approximately 20°C above the ambient temperature in free air by the power dissipated in the cathode.

The pre-heating time required before the condensation temperature rises to its working value is set out in the following table. No anode potential may be applied before this time has elapsed.

This table is applicable when either of the recommended types of air blast is used. The power supplied to the blower (and heater, if any) should be switched simultaneously with the filament supply.

Ambient Temperature (°C)	Pre-heating Time (Minutes)
20 or over	2
15 or over	14
10 or over	20
5 or over	30

### APPROXIMATE DATA

$V_f$	2.5 V (+0.2 V, -0 V)
$I_f$	40 A (a)
$PIV_{(max)}$	16 kV
$I_a (pk) (max)$	8 A (b) 14 A (c)
$I_a (av) (max)$	2 A (b) 3.5 A (c)
$TH_g$	25-45°C

### Maximum Outputs

(1) 3-phase half-wave	
$V_{dc} (max)$	7.5 kV
$I_{dc} (max)$	5.5 A (b) 10 A (c)
(2) 3-phase full-wave	
$V_{dc} (max)$	15 kV
$I_{dc} (max)$	5.5 A (b) 10 A (c)

### NOTES

1. The valve must be screened against RF fields.
2. If a large smoothing capacitor is used, care should be taken not to exceed the maximum peak anode current.
3. Care must be taken to see that there is no condensation around the anode seal.
  - (a) The filament transformer should be rated for 50A.
  - (b) Filament voltage in phase with anode current.
  - (c) Filament voltage 60-120° out of phase with anode current.