

**MERCURY VAPOUR
THYRATRON****Service Type CV2957**

To be read in conjunction with the Rectifier and Thyatron Preamble.

ABRIDGED DATA

Mercury vapour thyatron for industrial control applications

Peak forward anode voltage	2.5	kV max
Peak inverse anode voltage	5.0	kV max
Peak anode current	2.0	A max
Mean anode current	0.5	A max

GENERAL**Electrical**

Filament	oxide coated
Filament voltage	2.5 V
Filament current	5.0 A
Filament pre-heating time (minimum)	10 s
Inter-electrode capacitances:	
grid to anode	4.0 pF
grid to filament	8.0 pF

Mechanical

Overall length	6.250 inches (158.8mm) max
Overall diameter	2.156 inches (54.76mm) max
Net weight	3 ounces (85g) approx
Mounting position	vertical, base down
Base	B.S.448-B4G
Top cap	B.S.448-CT3

Cooling	natural
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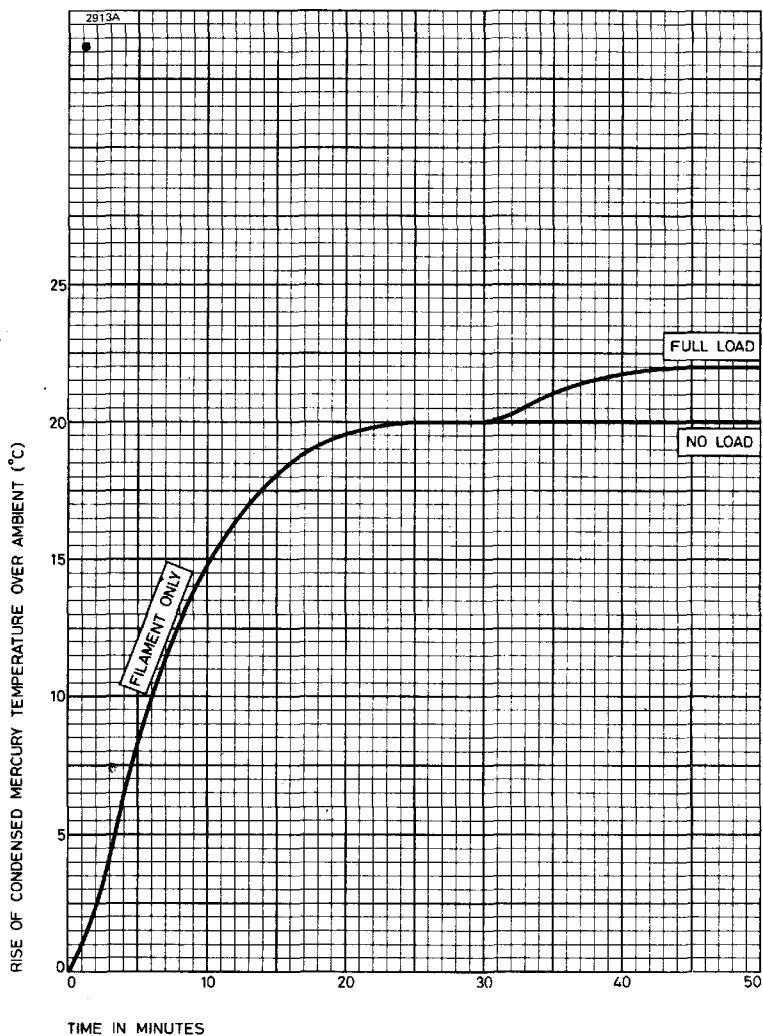
CHARACTERISTICS

Voltage drop	16	V approx
Ionization time	10	μs approx
Recovery time	1.0	ms approx
Condensed mercury temperature rise:		
at no load	20	°C approx
at full load	22	°C approx

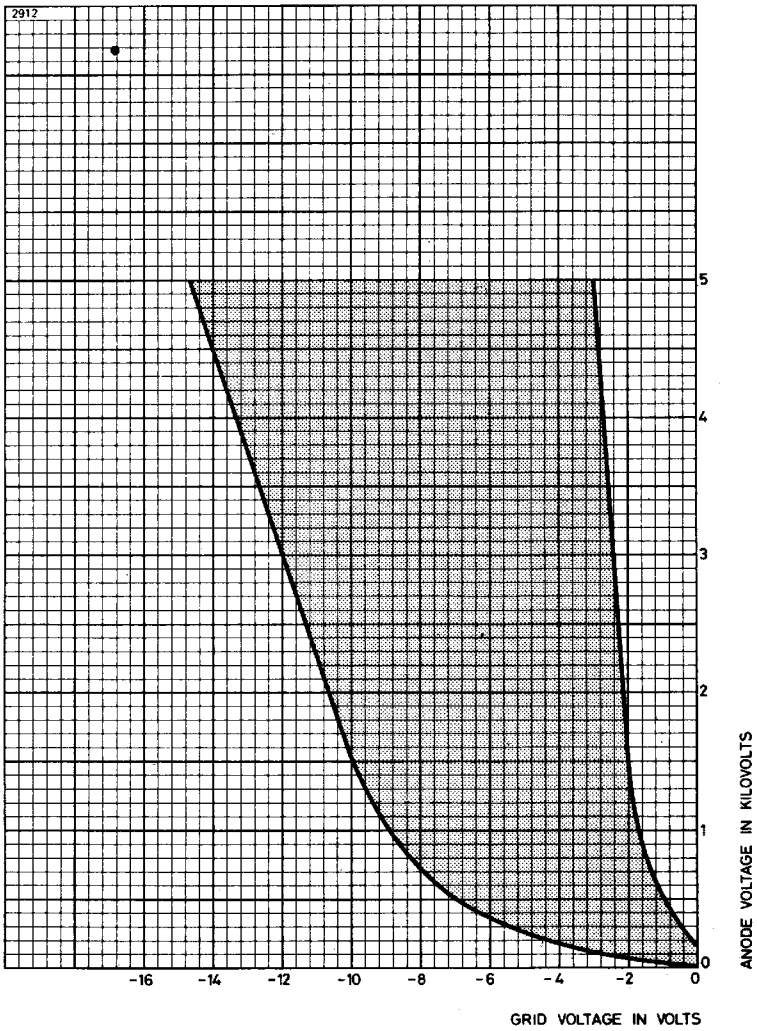
MAXIMUM AND MINIMUM RATINGS (Absolute values)

	Min	Max	
Peak forward anode voltage	—	2.5	kV
Peak inverse anode voltage	—	5.0	kV
Peak anode current	—	2.0	A
Mean anode current (averaging time 15s max)	—	0.5	A
Fault anode current (peak)	—	40	A
Duration of fault current	—	0.1	s
Condensed mercury temperature	40	80	°C
Negative grid voltage:			
before conduction	—	500	V
during conduction	—	10	V
Mean grid current	—	50	mA
Recommended grid resistor	10	100	kΩ
Filament pre-heating time	10	—	s
Power supply frequency	—	150	Hz

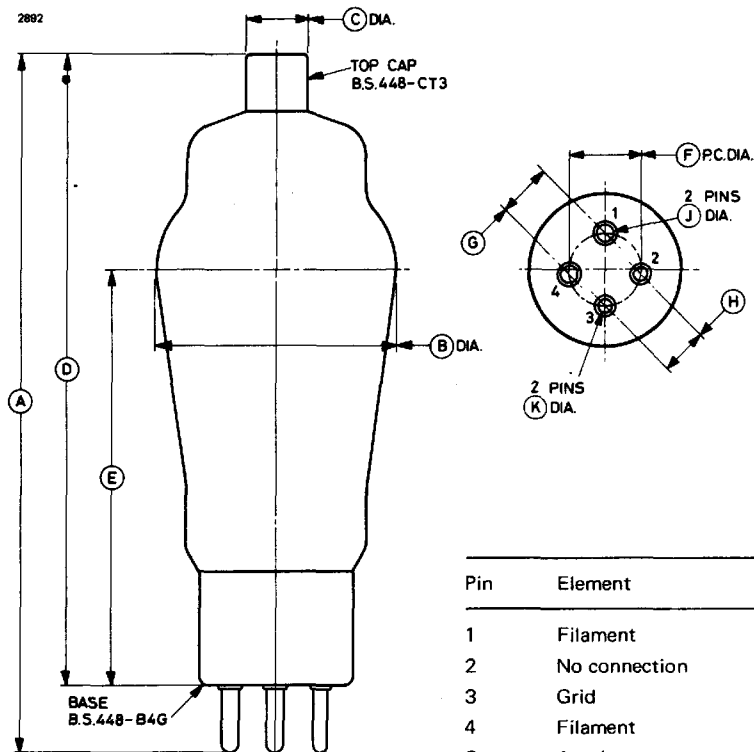
TYPICAL HEATING CHARACTERISTIC



CONTROL CHARACTERISTIC



OUTLINE (All dimensions without limits are nominal)



Pin	Element
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1	Filament
2	No connection
3	Grid
4	Filament
Cap	Anode

Ref	Inches	Millimetres	Ref	Inches	Millimetres
A	6.250 max	158.8 max	F	0.640	16.26
B	2.125 ± 0.031	53.98 ± 0.79	G	0.468	11.89
C	0.566	14.38	H	0.437	11.10
D	5.625 ± 0.250	142.9 ± 6.4	J	0.156	3.96
E	3.625	92.08	K	0.125	3.18

Millimetre dimensions have been derived from inches.