FERRANTI

VOLTAGE STABILISERS

Types KD21 (VR75/30), KD24 (VR105/30) and KD25 (VR150/30) are cold cathode glow discharge voltage stabiliser valves.

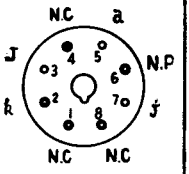
KD21 (VR 75/30)

KD24 (VR 105/30)

KD25 (VR 150/30)

PHYSICAL DETAILS.

Base	International Octal.
Bulb	Clear.
Max. Overall Length	105 mm. (4⅛in.).
Max. Seated Height	91 mm. (3 5/16in.).
Max. Diameter (Bulb)	40 mm. (1 9/16in.).
Mounting Position	Any.

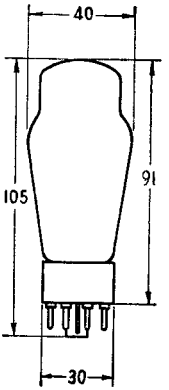


Base Connections Underside View of Base

BASE CONNECTIONS.

Pin 1—No Connection.	Pin 5—Anode.
Pin 2—Cathode.	Pin 6—No Pin.
Pin 3—Jumper*	Pin 7—Jumper*
Pin 4—No Connection.	Pin 8—No Connection.

*With suitable circuit connections the 'jumper' link in the base operates as a switch to render the equipment inoperative when the stabiliser valve is removed from its holder. A suggested arrangement is shown overleaf.



All dimensions shown are in millimetres. (max.).

RATINGS AND CHARACTERISTICS.

KD21

†Min. Anode Supply Voltage ...	105 volts DC.
Nom. Striking Voltage	100 volts DC.
Nom. Operating Voltage ...	75 volts DC.
Max. Operating Current ...	40 mA.
Min. Operating Current ...	5 mA.
‡Max. Peak Current	100 mA.
Regulation (5 to 40 mA.) ...	6 volts.

KD24

†Min. Anode Supply Voltage ...	135 volts DC.
Nom. Striking Voltage	115 volts DC.
Nom. Operating Voltage ...	105 volts DC.
Max. Operating Current ...	40 mA.
Min. Operating Current ...	5 mA.
‡Max. Peak Current	100 mA.
Regulation (5 to 40 mA.) ...	4 volts.

KD25

†Min. Anode Supply Voltage ...	180 volts DC.
Nom. Striking Voltage	160 volts DC.
Nom. Operating Voltage ...	150 volts DC.
Max. Operating Current ...	40 mA.
Min. Operating Current ...	5 mA.
‡Max. Peak Current	100 mA.
Regulation (5 to 40 mA.) ...	5·5 volts.

†See note overleaf.

‡See note overleaf.

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KD21
(VR 75/30)

KD24
(VR 105/30)

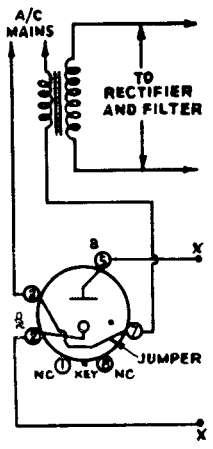
KD25
(VR 150/30)

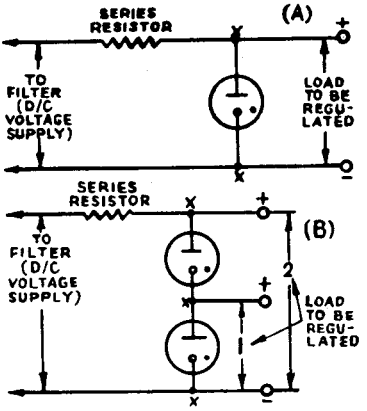
NOTES.

†To ensure 'striking' throughout life.

‡Sufficient resistance must always be included in series with these valves to limit the current through the valve to 40 milliamperes under steady operating conditions. However during the warming up period of approximately 10 seconds, before the valves in the associated equipment draw anode current, the maximum current can be permitted to rise to 100 mA providing that each such starting period is followed by at least several minutes of operation under normal conditions. Unless this precaution is observed the performance of the stabiliser will be impaired.

TYPICAL CIRCUIT CONNECTIONS.





VALVE TYPE	REGULATED SUPPLY VOLTAGE TO LOAD (APPROX. VOLTS)		
	CIRCUIT A	CIRCUIT B	
		1	2
VR 75/30	75	75	150
VR 105/30	105	105	210
VR 150/30	150	150	300