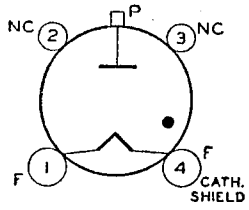
866-A

HALF-WAVE MERCURY-VAPOR RECTIFIER



Coated-filament type used in power supply of transmitting and industrial equipment. Maximum peak inverse anode volts, 10,000; maximum average anode amperes, 0.25. Requires Small four-contact socket and may be mounted in vertical position only, base down. OUTLINE 41, *Outlines* Section.

FILAMENT VOLTAGE (AC)°	2.5	volts
FILAMENT CURRENT	5.0	amperes
PEAK TUBE VOLTAGE DROP (Approx.)	15	volts

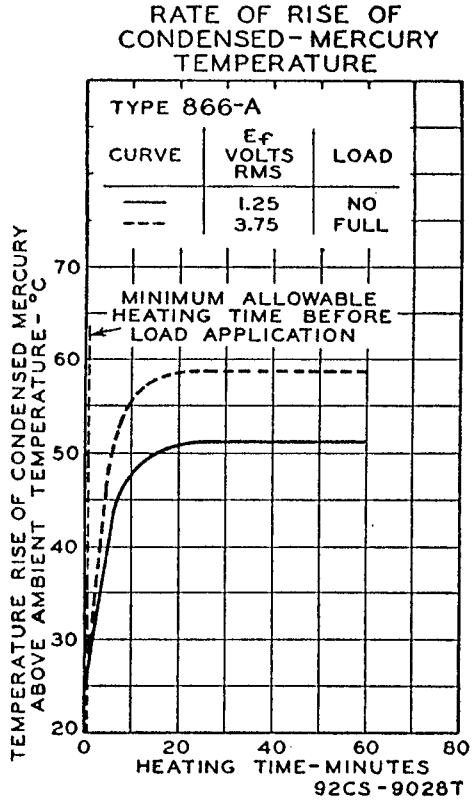
° Filament voltage must be applied at least 15 seconds before the application of anode voltage.

HALF-WAVE RECTIFIER

Maximum Ratings: (*For power-supply frequency of 60 cps*):

PEAK INVERSE ANODE VOLTAGE	2500 *max*	5000 *max*	10000 *max*	volts
ANODE CURRENT:				
Peak	2 *max*	1 *max*	1 *max*	amperes
Average*	0.5 *max*	0.25 *max*	0.25 *max*	ampere
Fault, for duration of 0.1 second maximum	20 *max*	20 *max*	20 *max*	amperes
CONDENSED-MERCURY-TEMPERATURE RANGE•	20 to 80	20 to 70	20 to 60	°C

* Averaged over any interval of 30 seconds maximum.
• Operation at 40° ± 5°C is recommended.



Operating Values:

Circuit (For circuit figures, refer to *Rectifier Considerations* Section)	*Fig.*	*Max. Trans. Sec. Volts (RMS) E*	*Approx. DC Output Volts To Filter Eav*	*Max. DC Output Amperes Iav*	*Max. DC Output KW To Filter Pdc*
		In-Phase Operation			
Half-Wave Single-Phase...	54	7000●	3200	0.25	0.8
		3500▲	1600	0.25	0.4
		1700□	800	0.50	0.4
Full-Wave Single-Phase...	55	3500●	3200	0.5	1.6
		1700▲	1600	0.5	0.8
		800□	800	1.0	0.8
Series Single-Phase.....	56	7000●	6400	0.5	3.2
		3500▲	3200	0.5	1.6
		1700□	1600	1.0	1.6
Half-Wave Three-Phase...	57	4000●	4800	0.75	3.6
		2000▲	2400	0.75	1.8
		1000□	1200	1.5	1.8
		Quadrature Operation			
Parallel Three-Phase.....	58	4000●	4800	1.5	7.2
		2000▲	2400	1.5	3.6
		1000□	1200	3.0	3.6

Circuit (For circuit figures, refer to *Rectifier Considerations* Section)	*Fig.*	*Max. Trans. Sec. Volts (RMS) E*	*Approx. DC Output Volts To Filter Eav*	*Max. DC Output Amperes Iav*	*Max. DC Output KW To Filter Pdc*
Series Three-Phase.....	59	4000●	9600	0.75	7.2
		2000▲	4800	0.75	3.6
		1000□	2400	1.5	3.6
Half-Wave Four-Phase....	60	3500●	4500	0.91* 1.0■	4.05* 4.5■
		1700▲	2300	0.91* 1.0■	2.07* 2.3■
		800□	1100	1.82* 2.0■	1.98* 2.2■
Half-Wave Six-Phase.....	61	3500●	4800	0.95* 1.0■	4.60* 4.8■
		1700▲	2400	0.95* 1.0■	2.30* 2.4■
		800□	1200	1.90* 2.0■	2.28* 2.4■

● For maximum peak inverse anode voltage of 10000 volts and maximum average anode current of 0.25 ampere.

▲ For maximum peak inverse anode voltage of 5000 volts and maximum average anode current of 0.25 ampere.

□ For maximum peak inverse anode voltage of 2500 volts and maximum average anode current of 0.5 ampere.

* Resistive load. ■ Inductive load.