

Figure 1 — 18A Rectifier.

18A AND 18B RECTIFIERS

Use — Rectifier type power units for supplying plate and filament power to speech input and sound system amplifiers.

Description — A full wave vacuum tube rectifier for plate supply and a transformer winding to supply filament power. Normally used to supply power for Western Electric Types 120, 121, 129, 130, 131, 132, 133 and similar amplifiers. The 18A is designed for mounting on a 177 Type Mounting Plate with additional rectifiers or other plate mounted units. The 18B is designed for direct mounting on a relay rack or equipment cabinet.

Features

- Efficient.
- Compact.
- Rugged construction.
- Tapped transformer permits input and output voltage selection.

Specifications

Input: 105-125 volts, 50 or 60 cycles a-c. Approximately 100 watts for full load.

Output: Plate supply maximum 75 ma. at approximately 250 volts d-c, taps on high voltage winding of transformer to maintain voltage between 320 and 250 volts d-c for loads between 0.007 amperes and 0.075 amperes. Filament supply maximum 8 amperes at approximately 6.3 volts a-c.

Dimensions: (18A) 10-3/16" wide, 5-7/32" deep and 6-11/16" high.

(18B) 19-5/32" wide, 3-15/32" high, 6-27/32" deep.

Weight: (18A) 9 pounds.

(18B) 12 pounds.

Mounting: (18A) Designed for mounting on 177 or 190 Type Mounting Plate with 296 Type panel (Capacity 3 rectifiers per plate). See "Components and Accessories" for ordering information.

(18B) Designed for mounting on standard 19" relay rack (includes face mat) or equipment cabinet. Occupies 3 1/2" of rack space.

Finish: (18A) Gray enamel.

18B-15 Dark aluminum gray.

18B-3 Black.

Tubes: One W.E. 274A or one Type 5Z3.

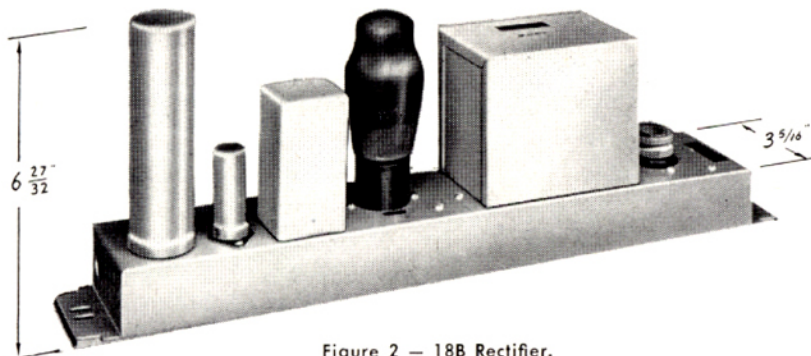


Figure 2 — 18B Rectifier.

20B RECTIFIER

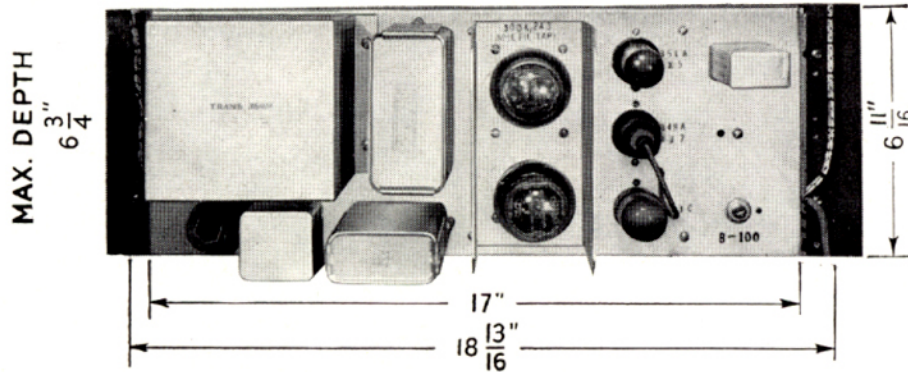


Figure 3 — Rear View, 20B Rectifier.

Use — This rectifier is intended for use with equipment which requires excellent voltage regulation. It is especially useful where several amplifiers are powered from the same source.

Description — A full-wave vacuum-tube rectifier incorporating a vacuum tube voltage regulating circuit which is ultra rapid in operation and which is designed to prevent the plate voltage supply from rising above its final value during the warm-up period of the voltage-regulator tube. Due to its ultra rapid feature it has negligible internal impedance and therefore, practically eliminates coupling between amplifiers which might otherwise be caused by the use of a common plate supply source.

Features

- Efficient.
- Rapid automatic voltage regulation.
- Low ripple component.
- Compact construction.

Specifications

Input: 100-130 volts, 50 to 60 cycles. Power consumption approximately 55 watts, 0.7 ampere at 115 volts for no load and 196 watts, 1.7 amperes for rated load.

Output: Rated load — plate supply 110 milliamperes at 275 volts d-c and filament supply 10 amperes at 6.3 volts a-c.

Plate Supply Regulation: 3 volts maximum voltage change from no load and +10 per cent line voltage to rated load and -10 per cent line voltage.

Plate Supply Ripple: Approximately 5 millivolts rms at rated load.

Dimensions: Mat — 19" x 6-31/32". Chassis-overall including mounting flanges, 18-13/16" wide, 6-11/16" high and 6 3/4" deep.

Weight: 26 pounds.

Mounting: Designed to mount on standard 19" relay rack or cabinet, where it occupies 7" of panel space.

Finish: Chassis — Light gray.

Mat — 20B-15 Dark aluminum gray.
20B-3 Black.

Vacuum Tubes

Quantity Required	Western Electric		Commercial Receiver Type
1	274A	or	5Z3
1	300B	or	2A3
1	348A	or	6J7
1	313C		
1	351A	or	6X5
5			

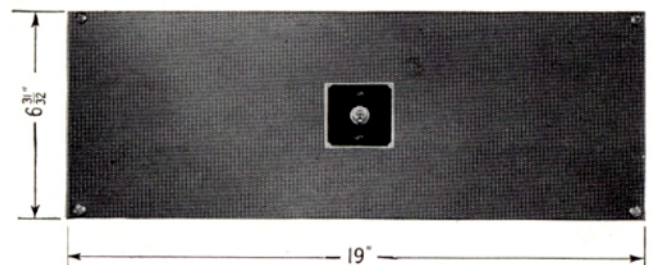


Figure 4 — Front View, 20B Rectifier.



12A POWER UNIT

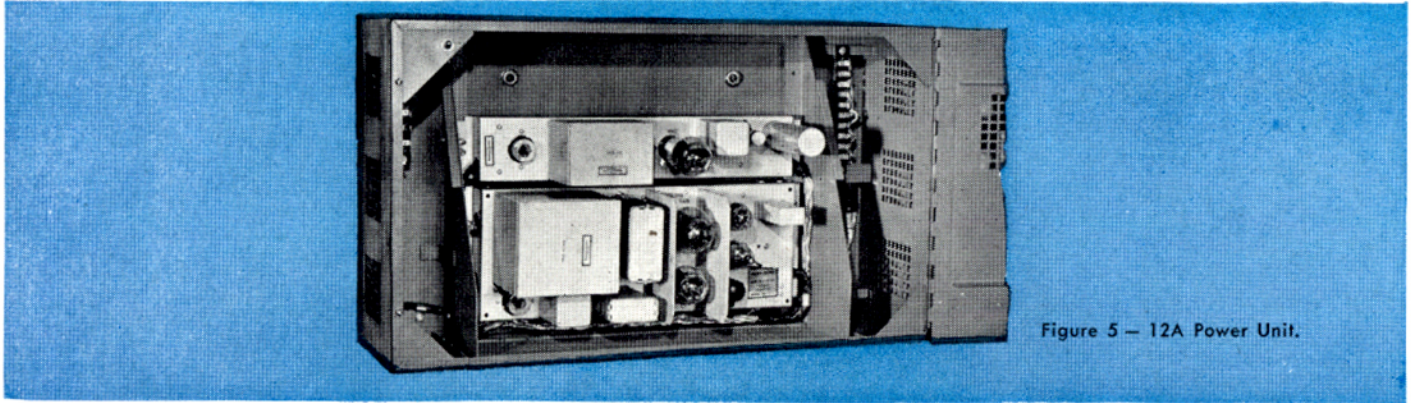


Figure 5 — 12A Power Unit.

A complete, compact power supply unit consisting essentially of an 18B Rectifier and a 20B Rectifier for mounting in a wall in a 21A Cabinet. Developed as the power supply for the 25B Speech Input Equipment but useful for other like applications, the 12A contains power supply units for plate and filament power to vacuum tubes.

The 21A Cabinet, which can be ordered separately, provides 14" of rack space for the mounting of equipment normally mounted on standard 19" racks.

Specifications

Input: 110 to 120 volt, 50 to 60 cycle a-c.

Output: See data on the 18B Rectifier and the 20B Rectifier.

Dimensions: (21A Cabinet) approximately 28" wide, 16½" high and 9½" deep.

Weight: 60 pounds.

Mounting: Designed for wall mounting.

Finish: The 21A Cabinet is finished in gray finished metal.

KS-7593 RECTIFIER

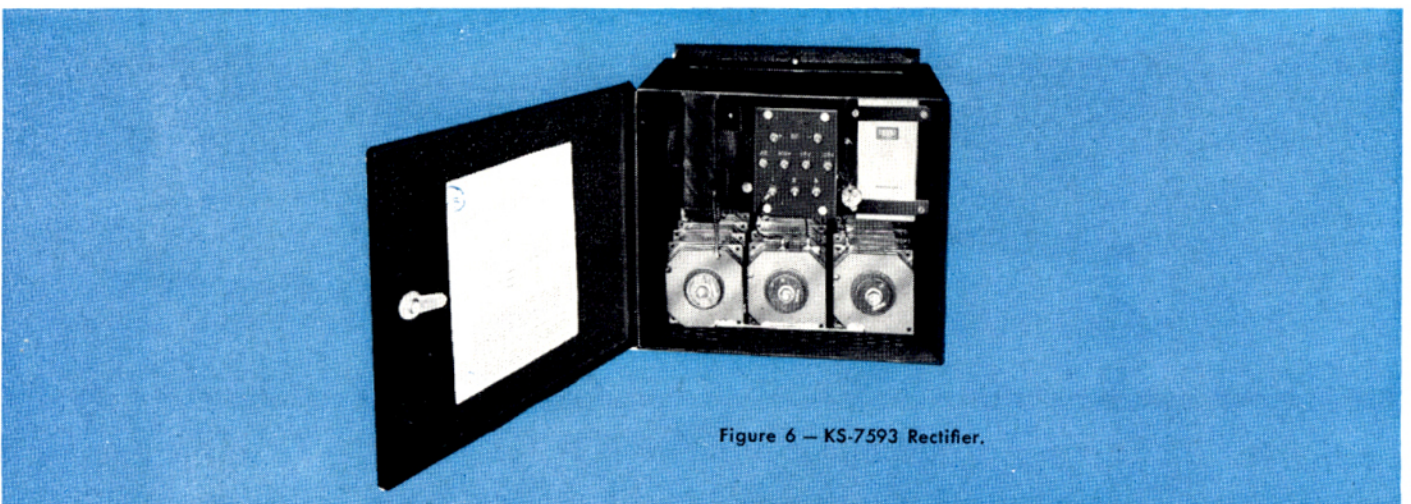


Figure 6 — KS-7593 Rectifier.

A copper-oxide rectifier used as a 12-volt d-c power source for operating relays and signal lamps in speech input equipment.

Specifications

Input: 105 to 125 volts, 60 cycle a-c.

Output: 1.2 amperes d-c full load. No load voltage 14 volts. Full load voltage 10 volts.

Dimensions: 14" wide, 13¾" high and 9½" deep.

Weight: 40 pounds.

Mounting: Assembled in a steel cabinet with hinged front cover, arranged for wall mounting.

Finish: Black crinkle lacquer.

KS-5653 LIST 3 RECTIFIER

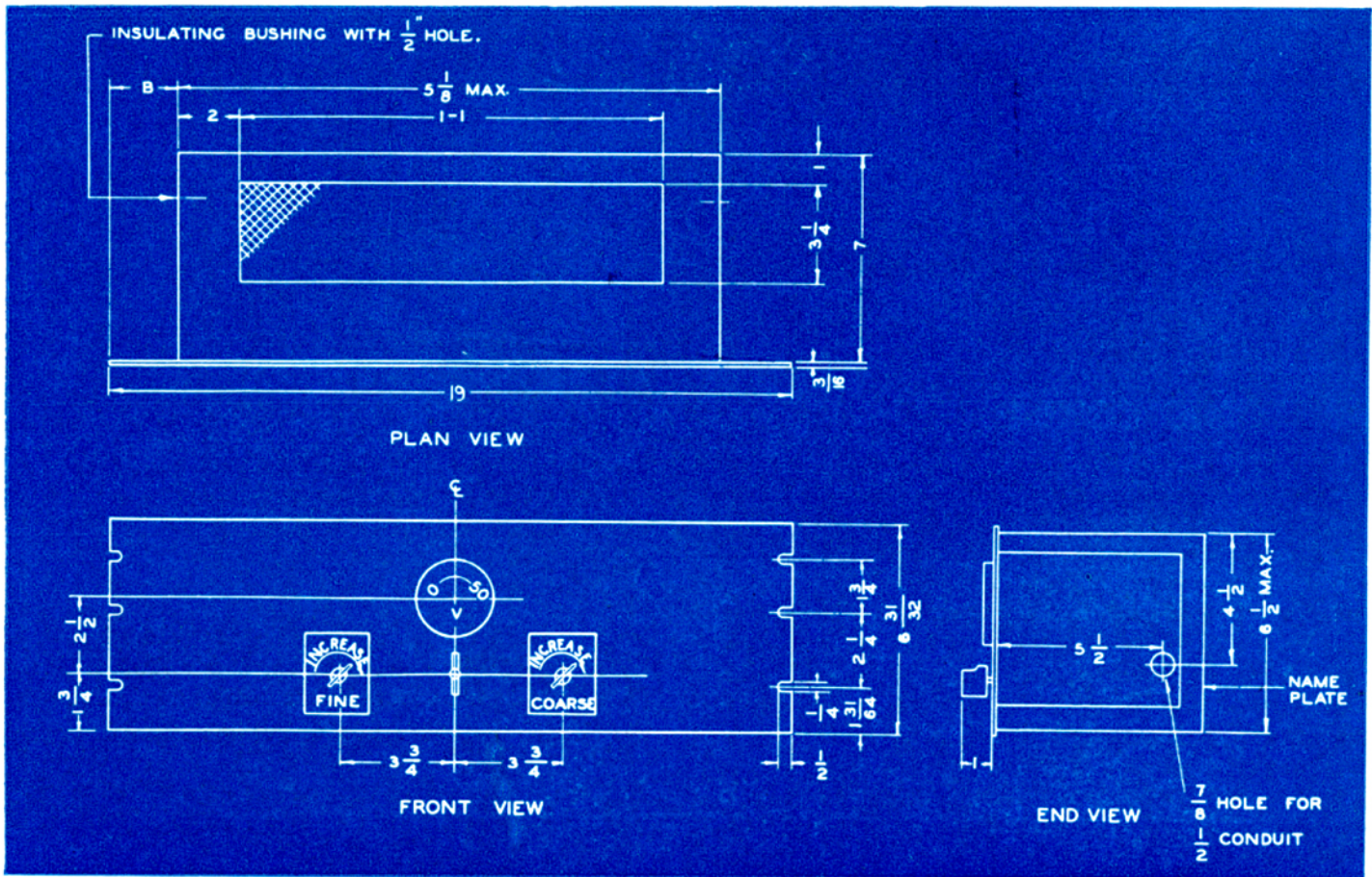


Figure 7 – Dimensional Drawing, KS-5653, List 3 Rectifier.

This rectifier is a selenium disc type designed to furnish power for relay and signaling circuits in connection with speech input equipment.

Specifications

Input: 105 to 125 volts, 50 to 60 cycles a-c.

Output: 1 ampere d-c full load at 24 volts.

Dimensions: 19" wide, 6-31/32" high, and 7" deep.

Weight: 42 pounds.

Mounting: Arranged to mount on a standard 19" relay rack.

Finish: Gray enamel.