

WESTINGHOUSE ELECTRIC CORPORATION



INSTRUCTION LEAFLET NO. 19-030-11A

METALLIC RECTIFIER BATTERY CHARGER

AC Rating

115 Volts - 60 Cy. AC - 1 Phase

Style (Includes DC Ammeter)	Style (Includes DC Ammeter & Voltmeter)	No. of Lead- Acid Cells	Range of DC Amperes	Normal D.C. Floating Voltage
1551580	1551608	3	.4 to 12 A.	6.5 V.
1551582	1551610	6	.1 to 3	12.9
1551583	1551611	6	.2 to 6	12.9
1551584	1551612	6	.4 to 12	12.9
1551585	1551613	12	.05 to 1	25.8
1551586	1551614	12	.1 to 3	25.8
1551587	1551615	12	.2 to 6	25.8
1551588	1551616	12	.4 to 12	25.8
1551590	1551618	18	.1 to 3	38.6
1551591	1551619	18	.2 to 6	38.6
1551592	1551620	18	.4 to 12	38.6
1551594	1551622	24	.1 to 3	51.6
1551595	1551623	24	.2 to 6	51.6
1551596	1551624	24	.4 to 12	51.6
1551598	1551626	36	.1 to 3	77.2
1551599	1551627	36	.2 to 6	77.2
1551600	1551628	36	.4 to 12	77.2
1551601	1551629	60	.05 to 1	129.5
1551602	1815132	60	.1 to 3	129.5
1551603	1551631	60	.2 to 6	129.5
1551604	1551632	60	.4 to 12	129.5

1. GENERAL

This charger is a manually controlled battery charger for use with a lead-acid battery. See above table for number of cells and the range of control of the DC charging current.

The charger is a wall-mounted type and includes AC-DC disconnect switch, main insulating transformer, AC and DC fuses, full-wave Rectox rectifier stacks, saturable reactor, high rate rheostat. The first column of styles includes a DC ammeter, while the second column of styles includes a DC ammeter and voltmeter.

2. INSTALLATION

Mount unit on any vertical surface.

Connect positive battery lead to + terminal on rectifier, negative battery lead to - terminal of rectifier.

Connect AC line leads to AC input terminals on rectifier panel.

Line voltage taps for 105-115-125 volts are on panel. Connect movable lead to whichever is nearest the actual line voltage.

In addition to the 2 AC and + and - terminals, other terminals marked 1 to 5 will be found on the panel. These are for use only when a 2-rate charge control unit is employed with this charger to convert it to automatic operation.

When used as a single rate charger, manually controlled rate, these terminals are unused, except that a jumper should be connected between DC- and #2.

3. OPERATION

To Start - Close switch.

Turn rheostat on panel to extreme counter-clockwise direction. Turn switch on.

Now turn rheostat in clockwise direction until desired charging rate is shown on the ammeter, but not more than the rated output of the charger is given on the nameplate.

To Stop - Open switch.

4. PRINCIPLE OF OPERATION:- SINGLE RATE, MANUALLY CONTROLLED

Control of rate is by means of a saturable reactor located in the transformer secondary circuit. When the control rheostat is in the extreme counter-clockwise position, the d.c. excitation of the reactor is at a minimum, and the charging rate also will be at a minimum.

As the rheostat is turned clockwise, d.c. excitation of reactor increases, decreasing its impedance, and allowing more charging current to flow.

5. ADJUSTMENTS

The high charge rate is adjusted by means of the rheostat on the charger. Do not exceed the maximum rating of the charger.

No adjustments are needed other than by the control rheostat.