



INSTALLATION • OPERATION • MAINTENANCE INSTRUCTIONS

TYPE CBU CARRIER AUXILIARY UNIT

(FOR USE WITH TYPE KR CARRIER SET)

APPLICATION

The type CBU current blocking unit is designed to be used with types HZ, HZ-4 or HZM phase relays and types HRK (current polarized) or HRP (potential polarized) directional overcurrent ground relays in plate keyed carrier relaying systems. It is applicable with intermittent carrier transmission and where the carrier microwave, or audio tone channel, is continuously supervised.

CONSTRUCTION

The type CBU current blocking unit consists of five germanium rectifiers, two resistors and a capacitor. (Fig. 1). For 250-volt D.C. circuits, five sections of two stacks in series are used.

OPERATION

The primary function of the current blocking unit is to effectively isolate, from each other, the carrier control circuits of each of the phase and ground relays while providing a common junction through which each of the carrier control circuits may initiate carrier transmission.

Current may pass through the rectifiers toward the common junction only. The high-back resistance of the rectifier stacks prevents the current from flowing through them away from the common junction. Therefore, when a Z_3 or the I_{OS} contact is closed, (Fig. 2), a positive potential, of sufficient magnitude to start carrier, appears at the plate of the carrier transmitter. The high-back resistance of the rectifier prevents the flow of current through the other CSA or CSO coil circuits. The rectifier's high-back resistance also makes it possible to start carrier manually with the test pushbutton without causing the CSA coils to be energized.

The resistor between terminals 4 and 5 provides current limiting resistance for the ground relay CSO auxiliary circuit.

CHARACTERISTICS

The type CBU current blocking unit is available

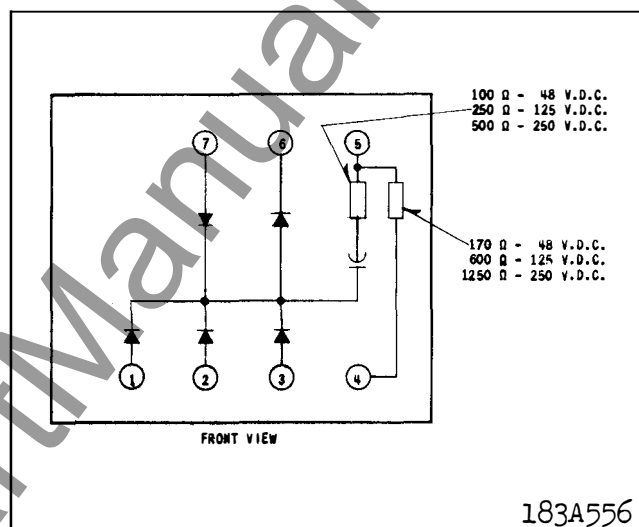


Fig. 1. Internal Schematic of the Type CBU Current Blocking Unit.

in three voltage ratings for applications with plate keyed carrier: 48 volts D.C., 125 volts D.C. and 250 volts D.C.

VOLTS D.C.	MAXIMUM FORWARD VOLTAGE DROP	FORWARD CURRENT AMPERES	MAXIMUM REVERSE CURRENT AMPERES
48	1.0	.024	.001
125	1.0	.024	.001
250	2.0	.024	.001

RENEWAL PARTS

Repair work can be done most satisfactorily at the factory. However, interchangeable parts can be furnished to the customers who are equipped for doing repair work. When ordering parts, always give the complete nameplate data.

VOLTS D.C.	STYLE
48	289B149A09
125	289B149A10
250	289B149A11

TYPE CBU RELAY

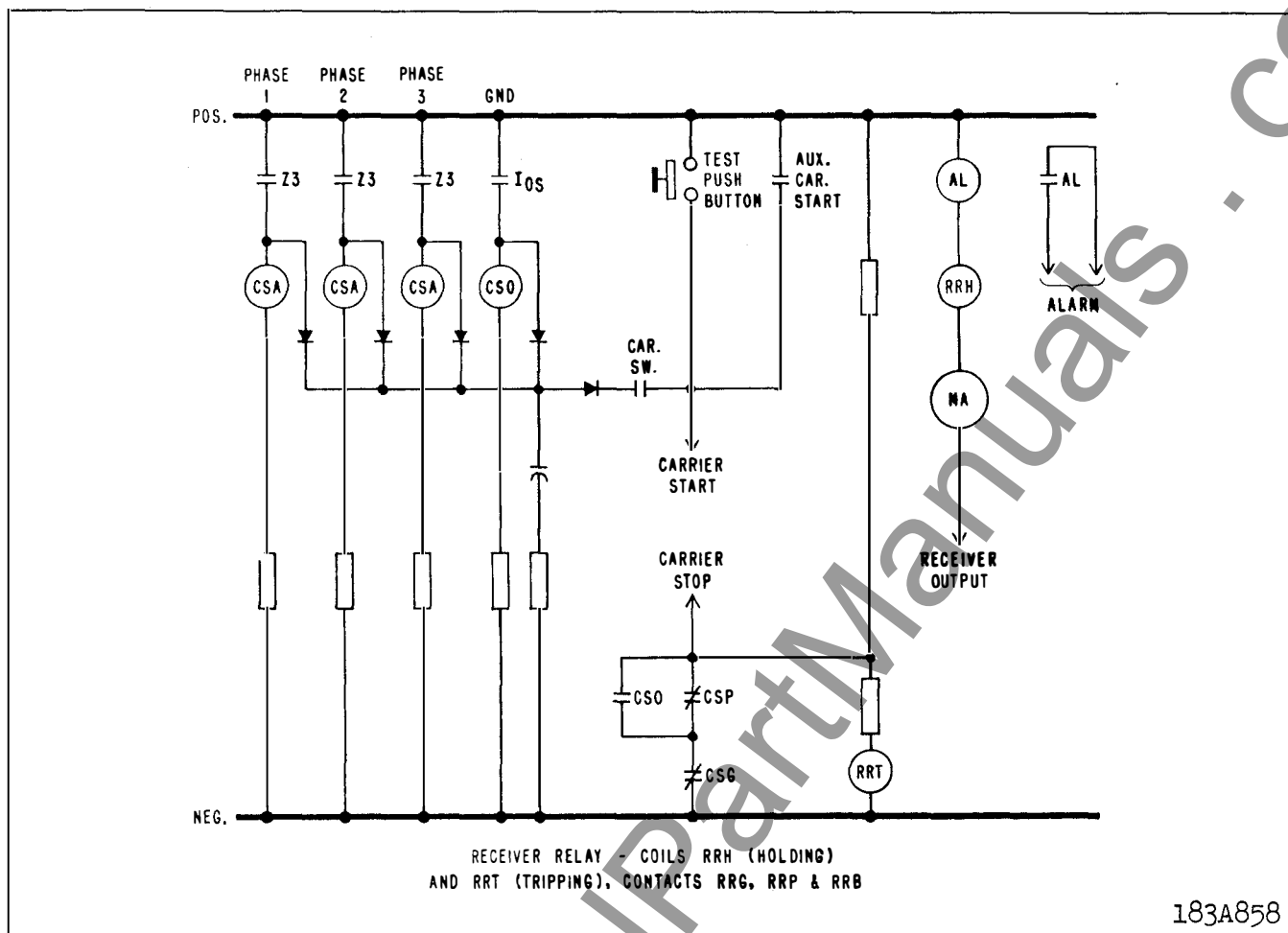


Fig. 2. Simplified D-C Schematic of Carrier Control in the Carrier Relaying Scheme.

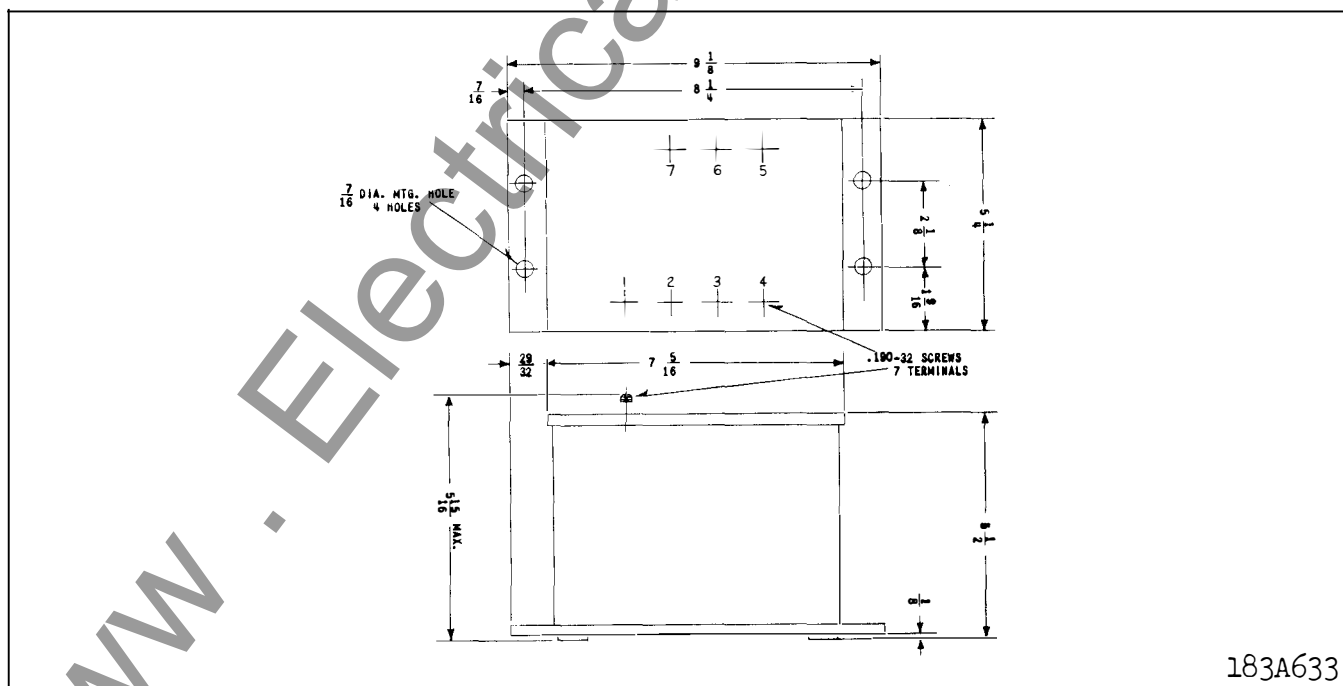


Fig. 3. Outline and Drilling Plan of the Type CBU Current Blocking Unit Case. (For reference only)

WESTINGHOUSE ELECTRIC CORPORATION
METER DIVISION **NEWARK, N.J.**

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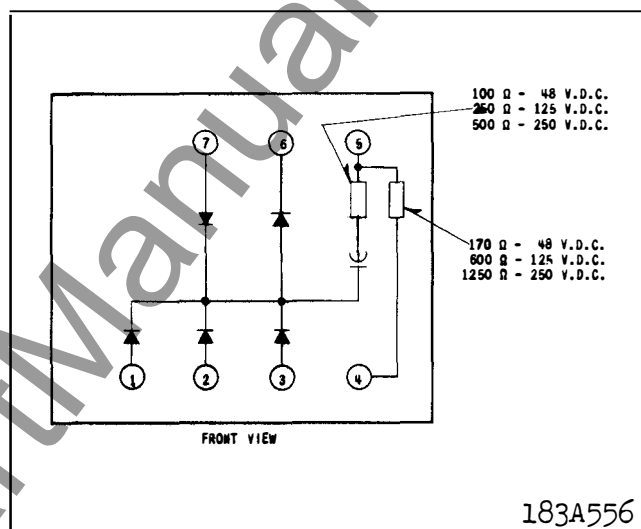


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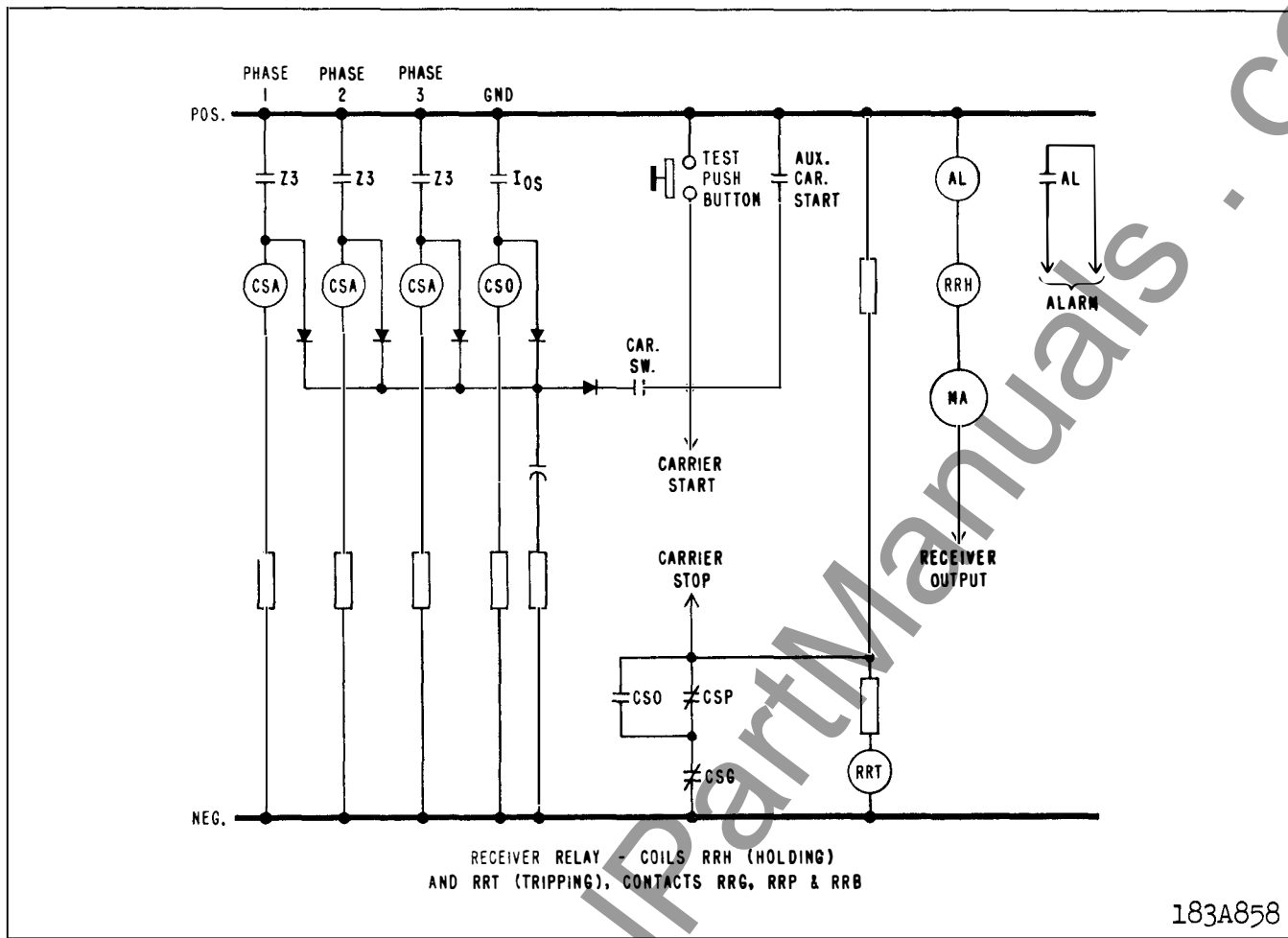


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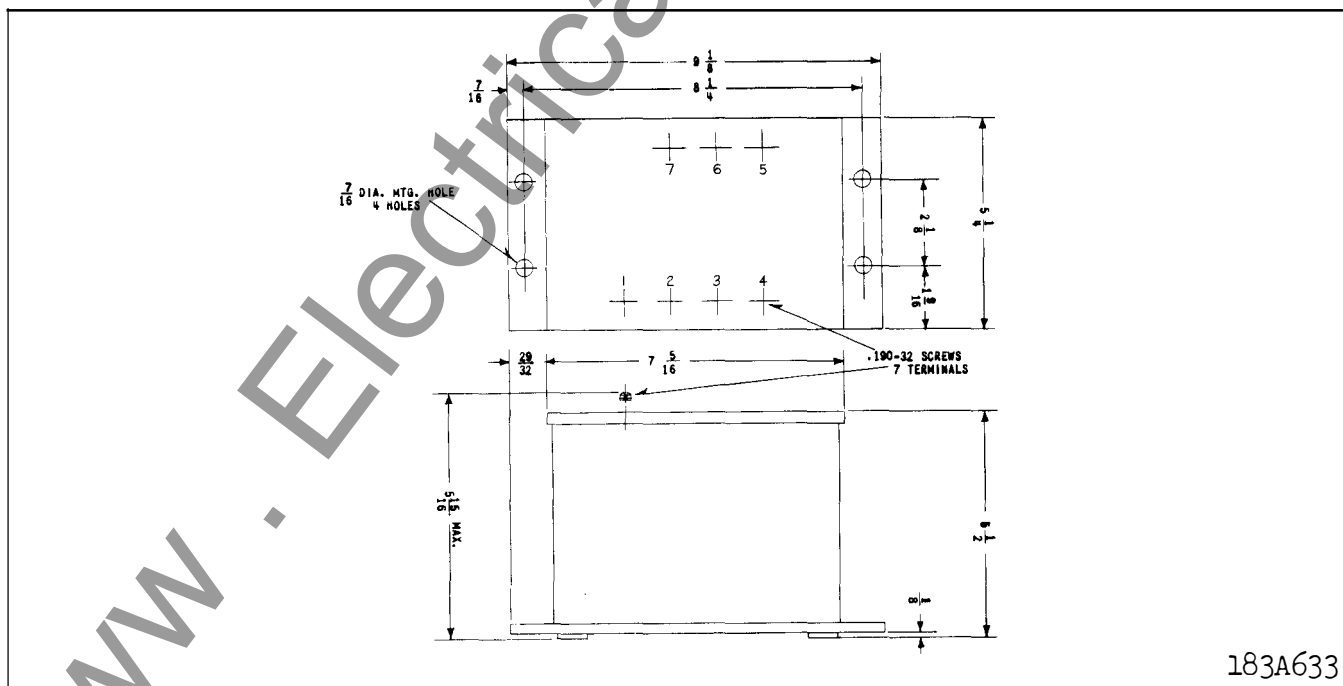


Fig. 3. Outline and Drilling Plan of the Type CBU Current Blocking Unit Case. (For reference only)