

# INSTALLATION • OPERATION • MAINTENANCE I N S T R U C T I O N S

## TYPE SG-2 AUXILIARY RELAY FOR SUPERVISORY CONTROL APPLICATIONS

### INSTALLATION

Inspect the relay carefully after unpacking to see that no damage has been done in shipping. Operate the relay by hand several times to see whether the moving elements are properly aligned and free from friction. Check the nameplate rating to see that it agrees with conditions under which the relay will be used.

Mount the relay with the base in a vertical plane and with the contacts at the top.

The relay is normally mounted with screws through two outside holes. A third screw connection (accessible with the cover removed) is made to ground the relay metal parts to the mounting panel (see outline drawing).

### APPLICATION

The SG-2 relay is primarily used in a supervisory control system as an interposing relay. The standard is furnished front-connected, with cover. Two relay units are contained in one SG-2 housing. Each unit has two moving contact arms, and has stationary contacts which can be reversed to provide make and break combinations. The standard coils are:

- 48, 125 volts d-c.
- 12 volts d-c with suppression diode.

The 12 volt relay with transient suppression diode is used with solid state systems.

All relays will pick up on 80% of the nameplate voltage rating or more. No adjustments are provided for varying the pickup. The armature will open at 30% or less.

### Operating Time

Pickup: .033-.05 second at d-c rating

Dropout: less than .016 second on d-c, no diode  
.035-.045 second at d-c, with diode

### Burden

D-C 3.5 Watts

Each contact will carry 12 amperes continuous and 30 amperes for one minute.

TABLE I

### Contact Gap and Follow Adjustment

	Contact Gap	Contact Follow
Make	1/8-9/64"	3/64"
Break	3/64"	1/32"

The contact interrupting ratings are as follows. All values are non-inductive currents.

External connections may be made with the contacts in series if desired.

### Interrupting Rating in Amperes

Volts	D-C 1 Contact	2 Contacts in Series	A-C 1 Contact
24	15	50	50
48	8	35	45
115	2.4	20	30
230	0.75	2.5	20
550	0.25	0.5	10

These instructions neither cover all details or variations in equipment nor provide for all contingencies with regard to installation, operation or maintenance. On request, Westinghouse will be glad to supply further information as to particular problems or questions which are not covered sufficiently for the purchaser's needs.

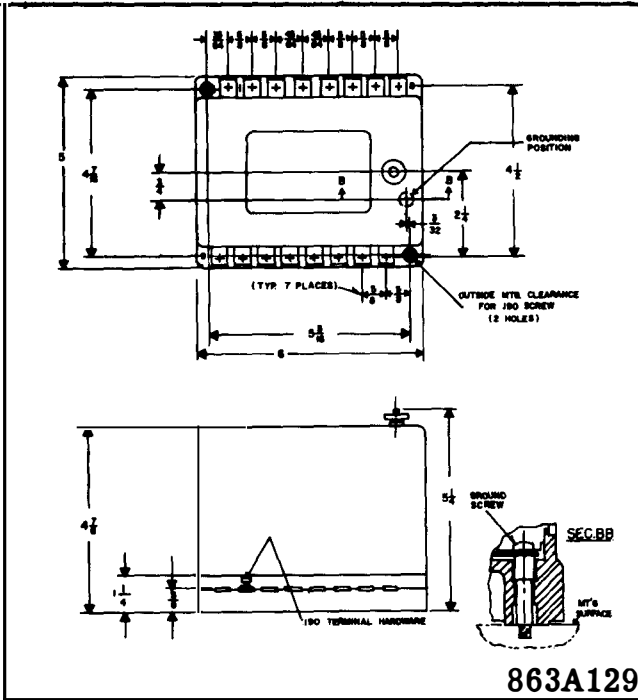


Figure 1. Outline and Drilling Plan for SG-2 Relay

## REPAIR AND RENEWAL PARTS

Major repairs can be most satisfactorily done at the factory. However, for customers equipped to do their own work, parts may be furnished on order. In ordering any part or requesting any other information always give entire nameplate reading.

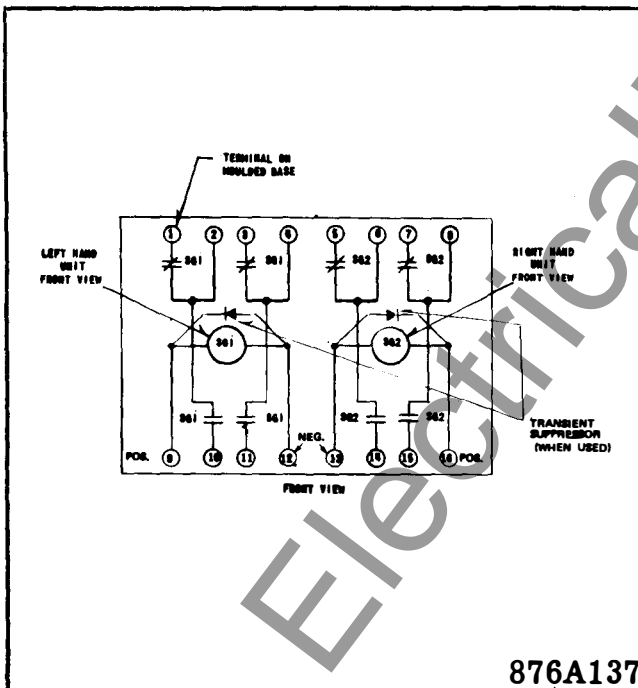


Figure 2. Internal Schematic for Type SG-2 Relay. 4 Transfer Contacts (Form C).

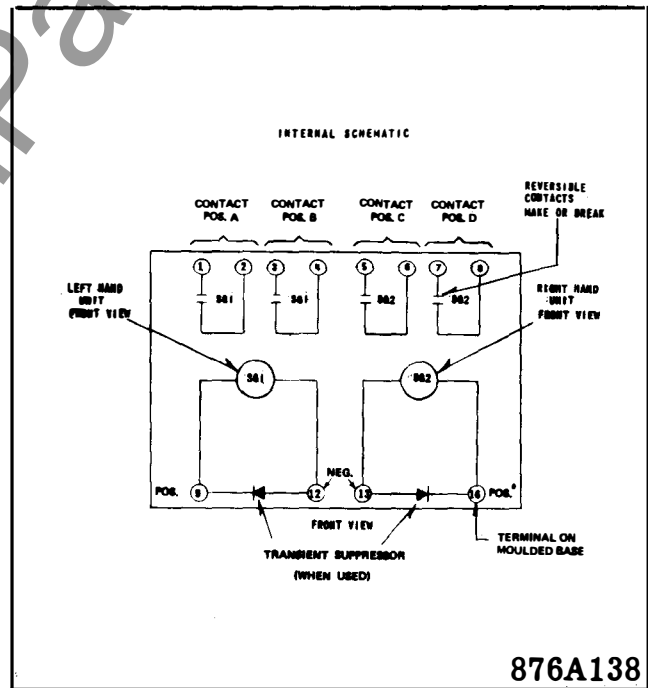
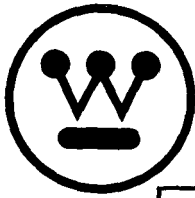


Figure 3. Internal Schematic for Type SG-2 Relay. 4 make or 2 make and 2 Break Contacts.



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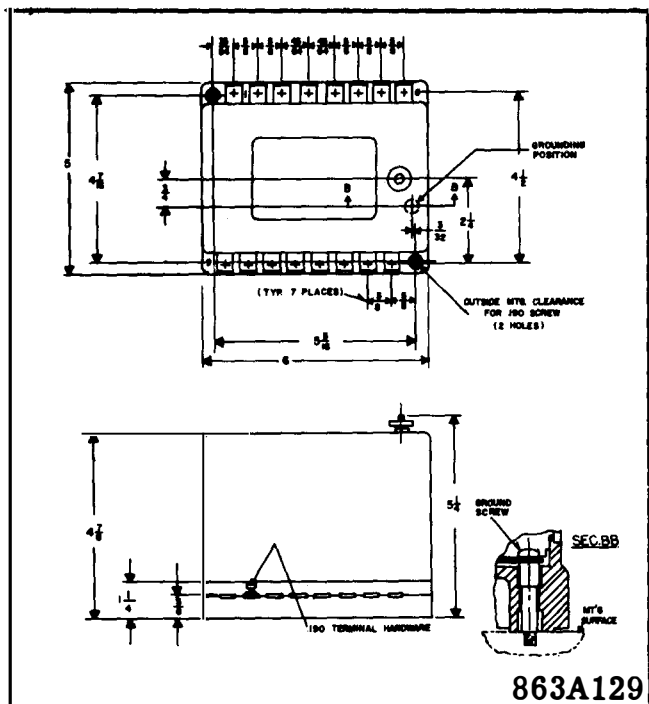
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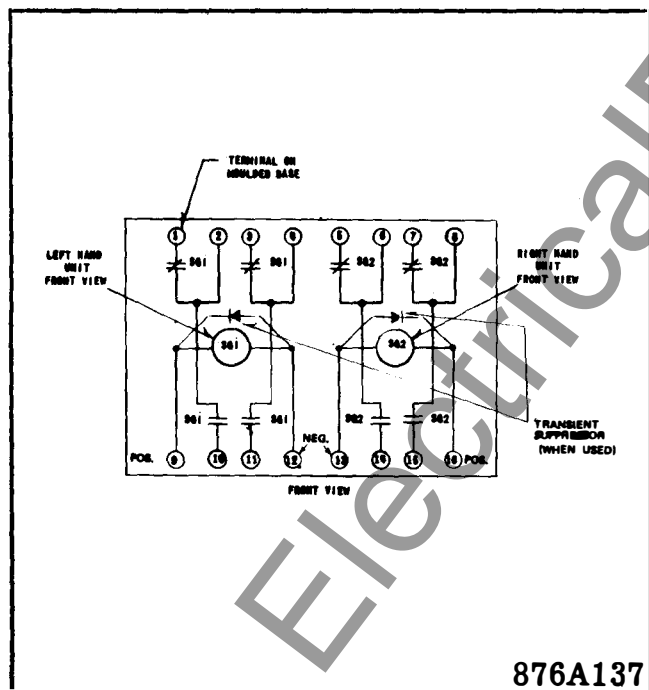


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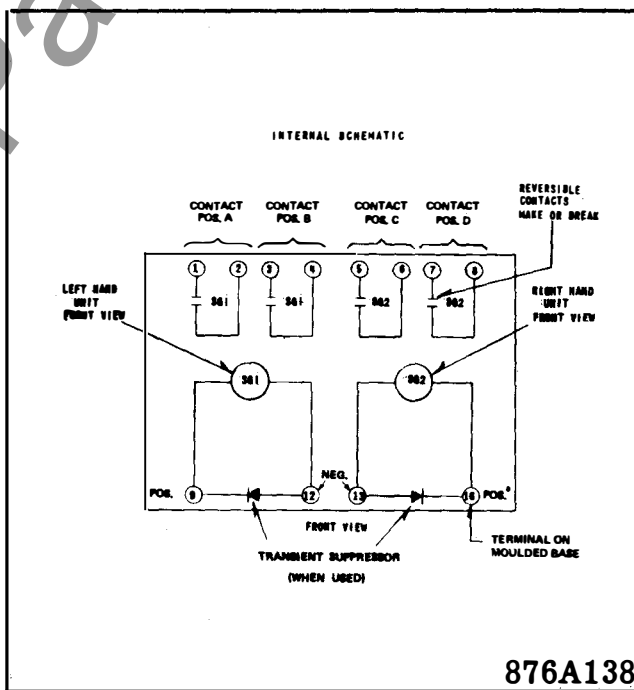
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876A137

Figure 2. Internal Schematic for Type SG-2 Relay, 4 Transfer Contacts (Form C).



876A138

Figure 3. Internal Schematic for Type SG-2 Relay, 4 make or 2 make and 2 Break Contacts.

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