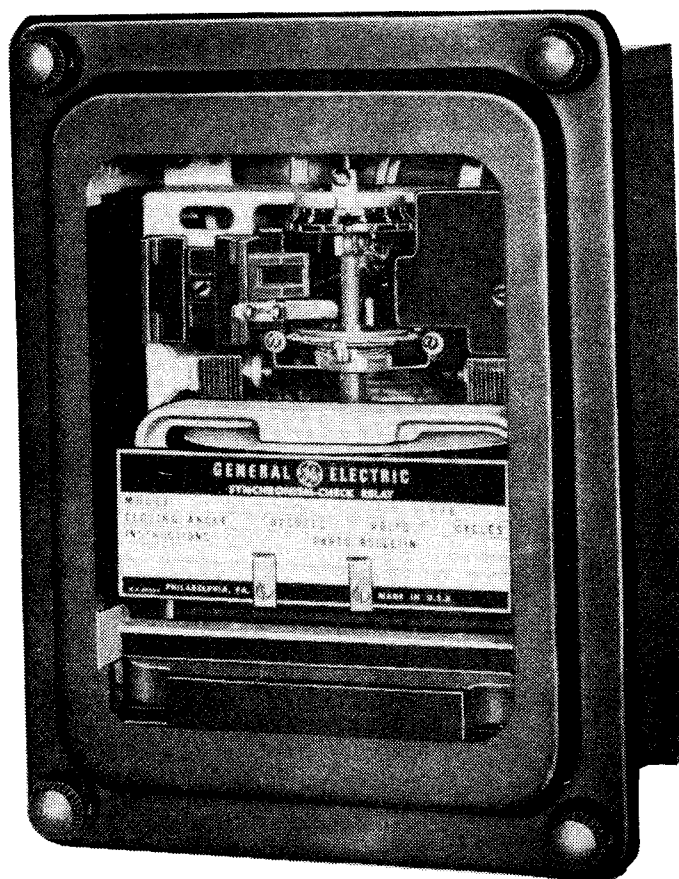




# INSTRUCTIONS

## SYNCHRONISM CHECK RELAY

TYPE IJS52D



GE Protection and Control  
205 Great Valley Parkway  
Malvern, PA 19355-1337

Two adjustments are necessary for obtaining a desired closing angle. The right-hand adjustable resistor at the top of the frame permits equalizing the closing angle. That is, the closing angle will be the same, whether one voltage is leading or lagging the other voltage.

The left-hand adjusting resistor is for obtaining the correct closing-angle setting. Simultaneous adjustments of the two resistors are necessary.

Using the connections shown in Figure 10, set  $V_1$  at rated voltage. If a 200 closing angle is desired, set  $V_2$  at rated voltage, leading  $V_1$  by 200. Adjust the left-hand resistor until the contacts just close. Now, with rated voltage on both circuits, determine the angle at which the contact closes with  $V_2$  lagging  $V_1$ . If the two angles are unequal, equalize them at 200 by adjusting the right-hand resistor. Then check the closing angle with  $V_2$  leading  $V_1$ , and readjust if necessary. Continue this procedure until the relay contacts just close for  $V_1$  leading or lagging  $V_2$  by 200. Use the same procedure for other closing-angle settings.

#### Pickup and Dropout

The pickup and dropout of the telephone-type relay may be changed by adjusting the gap between the armature and the pole face by bending the contact operating arm stop. After this adjustment is made, the contact wipe and gap must be rechecked.

#### Operating Time

If it is necessary to adjust the time characteristics, impose the chosen conditions on the relay, using connections shown in Figure 10, and adjust the time dial and, if necessary, the drag magnet until the correct operating time is obtained.

### RENEWAL PARTS

Sufficient quantities of renewal parts should be kept in stock for the prompt replacement of any that are worn, broken or damaged.

When ordering renewal parts, address the nearest Sales Office of the General Electric Company. Specify the name of the part wanted, quantity required, and complete nameplate data, including the serial number, of the relay. If possible, give the General Electric requisition number on which the relay was furnished.

Since the last edition, changes have been made in the final step of ELECTRICAL TESTS, ON PAGE 7.

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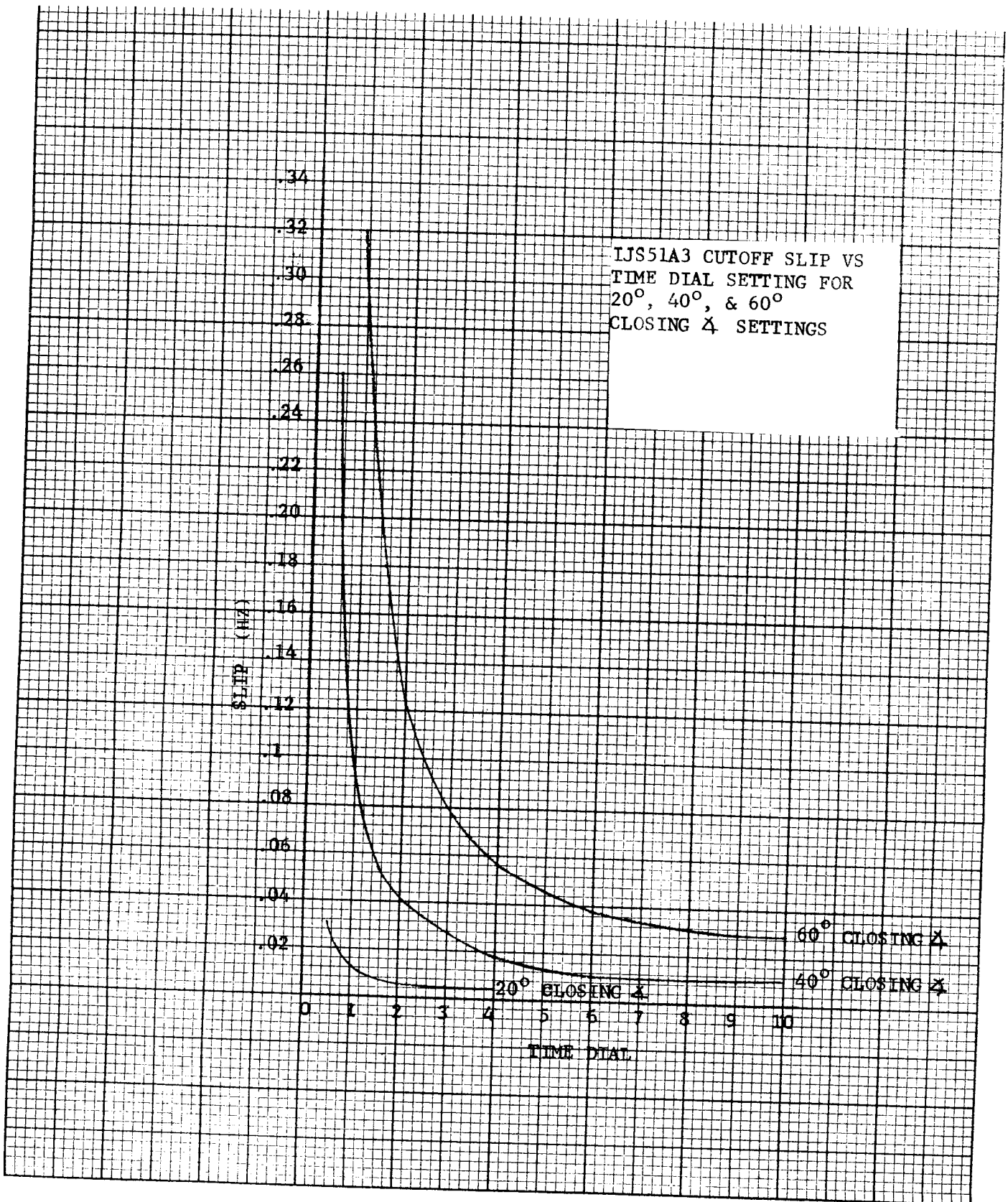


Figure 13 (0208A2314-0) IJS52D3A Cutoff Slip vs. Time-Dial Settings for Closing-Angle Settings of 20°, 40° and 60°

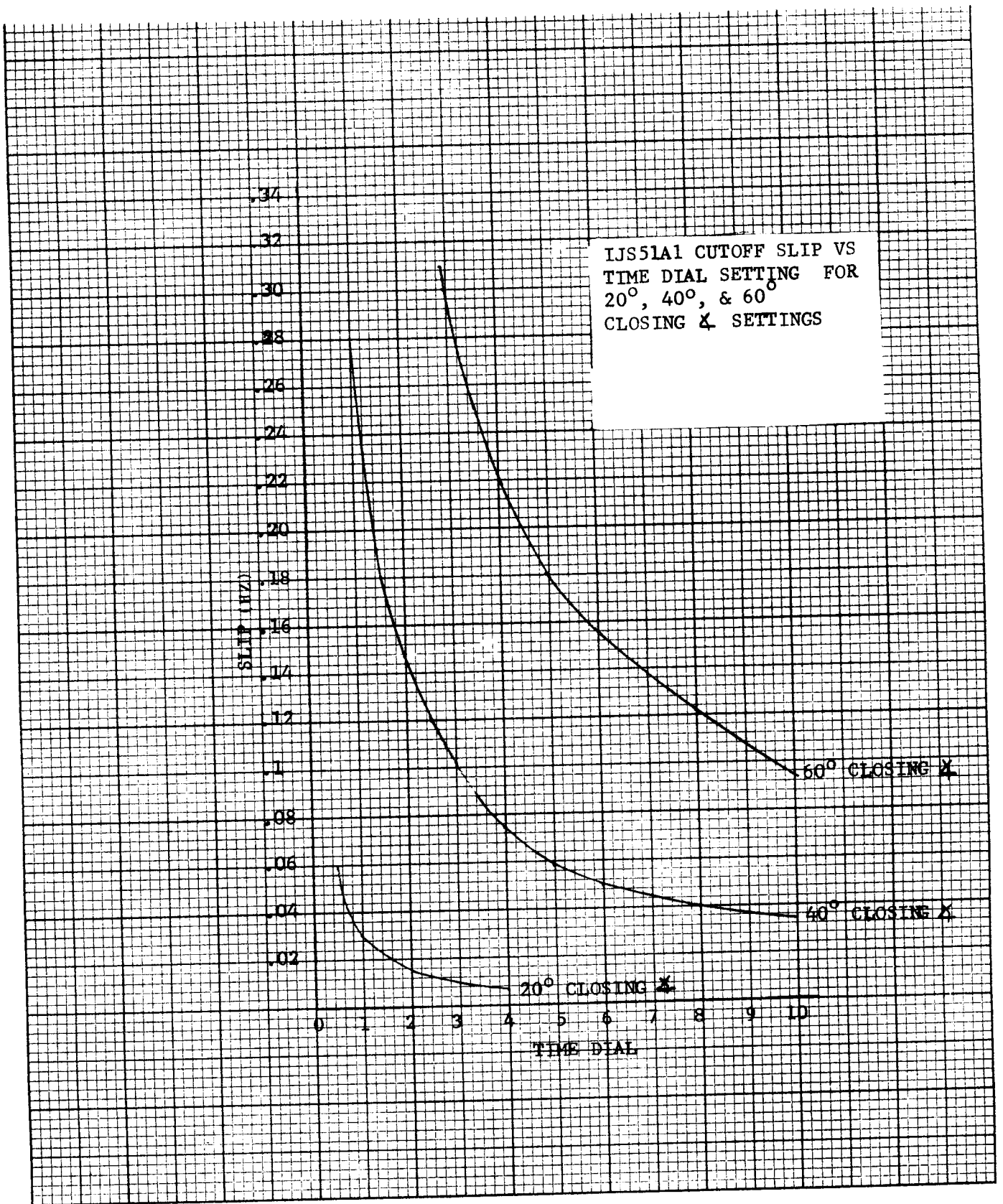


Figure 14 (0208A2315-0) IJS52D1A Cutoff Slip vs. Time-Dial Settings for Closing-Angle Settings of 20°, 40° and 60°

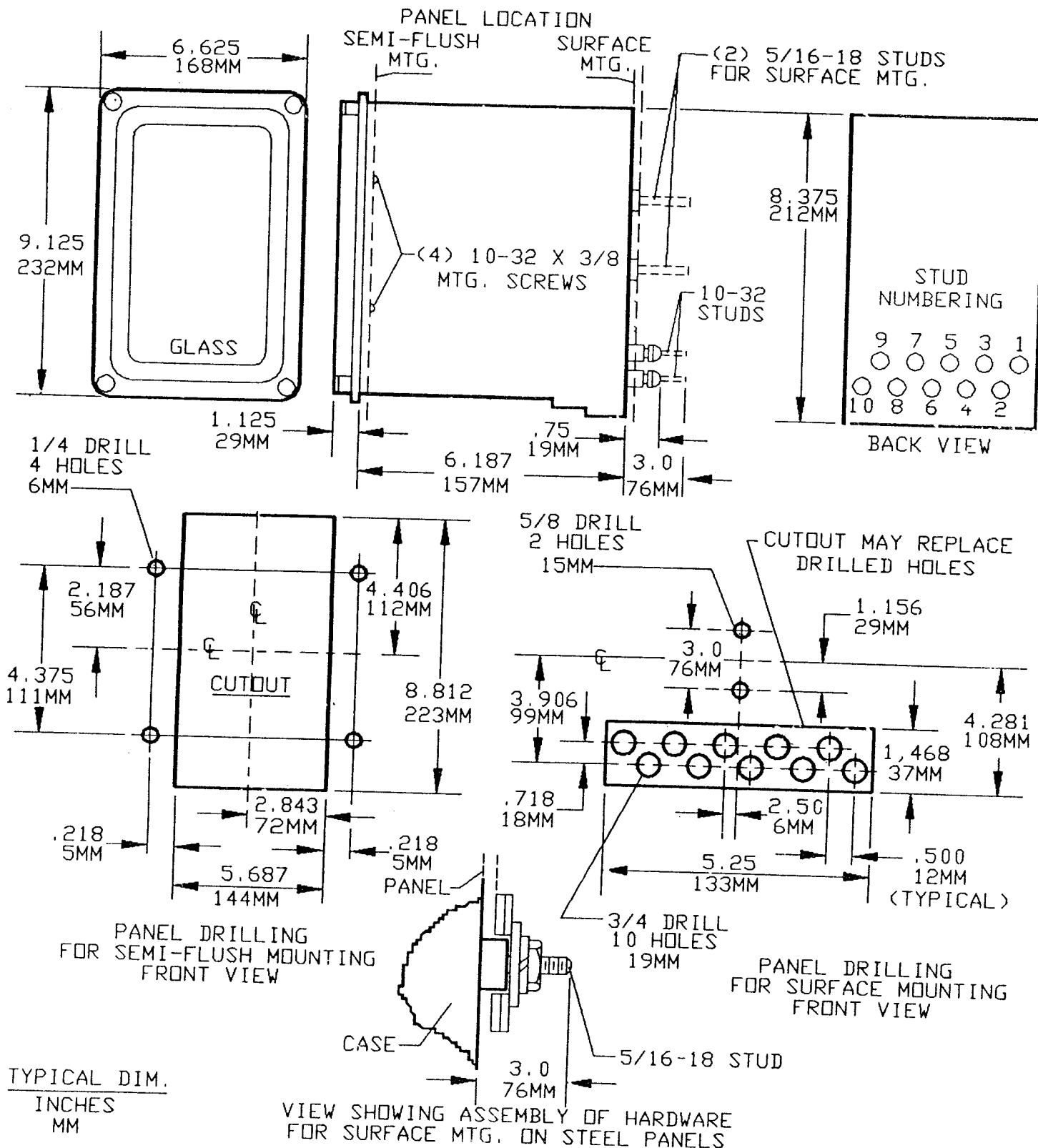


Figure 15 (K-6209271 [8]) Outline and Panel Drilling Dimensions for Type IJS Relay



***Protection and Control  
Business Department***

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