

DC AUXILIARY RELAY

Type HGA26C

GENERAL E ELECTRIC

PHILADELPHIA, PA.

DC AUXILIARY RELAY TYPE HGA

DESCRIPTION

INTRODUCTION

The HGA26C relay is a hinged armature device having shock restrained contacts. It is suitable for application where a high-speed, low energy device is required and where shock may be transmitted to the moving contacts. An example of such an application is mounting the relay on, or near a pneumatic circuit breaker mechanism.

RATINGS

This relay is available for continuous operation at all standard DC voltages up to 250 volts.

The current closing rating of the contacts is 30 amperes. The current carrying rating is 12 amperes continuously, or 30 amperes for one minute. The interrupting ratings, (non-inductive circuits) for various voltages are listed in Table I.

TABLE I

	DC		AC	
Volts	125	250	115	230
Amps	2.8	0.7	30	20

BURDENS

TABLE II

COIL RATING VOLTS (DC)	RESISTANCE OHMS	WATTS
250	15,500	4.02
125	3,650	4.28
48	512	4.50
32	250	4.10
24	160	3.60

CONSTRUCTION

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The shock restraint feature of the HGA26C relay is achieved by the use of a specially constructed armature and moving contact assembly. By the use of counterweights, the entire armature assembly is so constructed as to be in static balance. The contacts are of the "bridging type". Both the opening and the closing contacts are bridged by the common "T" bar (moving contact) which consists of a solid silver bar mounted on a leaf spring.

The molded base on which are mounted the coil, armature, and contact assembly, is not made of high impact material.

INSTALLATION

MOUNTING AND CONNECTIONS

The HGA26C relay should be mounted on a vertical surface. When mounted on a steel panel,

an insulating bushing is required for each terminal. The outline, panel drilling and internal connection diagram is shown in Fig. 1.

MAINTENANCE

PERIODIC INSPECTION

It is suggested that the relay be inspected and given an operational test at the time the associated devices are inspected.

CONTACTS

CLEANING

For cleaning fine silver contacts, a flexible burnishing tool should be used. This consists of a

flexible strip of metal with an etched roughened surface, resembling in effect a superfine file. The polishing action is so delicate that no scratches are left, yet corroded material will be removed rapidly and thoroughly. The flexibility of the tool insures the cleaning of the actual points of contact.

Fine silver contacts should not be cleaned with knives, files nor abrasive paper nor cloth. Knives or files may leave scratches which increase arcing and deterioration of the contacts. Abrasive paper or cloth may leave minute particles

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

of insulating abrasive material in the contacts, thus preventing closing.

ADJUSTMENTS

The contact gap should be 15/64-inch. This may be obtained by closing the armature and then adjusting the screws on the normally closed contacts until 15/64-inch is measured from the screw tip to the leaf spring.

The normally open contact wipe should be 3/64-inch. The normally closed contact wipe depends on the control spring setting. Tightening the spring increases the wipe.

PICKUP

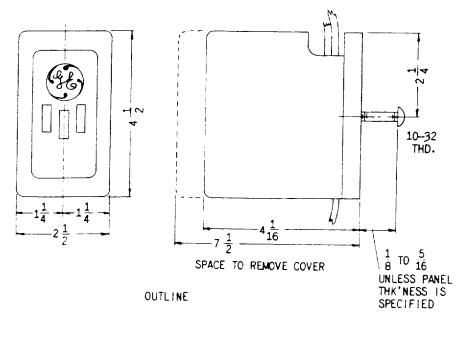
The pickup is normally set above 60% of rated voltage by adjusting the control spring tension.

The control spring is located at the tail of the armature. It is recommended that the pickup be set no lower than the 60% value to insure that the relays maintain adequate shock characteristics. The pickup should not be set above 80% of rated voltage.

RENEWAL PARTS

It is recommended that sufficient quantities of renewal parts be carried in stock to enable 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, specifying the quantity required and describing the parts by catalogue numbers as shown in Renewal Parts Bulletin No. 2623.



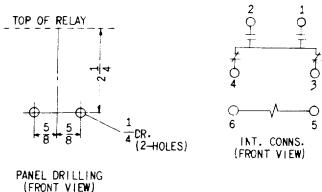


Fig. 1 Outline, Panel Drilling and Internal Connection Diagram for the HGA26C Relay