INSTRUCTIONS

GEH-1793A

SUPERSEDES GEH-1793 & GEI-30910A

INSTANTANEOUS AUXILIARY RELAY

TYPE HGA11

DESCRIPTION

These relays are double-pole, hinged armature type relays suitable for applications where a high-speed, low energy device is required.

The **HGA11A** relay is back connected. A cover is provided for this surface mounted relay.

The **HGA11A(-)F** relay is similar to the HGA11A relay except it has provisions for flush mounting.

The **HGA11H** relay is front connected. No cover is available for this surface mounted relay.

The **HGA11J** relay is front connected. A cover is supplied with this surface mounted relay.

The **HGA11K** is similar to the HGA11H except it has provisions for surface mounting from the front.

RATINGS

These relays are available with coil ratings for standard voltages up to 575 volts for 25, 50 or 60 cycles AC and up to 250 volts DC. The DC relays are also available with coil current ratings up to 5 amperes.

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 the various voltages are listed in the following table.

	DC				AC		
Volts	24	48	125	250	115	230	460
Amps.	12	6	3	1	25	15	5

BURDENS

DC COILS				AC COILS			
Coil Rating		R	Watts	Coil Rating		Z†	Volt-
Volts	Amps.	Ohms		Volts	Cycles	Ohms	Amps.
250		12900	4.84	575	60	22000	15.0
125		3250	4.82	460	60	14200	14.9
48		500	4.61	230	60	3800	13.9
32		205	4.97	115	60	1000	13.2
24		130	4.43	575	50	26700	12.4
12		35	4.11	460	50	17000	12.4
6		9	4.00	230	50	4250	12.4
	1	4.43	4.43	115	50	1020	13.0
	2	1.10	4.40	575	25	33500	9.87
	3	0.46	4.14	460	25	28300	7.50
	4	0.244	3.90	230	25	7070	7.50
	5	0.16	4.00	115	25	1768	7.45

† Impedance measured with relay picked-up.

CONSTRUCTION

The armature, magnet assembly and contact assemblies are all mounted on a compact molded compound base. Those relays provided with a molded cover may, upon request, be provided with a cover having a glass window.

INSTALLATION

MOUNTING

The relay should be mounted on a vertical surface. When the HGA11A is mounted on a steel panel, an insulating bushing is required for each terminal.

ADJUSTMENTS

The relays for DC service are adjusted at the factory to pick up at 60 percent of their rating when cold and 80 percent or slightly less after continuous operation. The relays for AC service are adjusted at the factory to pick up at 80 percent of their rating or slightly less.

Normally it should not be necessary to readjust the spring which is hooked onto the notched extension of the armature. If the proper adjustment does not exist the spring tension can be altered by shifting it to a different notch. It should not be set so low that the "b" contact wipe is lost.

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.

SWITCHGEAR DEPARTMENT

GENERAL ELECTRIC

PHILADELPHIA, PA.

MAINTENANCE

CONTACT CLEANING

For cleaning fine silver contacts a flexible burnishing tool should be used. A typical burnishing tool is included in the standard XRT11A relay tool kit.

RENEWAL PARTS

For renewal parts, address the nearest General Electric Company Sales Office, specifying the quantity required and describing the parts by catalogue numbers shown in Parts Bulletin No. GEF-2623.

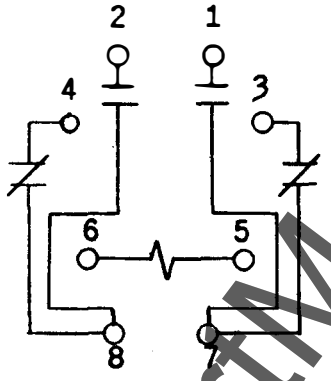
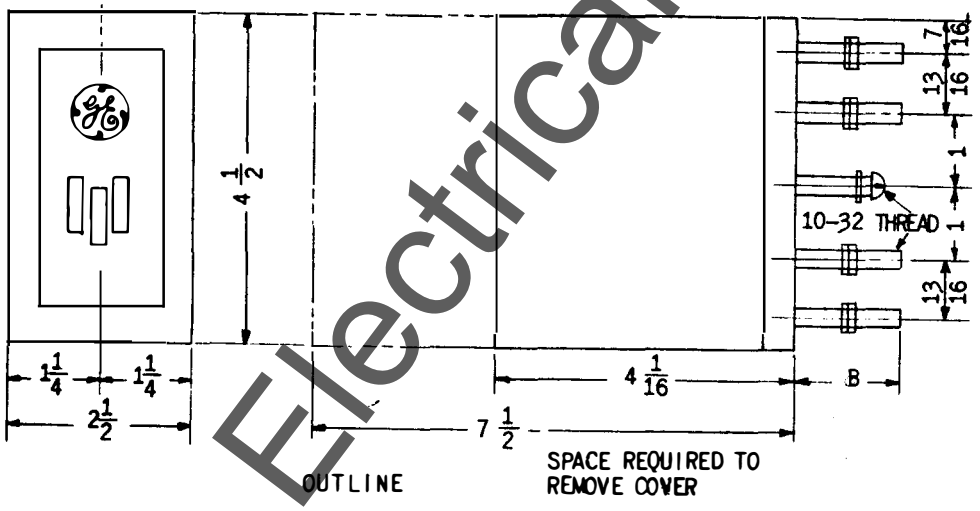
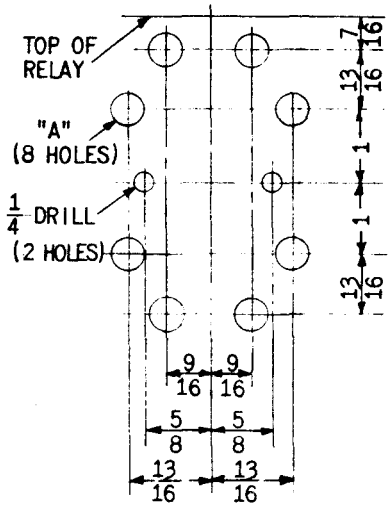


Fig. 1 (104A8573)

Fig. 1 Internal Connections for Type HGA Relays (Front View)





TYPE OF PANEL	"A"	"B"
INSULATING	7/16"	2-13/16"
STEEL	9/16"	1-3/8"

PANEL DRILLING (FRONT VIEW)

Fig. 2 (K-6077058)

Fig. 2 Outline and Panel Drilling for HGA11A Relay

Fig. 3 (104A8558)

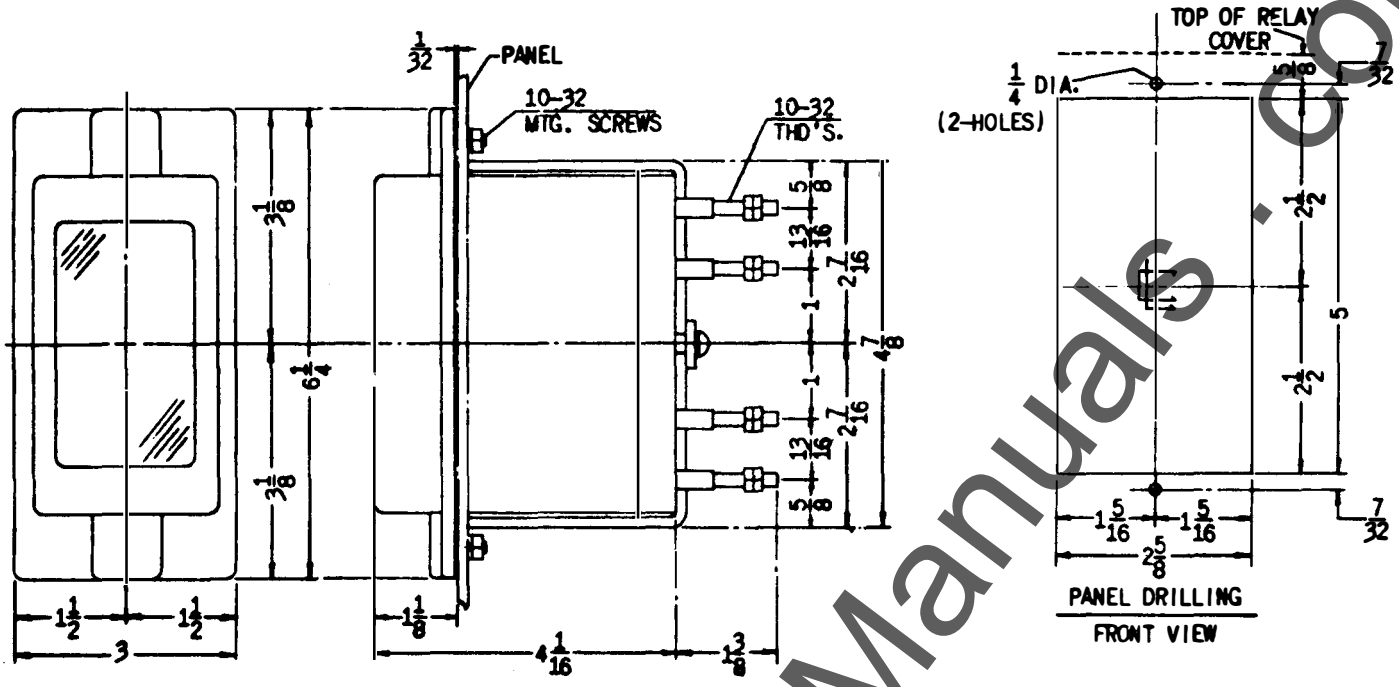


Fig. 3 Outline and Panel Drilling for HGA11A(-)F Relay

Fig. 4 (K-6375626)

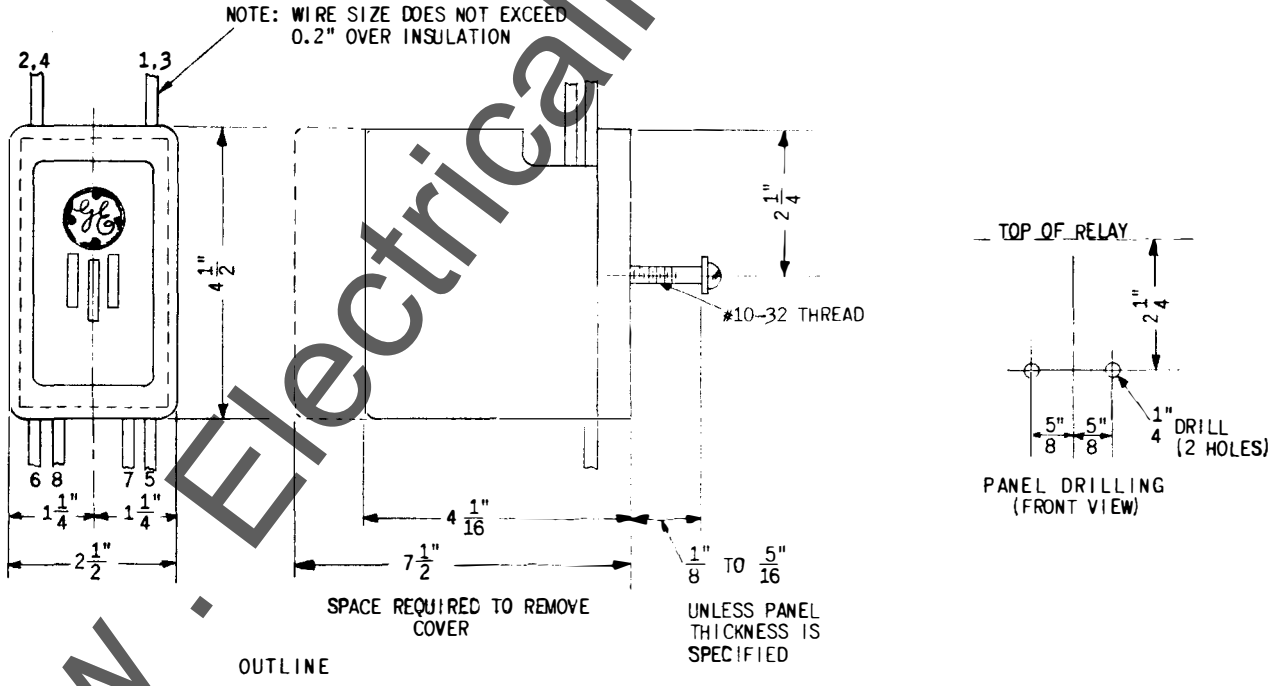
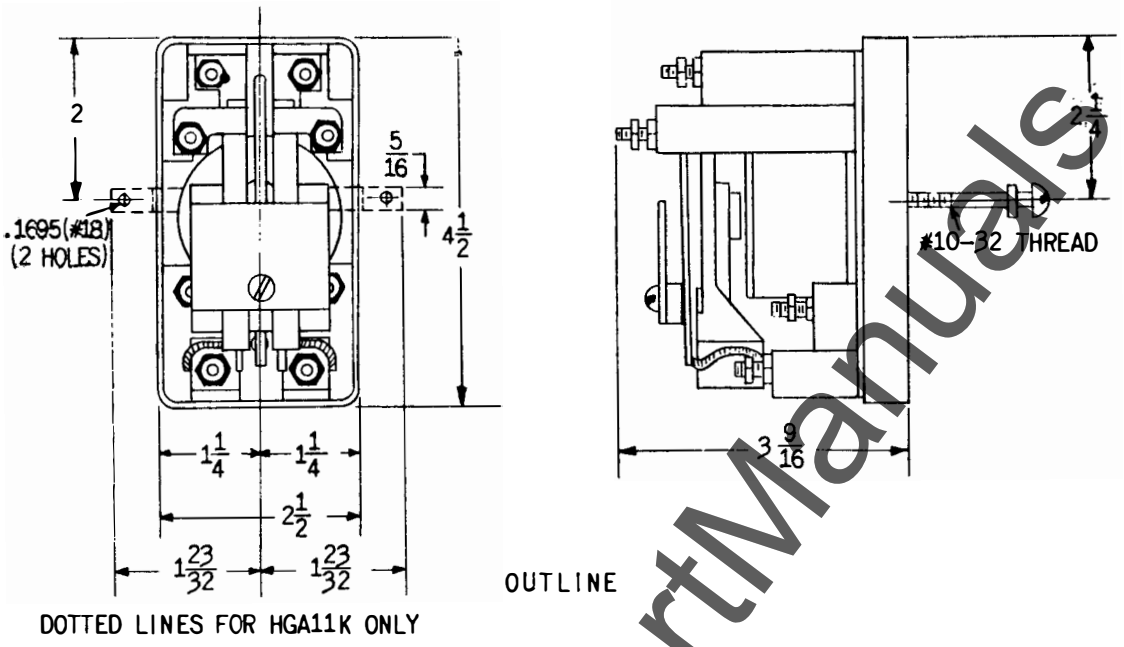


Fig. 4 Outline and Panel Drilling for HGA11J Relay



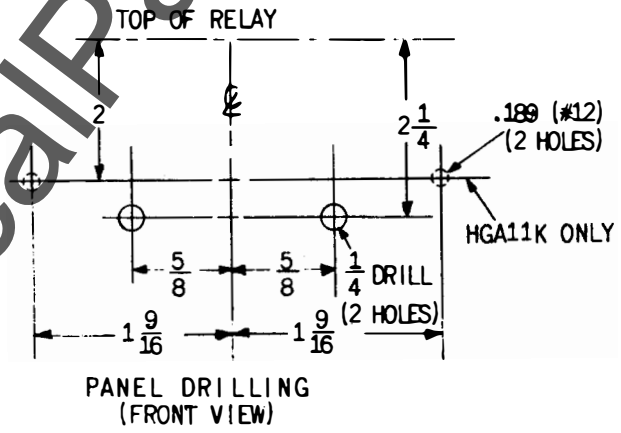


Fig. 5 (10A8573)

Fig. 5 Outline and Panel Drilling for HGA11H and HGA11K Relay