



INSTANTANEOUS AUXILIARY RELAY TYPE HMA23A

INTRODUCTION

The Type HMA23A relay is an instantaneous, low-burden device whose contacts are opened and closed by the movement of a hinged armature.

The Model 12HMA23A1 is a back-connected relay supplied with a cover and having a double-pole, double-throw contact arrangement. The two movable contacts are electrically separate and are held in position on the armature by means of a *Textolite contact carrier and spring housing. This relay is not furnished with terminal studs, but has the standard inserts in the base adaptable for any type of stud with a #10-32 thread.

The Model 12HMA23A11 relay is similar to the 12HMA23A1 relay except it is not furnished with a cover. Also, the rear mounting strap is omitted to make the two holes in the base accessible for front mounting.

RATINGS

The relays are available with a coil rating of 115 volts, 25 or 60 cycles.

LOCATION

The location should be clean and dry, free from dust and excessive vibration, and well lighted to facilitate inspection and testing.

MOUNTING

These relays are intended for use with a plug-in type of adapter. The relay should be mounted on a vertical surface, but horizontal mounting is permissible if the pickup is readjusted as described under ADJUSTMENTS. The outline and panel drilling

The current closing rating of the contacts is 30 amperes. The current carrying capacity is 12 amperes continuous or 30 amperes for one minute.

VOLTS		NON-INDUCTIVE	
D-C	A-C	Single Break (Amps)	Double Break (Amps)
125	---	0.5	1.5
250	---	0.1	0.25
---	115	15.	25.
---	230	10.	20.

BURDENS

Volts	Frequency	D-C Res.	Watts	Volt Amps.	Power Factor
115	60 Cy.	575	2.8	5.52	.507
115	25 Cy.	1780	1.8	3.5	.514

INSTALLATION

dimensions are shown in Fig. 1. Panel drilling dimensions are given to indicate how the relay can be secured from either the front or the rear if required. Normally, suitable prongs are to be provided by the purchaser to adapt the relay for "plug-in" mounting. However, if terminal studs are used, the relay can be used as a conventional back-connected unit.

CONNECTIONS

The internal connection diagram for these relays is shown in Fig. 1.

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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.

ADJUSTMENTS

The relays are properly adjusted at the factory for operation when mounted on a vertical surface. Relays for d-c service are adjusted to pick-up at 60 percent of their rating when cold and 80 percent when hot. Relays for a-c service are adjusted to pick-up at 80 percent of their rating.

Normally it should not be necessary to make any further changes in these adjustments. If, however, the correct pickup is not realized, adjustments can be made by changing the tension of the armature tension spring. This is accomplished by bending the projecting spring holder on the armature stop. The spring tension should not be so low that the back wipe is sacrificed.

MAINTENANCE

CONTACT CLEANING

In 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 burnishing tool described is included in the standard relay tool kit obtainable from the factory.

RENEWAL PARTS

Because of the nature of the relay construction it is not recommended that replacement parts be installed. Instead, spare units should be available for installation in case of emergency. Orders for

spare units should be addressed to the nearest Sales Office of the General Electric Company giving the complete model number and voltage rating of the relay desired.

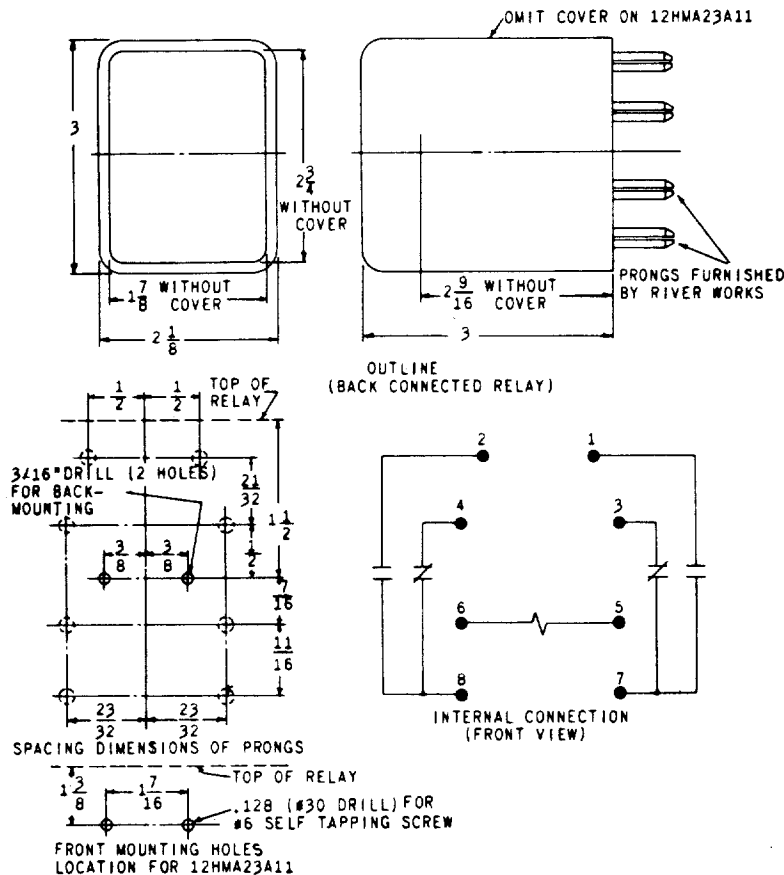


Fig. 1 (K-6507945)

Fig. 1 Outline and Panel Drilling Dimensions and Internal Connections for Type HMA23A Relay

* Denotes change since superseded issue.

