

# INSTRUCTIONS

GEK-27853  
INSERT BOOKLET GEK-27877

STATIC AUXILIARY TRIPPING RELAY

TYPE SLA12U

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**POWER SYSTEMS MANAGEMENT DEPARTMENT**

**GENERAL  ELECTRIC**



STATIC AUXILIARY TRIPPING RELAY

TYPE SLA12U

DESCRIPTION

These instructions supplement the basic SLA instruction book, GEK-27877, which is included in this book. The combination of the two forms instructions for Type SLA12U.

The Type SLA12U relay is a static auxiliary tripping unit which provides extra output circuits when used with a compatible type of SLA logic and tripping unit. The tabulation below shows the differences in the three models of the Type SLA12U relay.

MODEL	RELAY POWER SUPPLY DC VOLTAGE	TRIP CIRCUIT DC VOLTAGE
SLA12U1	125	125
SLA12U2	48	250
SLA12U3	48	125

The Type SLA12U relay provides the following output functions:

- 1) Two electrically separate, silicon controlled rectifier (SCR) tripping circuits, each containing a series, hand reset, mechanical target.
- 2) A breaker failure initiation (BFI) auxiliary telephone-type relay with two normally open, electrically separate contact outputs.
- 3) A reclose initiation (RI) auxiliary telephone-type relay with two normally open, electrically separate contact outputs.

Two trip auxiliary relays (TAR3, TAR4) are electrically separate reed relays used to send a logic signal to the adjacent SLA logic and trip relay. This logic signal permits the appropriate target lamp to light in the SLA logic and trip unit.

The circuitry for the above functions is shown on the internal connections diagram (Figure 1). A component location diagram is shown in Figure 2. The outline and mounting dimensions are shown in Figure 3.

RATINGS

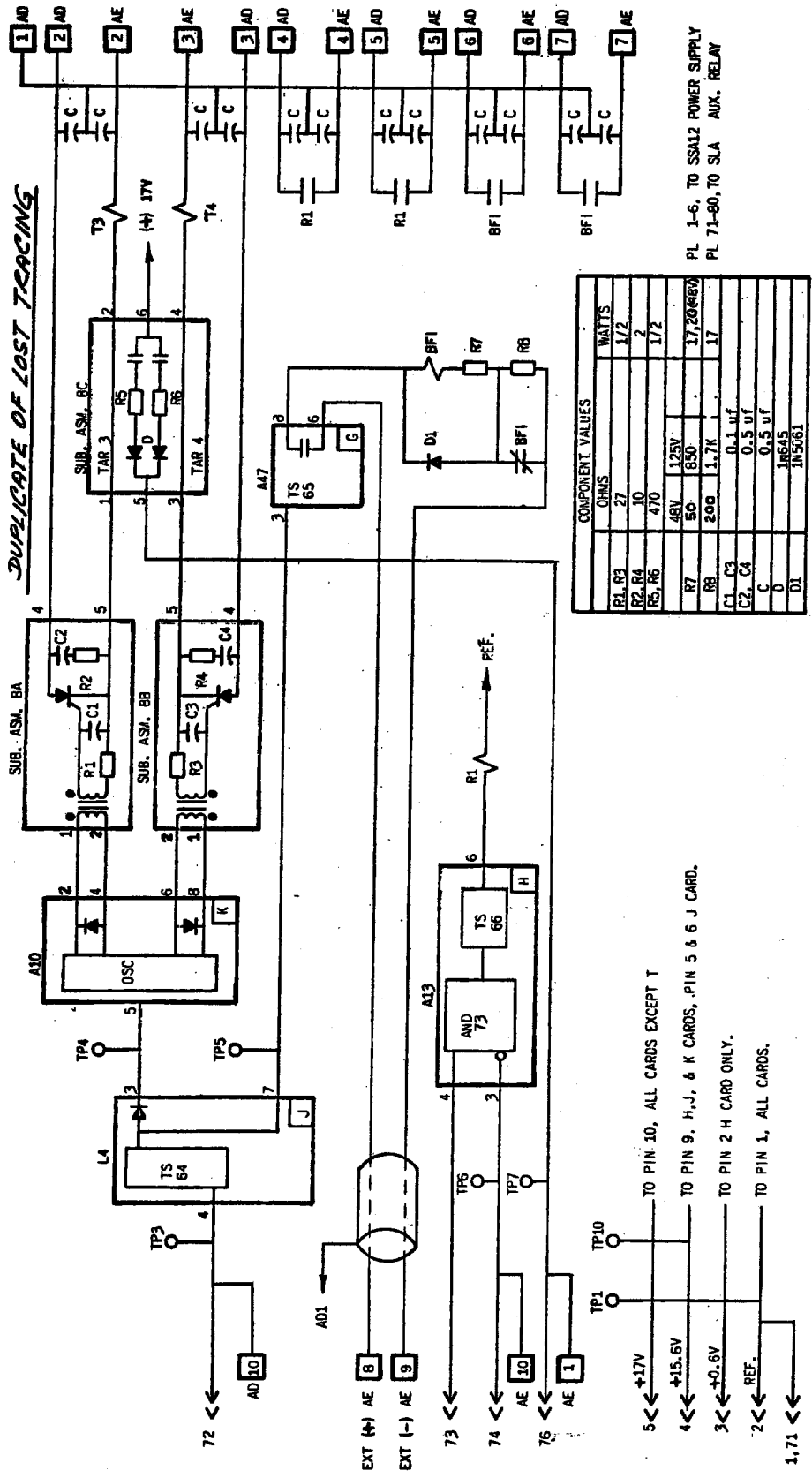
The operating times of the telephone-type relays are shown below:

BFI PICKUP TIME	3 - 5 milliseconds
BFI DROPOUT TIME	14 - 17 milliseconds
RI PICKUP TIME	14 - 17 milliseconds
RI DROPOUT TIME	130 - 160 milliseconds

The 17 volt D.C. burden is only a few milliamperes in the standby mode of operation and less than 100 milliamperes in the trip mode.

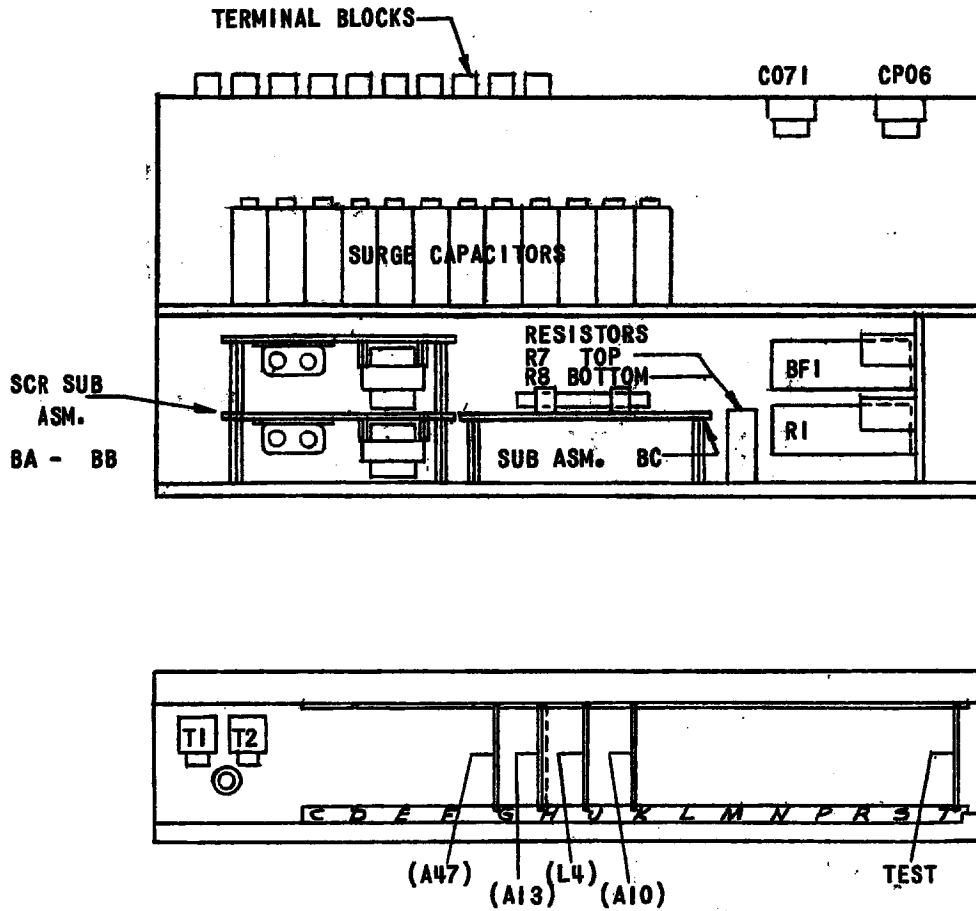
When energized, the burden of the BFI coil circuit on the station battery is approximately 185 milliamperes for a 48 V battery and 48 milliamperes for a 125 V battery.

***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.***



PL 1-6, TO SSA12 POWER SUPPLY  
 PL 71-80, TO SLA AUX. RELAY

FIG. 1 (0165B3631-1) INTERNAL CONNECTIONS DIAGRAM FOR THE SLA12U LOGIC UNIT



PRINTED CIRCUIT CARD REFERENCE

TYPE	POSITION	CAT. NUMBER
A10	K	0116B6702 GR-1
A13	H	0127B8175 GR-1
A47	G	0165B3577 GR-1
L4	J	0116B4939 GR-1
TEST	T	0116B6672 GR-1

FIG. 2 (0226A7221-0) COMPONENT LOCATION DIAGRAM FOR THE SLA12U RELAY







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