

GE Protective Relays

#### Test Probes and Plugs for C-Case Drawout Relays

**XCA** Test Equipment and Accessories

# DESCRIPTION AND APPLICATION

Three different XCA test plugs are available to provide an easy means of testing C case drawout relays without removing them from their cases.

The XCA11A1 is a two-position fourpoint test probe used in testing C-case relays. It is keyed to the barrier strips in the C-case, and can only be inserted in positions 1-2, 3-4, 5-6, etc. These terminal pairs are used for current transformer connections and trip circuit outputs in C-case relays. It cannot be inserted in positions 2-3, 4-5, etc. It has contact fingers which are electrically separate, top to bottom, and are connected to standard banana-plug receptacles on the face of the probe. This test probe is furnished with an accessory shorting plug Type 0184B5461 (see Figure 1) which may be used to short out CT inputs during relay tests.

The **XCA11A2** is a prewired test probe for use in measuring current in the CT circuits connected to a C-case relay. It consists of a Type XCA11A1 test probe to which a jumper and six-foot long (1.8 m) ammeter leads have been added. See Figure 2.

The **XCA28A1** is a full-width 14-position 28- point test plug which provides complete flexibility in testing C-case relays. See Figure 3. It has 28 electrically separate contact fingers connected to 14 concentric binding posts. One side of the test plug is prominent-



Fig. 1. XCA11 test probe with shorting plug 0184B5461

ly marked "Relay Side" and the other "Case Side". The test plug is keyed so that it can only be inserted in the proper manner. The "Relay Side" contact fingers are connected to the black inner binding posts and engage the relay internal connections. Test leads with either spade lugs or banana jacks may be used with these binding posts. The contact fingers on the "Case Side" are connected to the outer binding posts with red thumb nuts and engage the C-case stud connections. Removable test links are furnished with each test plug for through connection, short circuiting and external wiring,. These accessory links are identical to those supplied with the XLA test plug. SeenEig.



Fig. 2. C-case relay with XCA11A2 ammeter test probe

## TEST PROBE SELECTION GUIDE

Application	Model	Number	Weight Ib (kg)	
	Number	Required	Net	Shipping
All Test	XCA28A1	1	2.6 (1.2)	
Measure CT Current	XCA11A2	1	0.3 (0.14)	0.5 (0.2)
Test Current circuit only	XCA11A1@	1 and 1 shorting	0.15 (0.06)	0.3 (0.14)
		plug		
Test Current and output circuits	XCA11A (2)	2-4 depending		
		on relay		

① For maximum flexibility in testing, it is recommended that each set of test equipment include one XCA28A1 full-width test plug and one XCA11A2 ammeter test porbe. Alternatively, two XCA11A1 two-position test probes, each with 0184B5461 shorting plug and one XCA11A2 ammeter test probe should be ordered.

(2) Model XCA11A1 includes one accessory shorting plug 0184B5461.



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### **CONNECTION DIAGRAM**



Fig. 3. Typical separate source connections and wiring diagram for testing an IFC overcurrent relay using the XCA28 test plug



link



Qty 5 Cat. No. 6375471 Short-circuiting link



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Fig. 4. Accessory links are provided with the test plug XCA28 for jumper connections and for connections to terminal studs

(Photo 1236857)

Accessory Link Kit 273A9598G1

= (10)-62422939P1 thru-links (5)-6375471P1 short-circuit links (10)-6242937P1 test clip (10)-6242938P1 test clip

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