

Operating Instructions

HOOK-UP

Before Hook-Up

1. Remove breaker from service.
2. Breaker should be closed and in the "On" position.
3. Record breaker settings so they can be returned to their original position.
4. Set all breaker settings to maximum position.
5. Set "Test Type" switch on the test kit to "Off".

WARNING: ELECTRICAL SHOCK IS POSSIBLE FROM THE TEST LEADS. BE SURE THAT THE "TEST TYPE" SWITCH IS IN THE "OFF" POSITION. THE TRIP UNIT KIT CAN BE DAMAGED IF A RATING PLUG IS NOT INSTALLED. INSTALL A RATING PLUG IN THE TRIP UNIT BEFORE USING THE TEST KIT.

Hook-up

1. Remove the test cord from inside the test kit for the type of breaker to be tested. (Series-C or Seltronic) See Figure 1.
2. Connect the test cord to "Output" on test kit and insert opposite end into trip unit. See Figures 2,3.
3. Plug test kit power cord into a power source.

TESTS

All tests performed are functional operation tests only and are not intended as a check of the actual calibration of the breaker. Precise calibration should be done with primary injection equipment.

Long Delay Test

1. Set "Test Type" switch to "Long Delay". (RED "RUNNING" LIGHT MAY COME ON BRIEFLY)
2. Examine breaker, rating plug and trip unit nameplates to determine breaker frame and rating of unit per their catalog numbers. Seltronic breakers with mining and ground fault are the same on the standards (example: for LCM150 look at LC150).
3. Select "Test Range" from "Long Delay Test Position", "Breaker Frame" and "Rating" shown on "Test Chart".
4. When green "Ready" light turns on the unit is ready for testing. Push "Start" button and begin timing. Release "Start" pushbutton.
 - A. The red "Running" light turns on during testing.
 - B. Breaker will trip within "Time Range" shown on "Test Chart".
5. Set "Test Type" Switch to "Off".
6. Reset and reclose breaker.

NOTE: ALLOW FIVE MINUTES BEFORE REPEATING LONG DELAY TEST.

Short Delay Test

1. Set "Test Type" switch to "Short Delay". (RED "RUNNING" LIGHT MAY COME ON BRIEFLY)
2. Set "Short Delay Time" setting on trip unit, if available, to minimum.
3. When green "Ready" light turns on, push "Start" button.
 - A. The red "Running" light turns on during test.
 - B. Breaker will trip instantaneously. Release "Start" pushbutton.
 - C. The green "Ready" light turns on in four to six seconds.
4. Reset and reclose breaker.

Figure 1-Test Cords

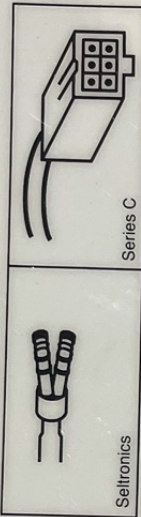


Figure 2-Seltronics

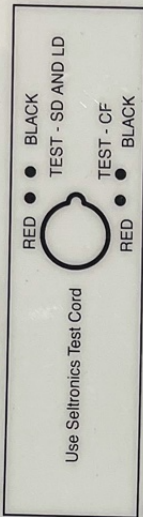
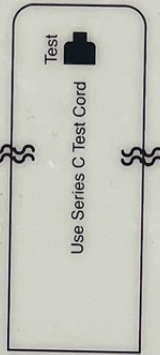


Figure 3-Typical Series C



Ground Fault Test

1. Repeat Step #2 in "Hook-up" for Seltronic only.
2. Set "Test Type" switch to "Ground Fault". (RED "RUNNING" LIGHT MAY COME ON BRIEFLY)
3. Set ground fault pick-up settings on trip unit to minimum position.
4. When the green "Ready" light turns on push "Start" button and hold.
 - A. The red "Running" light turns on during test.
 - B. The breaker will trip with a slight delay release "Start" pushbutton.
 - C. The green "Ready" light turns on in four to six seconds.
5. Set "Test Type" switch to "Off" and then back to "Ground Fault". (RED "RUNNING" LIGHT MAY COME ON BRIEFLY)
6. Reset and reclose breaker.
7. Set ground fault time setting on trip unit to minimum position.
8. When the green "Ready" light turns on push "Start" button and hold.
 - A. The red "Running" light turns on during testing.
 - B. The breaker will trip instantaneously, release "Start" pushbutton.
 - C. The green "Ready" light turns on in four to six seconds.
9. Set "Test Type" switch to "Off".
10. Reset and reclose breaker.
 - A. Unplug test kit from trip unit.
 - B. Return trip unit settings to their original settings.

Should Breaker Fail To Trip

1. Check to see if green "Ready" light is on. If it is not:
 - A. Make sure the test kit has power applied.
 - B. Unplug the test kit from the power source, examine the fuse in the test kit and replace it if blown. Plug test kits power cord into power source.
2. Repeat test and if breaker again fails contact your local Westinghouse representative.



Electronic Trip Unit
Test Kit

Fuse



Output



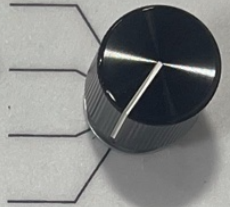
Test type

Short Delay

Ground Fault

Long Delay

Off



1232C50G10

Test Chart 1

Breaker Frame	Rating	Long Delay Test Position	Time Range For Trip-Seconds	
			Min.	Max.
LC150	75	A	32	64
	90	A	49	92
	100	B	25	50
	125	B	40	78
	150	C	32	64
LC300	150	A	32	64
	175	A	44	87
	200	B	25	50
	225	B	32	64
	250	B	40	78
	275	C	27	54
	300	C	32	64
LC400	200	A	32	64
	225	A	41	81
	250	B	22	44
	300	B	32	64
	350	C	25	49
	400	C	32	64
LC600	300	A	32	64
	350	A	44	87
	400	B	25	50
	450	B	32	64
	500	B	40	78
	600	C	32	64

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Test Range

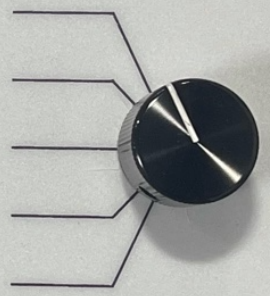
A

B

C

D

E



Test

Ready



Running



Start

