

# Results of Testing of Directional O/C & E/F Relays

Name of Sub-station : .....  
 Name of Feeder : .....  
 Settings : .....  
 Mfg. Nr. : .....

Date : .....  
 Type of Relay :- CDD.....  
 Make : .....  
 C. T. R.....

## (A) Starting Current & Operating Time Test

| Phase | Operating Current Test |                 |                  | Operating Time Test at T.M.S.= |                          |                         |                        | Remarks |
|-------|------------------------|-----------------|------------------|--------------------------------|--------------------------|-------------------------|------------------------|---------|
|       | Set at Amps            | Started at Amps | Operated at Amps | P.S.                           | Current Injected in Amps | Operating Time in Secs. | Computed Time in Secs. |         |
|       |                        |                 |                  |                                |                          |                         |                        |         |

## (B-1) Injecting Double Rated Current Keeping Voltage Terminal Short

| Phase | Set at Amps | Current Injected on (9-10) in Amps | Voltage Terminal (7-8) | Behaviour of Relay (Operated/Blocked) | Remarks |
|-------|-------------|------------------------------------|------------------------|---------------------------------------|---------|
|       |             |                                    | Shorted                |                                       |         |
|       |             |                                    | Shorted                |                                       |         |
|       |             |                                    | Shorted                |                                       |         |

## (B-2) Directional Check By Z.F.B Test Set

| Phase | R-N. Current of R-phase Injected between 9-10 | Voltage of Y & B-phase applied at 7 & 8 in sequence | Position of Switch (Normal/Reverse) | Behaviour (Operated/Blocked) |
|-------|---|---|-------------------------------------|------------------------------|
|       |   |   |                                     |                              |

## (C) Other Checkings & Measurements

- (i) System Voltage Measured on Directional O/C Relay Terminals 7-8 :—  
 R- $\phi$  = ..... Volts; B- $\phi$  = ..... Volts;
- (ii) Open Delta Voltage measured on Directional E/F Relay Terminals 7-8 :—.....
- (iii) On Load Direction Test performed on :—  
 O/C R $\phi$  = ... ; E/F = ... , O/CB $\phi$  = .....
- (iv) Main Distance Protection & Back—up protection are connected on same/separate core of C.T.....
- (v) C.T. Secondary Currents measured and results recorded in enclosed sheet.
- (vi)

Counter-signed by  
 Executive Engineer (T & C)

Tested by  
 Assistant Engineer (T & C)

**Note** :—This sheet is meant for Commissioning & Routine Testing results.