**Case-1:**

Experimental Results: **(Fault current =2.67A, Fault current in PU=0.534)**

Nominal Current (Inom)= 5A, Pickup setting= 0.3Inom. Characteristic curve= IEEE M Inverse.

β = 150 deg, ϒ = -30 deg. Minimum Trip Time= 0.20 sec.

Sl. No. Angle (V-I) Trip/Block

1 5 Trip

2 14 Trip

3 17 Trip

4 24 Trip

5 38 Trip

6 45 Trip

7 54 Trip

8 68 Trip

9 75 Trip

10 86 Trip

11 98 Trip

12 103 Trip

13 112 Trip

14 124 Trip

15 138 Trip

16 143 Trip

17 149 Trip

18 153 Block

19 172 Block

20 -175 Block

21 -162 Block

22 -150 Block

23 -149 Block

24 -132 Block

25 -120 Block

26 -108 Block

27 -91 Block

28 -79 Block

28 -61 Block

28 -48 Block

29 -37 Block

30 -32 Block

31 -27 Trip

32 -14 Trip

33 -2 Trip

**Case-2: with Current reversal**

Experimental Results: **(Fault current =2.67A, Fault current in PU=0.534)**

Nominal Current (Inom)= 5A, Pickup setting= 0.3Inom. Characteristic curve= IEEE M Inverse.

β = 70 deg, ϒ = -110 deg. Minimum Trip Time= 0.20 sec.

Sl. No. Angle (V-I) Trip/Block

1 3 Block

2 12 Block

3 29 Block

4 41 Block

5 55 Block

6 67 Block

7 78 Trip

8 84 Trip

9 95 Trip

10 108 Trip

11 121 Trip

12 136 Trip

13 149 Trip

14 162 Trip

15 177 Trip

16 -172 Trip

17 -161 Trip

18 -148 Trip

19 -130 Trip

20 -123 Trip

21 -117 Trip

22 -102 Block

23 -91 Block

24 -79 Block

25 -62 Block

26 -47 Block

27 -33 Block

28 -20 Block

28 -9 Block

28 -2 Block