LIST OF PRINCIPAL SYMBOLS :

V_L	System fault voltage, referred to the secondaries of the potential transformers
$I_L \angle -\phi$	System fault current, referred to the secondaries of the current transformers
Z_L, Z	Line Impedance
$Z_R \angle \theta$	Replica impedance
R, X	Resistance and reactance, respectively
Z_S	Source impedance
S_1, S_2 etc.	Derived Signals for comparison
β_1, β_2 etc.	Angular limits of phase comparison
m	Fraction representing the location of fault
Z_1	Positive sequence impedance of the system viewed from the point of fault
Z_2	Negative sequence impedance, similar to Z_1
Z_o	Zero sequence impedance, similar to Z_1
Z_1'	Positive sequence impedance of the line, from relay to the point of fault
Z_o'	Zero sequence impedance, similar to Z_1'.

R_f	Fault resistance
$K_1\angle\alpha_1, K_2\angle\alpha_2$ etc.	Voltage coefficients
K_1, K_2 etc.	Constants representing potentiometer settings
δ	Load angle
S_p	Polarising signal derived from healthy phase or phase-pair
E_p	Prefault e.m.f.
Y_{PR}	Input admittance of pilot-wires
G_p, B_p	Conductance and susceptance of pilot-wires
Y_1, Y_2 etc.	Replica admittances
K	Relaying current distribution factor
E_1	Positive sequence voltage
I_1	Positive sequence current
'	Index defining the quantities on the left of the point of fault, in accordance with fig. 9.1
''	Index defining quantities on the right of the point of fault, in accordance with fig. 9.1
Z_{r_1}	Positive sequence impedance seen by the relay

$$X = \text{Accuracy} = \frac{\text{Impedance just causing the operation of the relay}}{\text{Impedance setting of the relay}}$$

$$Y = \text{Range} = \frac{\text{System source impedance}}{\text{Impedance setting of the relay}}$$