(22) Date of filing of Application :14/09/2024

(43) Publication Date : 20/09/2024

(54) Title of the invention : Fault Detection And Its Location Using Microcontroller For Underground Cables		
 (51) International classification (86) International Application No Filing Date (87) International Publication No (61) Patent of Addition to Application Number Filing Date (62) Divisional to Application Number Filing Date 	:G01R31/08, G05B19/02, G01R31/52 :NA :NA :NA :NA :NA :NA :NA :NA	 (71)Name of Applicant : 1)Dr.M.Kondalu Address of Applicant : Professor Electrical and Electronics Engineering Dept., Malla Reddy Engineering College, Maisanmaguda (Post. Via. Kompally), Medchal-Malkajgiri-500100. State:Telangana Email ID & Contact Number:receinod@mreca.ein & 9966440958 Secunderabad

(57) Abstract :

ABSTRACT: This work deals with new method of single-phase fault detection and also Auto switching based on Arduino displayed over the fault. Our detection system deals with the current flowing through cables. Each ABS IFACT: This work deals with new method of single-phase fault detection and aso Auto switching based on Arduino displayed over the fault. Our detection system deals with new method of single-phase fault detection and aso Auto switching based on Arduino displayed over the fault. Our detection system deals with new method of single-phase fault detection and aso Auto switching based on Arduino displayed over the fault. Our detection system deals with new method of single-phase fault detection and aso Auto switching based on Arduino displayed over the fault. Our detection system deals with new method of single-phase fault detection and aso Auto switching based on Arduino displayed over the fault. Our detection system deals with the direction system on the current transformers are used to detect current suddenly increases. Also, in case of open circuit, current will be zero. Current transformers are used to detect current level, this output current will be given to I to V converter unit so as to make in readable in terms of voltage. This voltage is then fed to ADC pin of Arduino, which convert it into digital and take appropriate action if any fault condition (SC or OC) occurs. This fault is displayed on LCD display & on LEDs. Relay driver and relay circuit is used to switch single phase load of city electricity distribution system on other ok phase to provide end user an uninterrupted power supply. Fault clearing switch is provided for manually tell the system about fault clearing. Then only load will be switched to regular phase. The information sends to authority peoples with help of GSM module.

No. of Pages : 12 No. of Claims : 4