wJ700

Recloser Controller

affra

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W700 is a powerful microcontroller based system which connects to a recloser switch. Capability to detect various types of faults is implemented so suitable commands can be directed. Communicating via standard protocols along side with the potential to configure properties of objects makes this device convenient to use.

Protection

- Instantaneous Over Current – 2 elements
  - Phase
  - Earth/ Calculated Residual
  - Negative Sequence
- Inverse Time Over Current – 63 curve
  - Phase
  - Earth/ Calculated Residual
  - Negative Sequence
- Definite Over Current
  - Phase
  - Earth/ Calculated Residual
  - Negative Sequence
- Sensitive Earth Fault
- Intermittent Earth Fault
- Broken Conductor
- Synchronism Check
- Over / Under Voltage
- Over / Under Frequency
- Ground Over Voltage
- Second Harmonic Blocking
- Inrush Restraint
- Cold Load Restraint
- Direction Detection
- Open Line Detection
- Auto Reclosing
  - Phase
  - Earth
  - Negative Sequence
- Sequence Coordination
- Hot Line Tag

Measurement

- Voltage Source/ Load
- Current Phase/ Earth
- Power Active/ Reactive/ Apparent
- Power Factor
- Frequency
- Temperature

PQM

- Sag/ Swell/ Interruption
- Displacement Power Factor
- Sequence Components
- THD Voltage/ Current
- Harmonic 2-40th (Odd/Even) Voltage/ Current
- Voltage/ Current Unbalance

Recording

- Fault Event
- Digital I/O Event
- System Event
- PQM Event
- Alarm Event
- Counters Switch Open, Switch Close, …
- Demand
- Load Profile
- Waveform Pre-fault – duration – Post-fault

Additional Functions

- 4-Quadrant Metering
- Max Demand
- Analog Alarm
- PQM Alarm
- Setting Group

Analog Input

- 6 Voltage Source/ Load
- 4 Current 3 phase/ 1 Earth

Digital Input/ Output

- 10 Output
- 5 Input

HMI

- 160 * 160 Graphic Display (BW)
- 17 Button Keyboard
- 40 Led Indicator

Communication

- Ethernet – DNP3.0, IEC60870-5-104, AES128 Supported
- Serial RS232 – DNP3.0,IEC60870-5-101, AES128 Supported
- Serial RS232 – HMI Software
- RS485 – Modbus RTU

Hardware

- Power Supply
- Battery Charger
- Battery Test Circuit

Environment Condition

- Operating Temperature -25 to +70 °C
- Humidity < 95% RH
- Altitude < 2000 m

Standards

- IEC 61000-4-2/ 3,4,5,6,8,11,17,18,29
- IEC 61000-6-5
- IEC 60068-2-1 / 2,6,27,30
- IEC 60255-1 /27,151
- IEEE C37.1
- CISPR22