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Protection and metering unit with integrated control for circuit-breaker protection cubicles

ekorsys units: protection, telemanagement & communication

Reliable innovation. Personal solutions.
Preface
Protection, metering and control unit, integrated in Ormazabal circuit-breaker cubicles for general protection with integrated control functions.

Applications
» Protection of remote-controlled Medium Voltage customers.
» Protection of Transformer substations and industrial customers:
  » Transformer protection (up to 15 MVA - 24 kV and up to 25 MVA - 36 kV)
  » General and line protection with circuit-breaker
  » Automatic transferring of lines
  » Capacitor banks and motors
  » Switching substations

Most notable features
» IEC inverse time curves
» External trip
» Presence of voltage from capacitors
» Phase metering from 5 A
» Earth current measurement from 0.5 A
» Factory-installed toroidal-core current transformers: prevention of errors on site
» Neutral Directional Unit with configurable MTA to detect directional earth faults in any earthing system

Materials
Microprocessor-based with protection functions for timed (overload) and instantaneous (short-circuit) overcurrent of phases and neutral (Optional: Directional overcurrent).

Communicable electronic relay
» Neutral Directional Unit with configurable MTA to detect directional earth faults in any earthing system

Neutral Directional Unit
» Earth current measurement
» Presence of voltage from capacitors
» External trip
» IEC inverse time curves
» Presence / absence of voltage
» Bistable trigger

Technical characteristics
Protection Functions
» Phase overcurrent 50-51
» Earth overcurrent 50N-51N
» Ultrasonic earth leakage protection
» Thermometer (external trip) 49T
» Directional overcurrent 67N - 67Ns (*) or 67 W

Voltage
» Detection of voltage presence / absence

Detection, Automation and Control
» 5 inputs / 7 outputs (*)
» 10 inputs / 4 outputs (*)
» Recloser 79

Communications
» Front port configuration DB9 RS232
» Rear port remote control RS485 (5kV) – RJ45
» MODBUS (RTU) – RJ485 – optical Fibre

Indications
» Tripping cause indication
» Error display
» History Log

Test
» Test blocks for current injection
» Output contact for test

Not all the combinations of this configurator are possible. Please ask our Technical-Commercial Department about availability of models.

Applications
» Protection of remote-controlled Medium Voltage customers.

Most notable features
» IEC inverse time curves

Current Transformers
1000 / 1 300 / 1 SP20 SP20 O.5 0.5 130% 130% 5-1300 3-390 0.20 0.18 26 000 7800 31.5 - 3 31.5 - 3 2.5 Ith (80 kA) 2.5 Ith (0 kA)

Technical Specifications
Insulation
IEC 60255-5
EMC
IEC 60255-11
IEC 60255-22-1
IEC 60255-22-2
IEC 60255-22-3
IEC 60255-22-4
IEC 60255-22-5
IEC 60255-22-6
IEC 61000-4-8
IEC 61000-4-12
IEC 60255-25

Climatic
IEC 60068-2-1
IEC 60068-2-2
IEC 60068-2-78
IEC 60068-2-30

Mechanical
IEC 60255-21-1
IEC 60255-21-2
IEC 60265
IEC 60056
CE Conformity
IEC-CE-26/08-43-EE-1
IEC60255

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