

## DC-Pro

HIGH PERFORMANCE PROTECTION RELAY



### General Characteristics

DC-Pro protection relay provides top-performance in terms of protection functions, memory and communication characteristic.

Designed for DC railway applications, is the best solution for the most demanding protection and control tasks.

### Communication

- IEC61850 server with GOOSE messages.
- "Internet ready" with multiple connections
  - FTP server (File Transfer) to download/upload files from/to internal memory, or from external USB memory stick.
  - Web server provides information on protection status.  
DHCP/AUTO IP/STATIC IP / Telnet / UDP
- Modbus on TCP, MODBUS RTU on RS485 and USB, IEC103 / NTP (time sync), NMEA (GPS), IRIG-B

### Hardware

- New 32 bit microprocessor, extremely short response time and high memory capacity.
- Analogue inputs fully programmable to accept a wide range of transducers (insulation amplifier, hall effect sensor, etc...)
- Two fiber optic inputs and two fiber optic output for direct connection with Microelettrica transducers.
- Four fully programmable analog outputs for SCADA or analog instrumentation.
- 7" capacitive touch screen with 10 programmable LEDs.
- 24 digital inputs and 14 digital outputs available on the module.

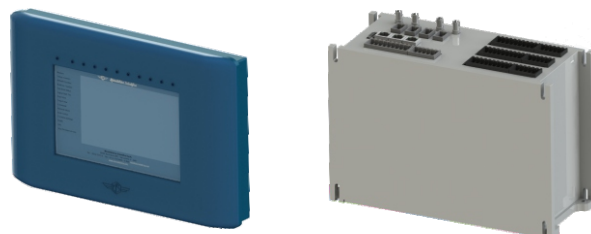
### Firmware

- Four independent setting groups
- PLC functionality: logical operator between inputs and outputs (logical and physical).
- Complete set of protection functions able to cover all requirement in DC traction switchgear.
- Intertripping logic: through digital IO or communication protocol (GOOSE messages).
- Events, trips and oscillographic recorder.

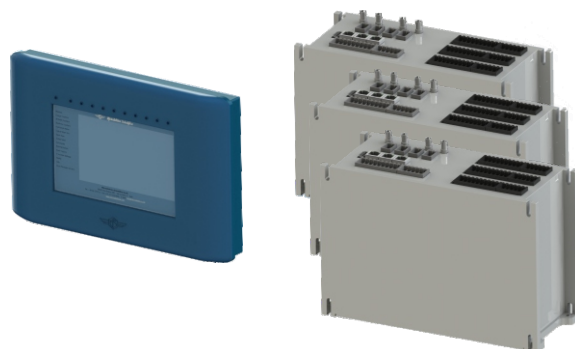
Local Display Version



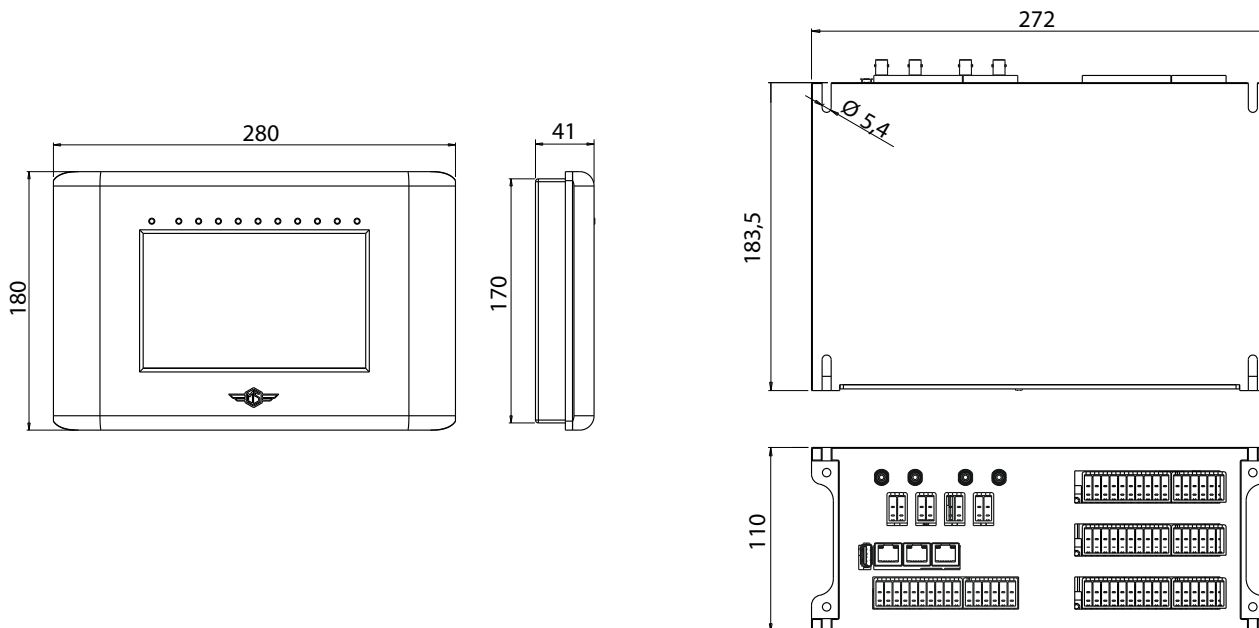
Remote Display One-to-One Version



One Display for all Substation Relay



Overall Dimensions (mm)



The performances and the characteristics reported in this document are not binding and can be modified at any time without notice



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