COELME
COSTRUZIONI ELETTROMECCANICHE - SPA

egic

DOM   Digital Operating Mechanism

HV Switching

Southern States **Group**

The Digital Operating Mechanism

The Digital Operating Mechanism (DOM) allows the remote control and the real-time data transmission of switching devices. Upon request, it can be manufactured also to allow the operation of equipment installed in isolated sites and/or where the low voltage network is not available.

The main components of the DOM are the Power Supply Unit (PSU), the Operating Mechanism (OM) and the Remote Terminal Unit (RTU).

The PSU consists of a 24 Vdc primary-switched power supply with a wide range of input voltages. The PSU ensures superior system availability by means of new functions. Signalling thresholds and characteristic curves can be individually adjusted via the NFC interface.

The OM is the standard COELME motor operating mechanism, which guarantees high performance and reliability. It permits multiple options for operations and adaptation to specific requirement (different structures and installation heights). If the OM is not installed at ground level, the manual operation can be carried out off the ground, with no need to use special tools or ladders.

The RTU, installed inside the OM, collects, elaborates and transmits several information from other components of DOM (PSU and OM) to the control room.
Optional modules are available for customer's interface (Ethernet, fiber optic and router GSM). A customer's router, with a dedicated firmware, can be used to transmit/receive orders to/from the control room. Additional analogue and digital inputs can be added to meet customer's needs. The whole information is transmitted via IEC 61850 protocol (other protocols available).

The DOM can be integrated into an already available SCADA system.
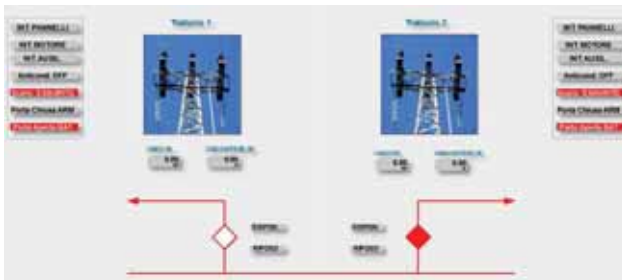
Optional features

The DOM can be also supplied with a battery backup system. The size of the battery pack is function of the required autonomy.

Additional modules can be added based upon customer's requests.

Key features and advantages

- Complete remote data management and reprogramming
- Data transmission through:
  - Direct connection with communication port
  - GSM or satellite network
- Expandable modules of:
  - digital inputs
  - analogue inputs
  - digital outputs
- Monitoring of several parameters:
  - switching device status (open, closed)
  - local/remote selector status
  - battery voltage
  - OM internal temperature
  - ...
- Different communication protocols available
- Automatic sending of alarms to the control rooms as, for example:
  - OM door open
  - battery box open
  - low battery level
- Heating circuit controlled by the RTU