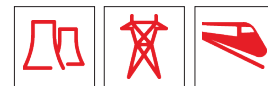


# S-COM



## REMOTE CONTROL BOARD - OPTIMIZED CONTROL & MONITORING



S-COM is a control board fully integrated to smart operating drives MR41E / MR164E for remote control and monitoring of MV / HV switching units throughout their operational life.

- Set in factory, S-COM allows secured operation of switching unit and quick information sharing (through standard and secured protocols) and insures interoperability with existing equipments and smart grids, allowing future modernization and HV IED grid integration.
- Designed according to IEC 62271-1, IEC 62271-102, IEC 60870-3 and EN 50121-1-2-5.

### BENEFITS

- Reduced integration costs of remote control unit with switches operating drive
- Reduced integration costs within control network
- Improved operation and maintenance of switches giving an access to many more parameters than a classical remote control unit (see MONITORING)
- Self-powered, no need for additional power supply
- Plug & play
- Network redundancy available
- Easy upgrade of switch operating drive (MR41E/MR164E) in smart grid networks

### INTEGRATION IN CONTROL & COMMAND NETWORK

#### PROTOCOLS

<b>IEC 61850</b>	Server - MMS (IEC 61850-8-1), no gose nor simple values	Logical nodes & data objects (IEC 61850-7-4): XSWI (mandatories) Development upon request : optionals SSWI and/or SOPM
<b>IEC 60870-5-101/104</b>	According to customer profile	Customization upon request
<b>MODBUS TCP</b>	According to specific SDCEM registers (STB167) and more upon request	Operating time, Motor current, Temperature Humidity, Operating torque...
<b>MODBUS RTU</b>	According to specific SDCEM registers (STB167) and more upon request	

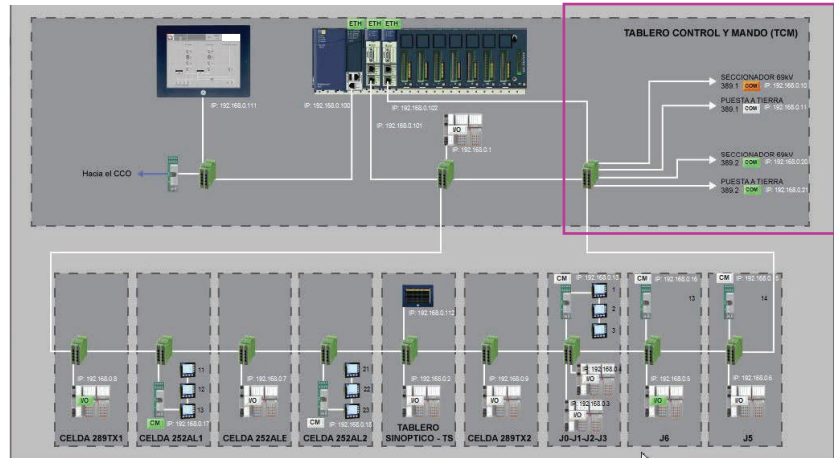
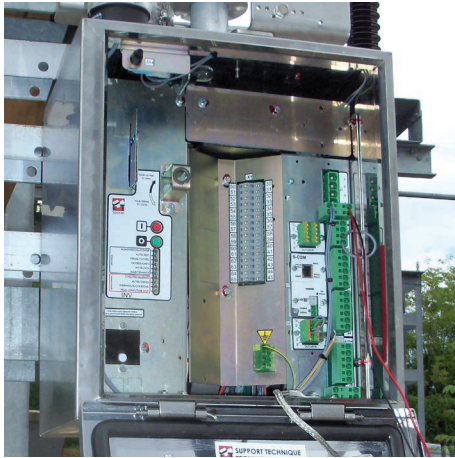
### MONITORING

S-COM allows a remote monitoring of many more switch parameters than a classical remote control unit.

<b>Monitoring parameters (examples)</b>	Auxiliary voltage Motor voltage Motor current Operating drive temperature Operating drive humidity level Operating times (opening and closing) Operation counter Switch in motion Switch exact position	Operating torque Over-torque Under-torque Power supply failure Anti-condensation heating resistance test Motor overload Alarms / warning Maintenance reminder ...
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*Information list is variable according to protocol and operating drive options.*

## EXAMPLE OF INTEGRATION



S-COM Protocol MODBUS TCP, physical support RJ45

## TECHNICAL FEATURES

<b>Operating conditions</b>	Adapted to all conditions including tropical, cold, humid environments		
<b>Relative humidity</b>	5% to 95%		
<b>Operating temperature</b>	-25°C / +60°C		
<b>Power supply</b>	Self-powered by electrical drive MR41E / MR164E		
<b>Physical support</b>	1 Ethernet port RJ45 CAT5 cable	Option: Fiber Optics connexion + media converter	Option : RS485 serial
<b>Network typology</b>	Point to point	Option : star, ring (closed) or repeater	
<b>EMC Protection</b>	IEC 62271-1, IEC 62271-102, IEC 60870-3 and EN 50121-1-2-5		

## ASSOCIATED SOLUTIONS

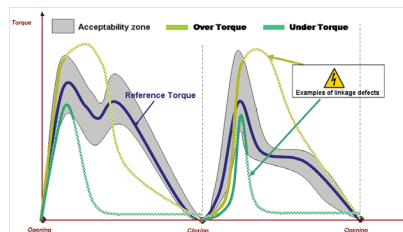
IMPROVED RELIABILITY - COST-EFFECTIVE OPERATION & MAINTENANCE



### MR41E Universal Smart Drive



### S-TORQUE Prevention of mechanical failures



### S-OFT Portable Diagnostic Tool

