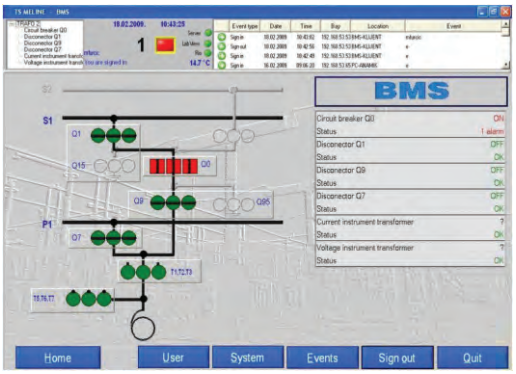
High Voltage Switchgear Bay Monitoring System - KONČAR BMS

Monitoring of high-voltage switchgear provides:

- insight into real-time HV switchgear condition
- condition based maintenance
- incipient fault detection
- prevention and reduction of fault consequences (cost reductions)
- continuous information on switchgear condition
- information about HV switchgear operating conditions (loads at switching operations, assessment of the residual life)
- increased availability
- fault cause analysis

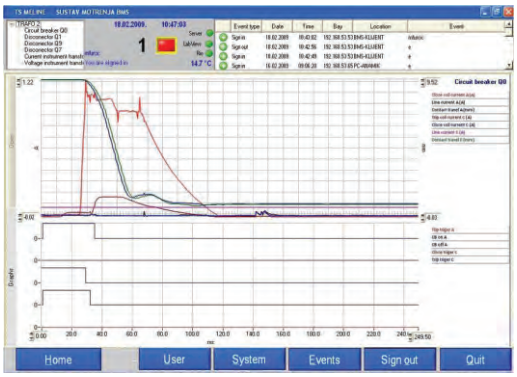


Tools

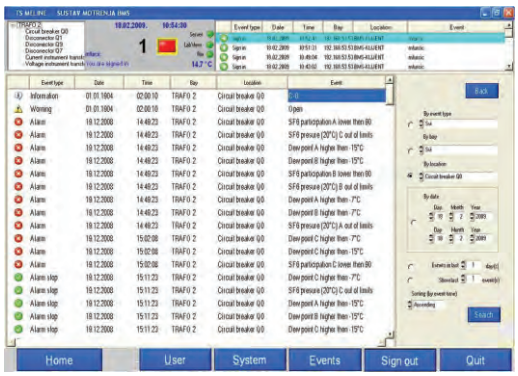
- alarms
- trend monitoring
- real-time information
- survey of recorded wave shapes and measuring values
- recommendations for maintenance of the equipment

Monitored quantities:

Circuit breaker
- phase voltage
- main circuit current
- close coil current
- trip coil current
- contact travel
- hydraulic pressure
- SF_6 temperature
- SF_6 dew point
- SF_6 density
- close trigger
- open trigger
- motor trigger
- circuit breaker open/closed
- gas pressure at 20°C
- arc integral
- switching times (make, closing, close-open)
- contact velocity
- variations of gas pressure at various operations
- coil current fingerprint comparison / grey zone checking



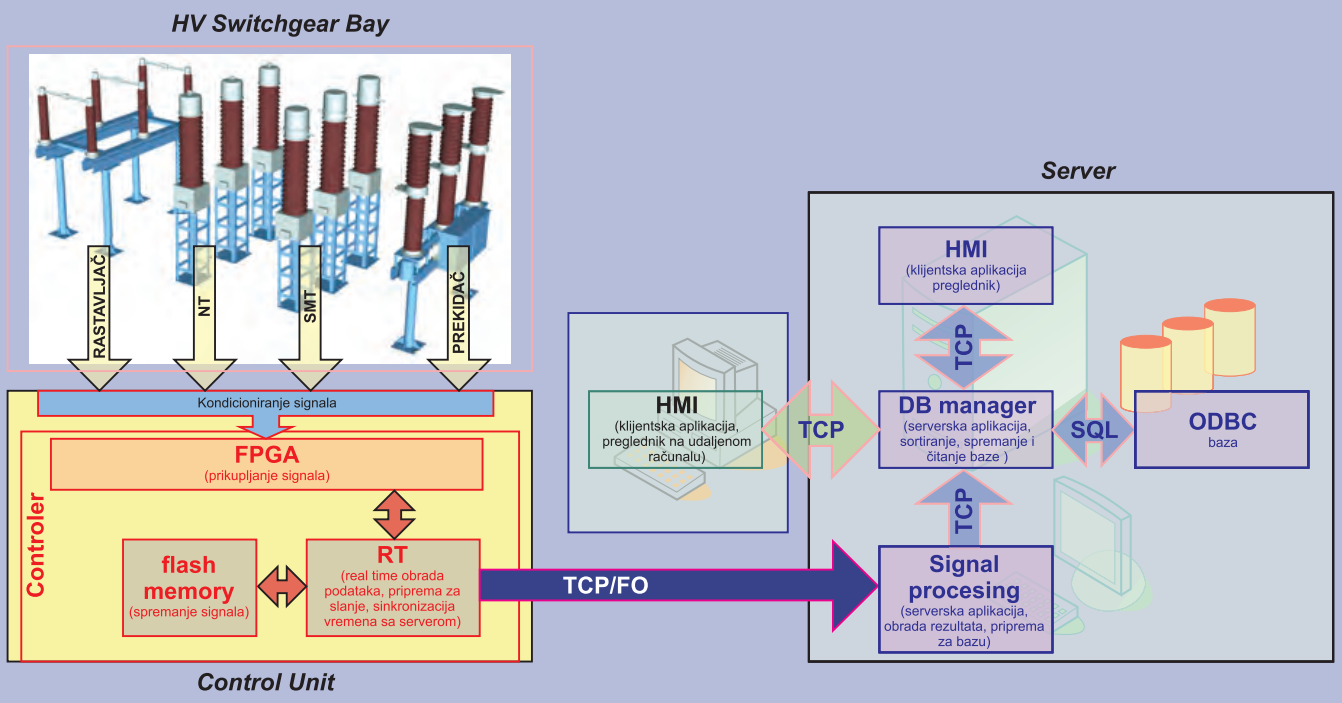
Disconnector
- contact travel
- motor current
- open trigger
- close trigger
- disconnector open/closed
- switching times (make, closing, close-open)
- contact velocity



Instrument transformer
- hydrostatic pressure

KONČAR
Electrical Engineering
INSTITUTE

qualityaustria
SYSTEM CERTIFIED
ISO 14001:2004 NR.00261/0
ISO 9001:2008 NR.01095/0
OHSAS 18001:2007 NR.00242/0



Features and benefits of **KONČAR BMS** (Bay Monitoring System)

Simple Ethernet 10/100 connectivity
Ethernet-based BMS communication enables simple LAN connectivity with other systems in a switchgear.

IEC 61850
Monitoring system's communication protocol satisfies the request of IEC 61850 8-1 standard for the design of electrical substation automation.

Taylor-made system
BMS is tailor-made system that can be configured by the user requirements.
Inputs are modular (analog, digital) and the entire system is built according to the needed signal number.

Compatibility
The system is compatible with transformer monitoring system (KONČAR TMS) and machine condition monitoring system (KONČAR MCM).

Reliable data collection
Controller in the switchgear sends the data to the server. If the communication fails, all the data are stored locally in the controller (flash memory) and forwarded when communication is re-established.

Reliable controller operation
Loss of communication with the controller or defective operation of I/O module is reported to the operator.

Reliable power supply
In case of power failure the controller is UPS fed.

Quick access to data
A quick and simple retrieval of stored data via graphic user interface (wave shapes, measured values).

Autostart
If an application on the controller fails due to power failure, it will automatically start again when the normal power supply is re-established.

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