

## Task 6: Measurements of Surge Arresters

(Laboratory F1-13, main lab)

Determine the response of three types of surge arresters (measuring spherical sparking gap, valve lighting arrester, overvoltage limiter) to applied atmospheric voltage impulse  $1.2/50 \mu\text{s}$  with different peak values. For each surge arresters, responses for different impulses should be plotted to one graph (total 3 graphs). Further, responses of one chosen peak value for all surge arresters should be plotted to one graph (total 1 graph). Conclusion should be contained evaluation of all measured surge arresters and comparison between them.

### Used equipment:

RG . . . . . two-stage impulse generator 200 kV, 10 kJ

D . . . . . voltage divider 200 kV (resistive-capacitive)

OSC . . . digital oscilloscope LeCroy

S . . . . . measured surge arrester (measuring spherical sparking gap, valve lighting arrester, overvoltage limiter)

### Measurement circuit:

