

Item No.: SO4204-3B

Course - Power engineering: Transient processes in AC and DC networks

Includes:

- 1 Experiment card with resistor, inductor coil and capacitor that can be connected in any configuration for the purpose of studying response when powered up or down with DC or AC voltages. Transient analyser for switching and measurement of switching processes, DC, 50Hz and 60 Hz,
- Disturbance generator
- Adjustable switching point for switching at a precise phase, angular resolution 1°
- Variable measuring times
- CD-ROM with Labsoft browser and course software

Course contents:

- Importance of switching processes in power supply networks
- Effects (and hazards) of switching processes in power supply networks
- Experimental investigation of current and voltage response when powering up a circuit with a DC voltage
- Effect of various loads (R, L, C) on the signal response
- Experiment-based investigation of current and voltage response when powering up a circuit with an AC voltage
- How the on and off switch time affects circuit response
- Measurement of signal response when the circuit is turned off at different times
- Determining optimum switching time
- Analysis of switching complex loads (R, L, C) on and off at different points in time
- Course duration: 3.5 h approx.

