Tampere University

Climate Room at High Voltage Laboratory of Tampere University

High Voltage Laboratory of Tampere University has high class climatic testing facilities available in the High Voltage test hall. The climate room was erected in 2003 and has facilities for adjusting air temperature and humidity in a large range as well as rain /fog/icing facilities. The main data of the climate room is given below.

- Test Chamber, 100 m³, 4,6m*4,2m*5,0m (h)
 - Completely made of acid-proof steel, all junctions welded forming a water tight chamber
 - Main door 2.9*2.8 m(h)
 - Wall bushing enabling the use of high voltages inside the chamber (AC: 100kV_{cont}./170kV_{TOV}, BIL 550kV)
 - Temperature range $-65^{\circ}C \dots +70^{\circ}C$
 - Rate of cooling/warming, see Fig. 1
- Humidity range 20% ... 95%
- Water spraying apparatus (wet tests, ice tests, tests with saline water)



- Temperature controllable 1m³ tank for spray water preparation (for example conductivity adjustment)
- Controlled by a digital controller, computer program for preparing test sequences.
 - One additional programmable relay output (lighting or power source control, for example)



Fig. 1, Rate of cooling/warming of the chamber.

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