

Temperature and Climatic Chambers

1. Equipment

- 2 Ovens
Test chamber volume 100l , Temperatures up to 400°C
- 2 Temperature cycling chambers
Test chamber volume 40l , Temperatures - 40°C to 180°C, Temperature gradient 4.5K/Min.
- 1 Temperature cycling chamber
Test chamber volume 275l , Temperatures - 70°C to 180°C, Temperature gradient 15K/Min.
- Temperature shock chamber
Test chamber volume 1000l , Temperatures - 70°C to 180°C,
Temperature gradient 30K/Min. in a 10kg Al profile, combinable with vibration tester
- 4 Climatic chambers
Test chamber volume 250l , Temperatures - 70°C to 180°C ,
Temperature gradient 2 to 8K/Min., Control of relative humidity 10-95% above 10°C
- Pressure Cooker
Test chamber volume 20l , Temperatures 105°C to 162°C, Pressure 0.2 to 4kg/cm² (2.8 – 56.8psi)

All chambers are equipped with feed throughs for supply and measurement of devices under test.

2. Tests

- Constant Temperature
Storage or operation of device under test at constant ambient temperature
- Thermal Cycling
Storage or operation of device under cyclic change of ambient temperature without control of humidity

- Constant Temperature and Humidity
Storage or operation of device under test at constant ambient temperature and humidity
- Composite Temperature and Humidity Cycling
Storage or operation of device under cyclic change of ambient temperature and humidity

3. Standards for typical Temperature- and Humidity Tests

IEC 60068-2-1	Test A: Cold
IEC 60068-2-2	Test B: Dry heat
IEC 60068-2-14	Test N: Change of temperature
IEC 60068-2-30	Test Db: Damp heat, cyclic (12 h + 12 h cycle)
IEC 60068-2-38	Test Z/AD: Composite temperature/humidity cyclic test
IEC 60068-2-61	Test Z/ABDM: Climatic sequence
IEC 60068-2-67	Test Cy: Damp heat, steady state, primarily intended for components
IEC 60068-2-78	Test Cab: Damp heat, steady state