



Mastering tests under extreme conditions.

With the explosion-proof test chamber ExtremeEvent.

The newly developed ExtremeEvent test chamber with tertiary explosion protection is specially designed for demanding tests in which extreme events such as high pressure and heat release or gas explosions regularly occur in an explosive atmosphere. It offers maximum safety and reliability. Your ideal partner for hydrogen tests, arc fault tests or battery abuse tests.

Our Highlights:

- Explosion-proof design (tertiary explosion protection)
- Pressure relief through patented flap mechanism
- Innovative wall reinforcement (pressure resistance)
- Reproducible test results
- Temperature control via external air-conditioning unit (optional)
- Integration of a mechanical testing system (optional)

Convincing technology. Reliable results.

Performance data and application limits		
Test space volume	l	1000
Test chamber dimensions (HxWxD)	mm	1000 x 1000 x 1000
External dimensions (HxWxD) ¹	mm	1200 x 1200 x 1310
Weight ²	kg	1086
Temperature range for temperature tests ³	°C	-40 to +200
Maximum pressure surge load of the test chamber	bar	1,0
Response pressure of the pressure release flap ⁴	mbar	220 to 300
Max. permissible rate of pressure rise (K _c -Value)	bar·m/s	500
Max. permitted electrical energy content for destructive testing of lithium-ion energy storage devices (any cell type)	kWh	1.2
Max. permitted electrical energy content for high-voltage and arc tests (arc energy)	kJ	700

¹ Overall dimensions when installed. Deviating installation dimensions, components can be dismantled for installation (service).

² Without additional equipment and loading.

³ Only with additional equipment (external device and pipework).

⁴ Depending on the structure and material of the pressure relief flaps; values valid for full opening.

Subject to technical changes.

Battery:

- ▮ Overcharge: overcharging with a defined current
- ▮ Short Circuit: external short circuit
- ▮ Voltage Limitation Cycling: Cycle over voltage limits

Arc fault:

- ▮ Spatial pressure measurement possible in the event of an accident using pressure sensors (optional)
- ▮ Influence of temperature on cable and arc reproducibly measurable (optional)

Hydrogen:

- ▮ Open concept has IIC approval with type examination by TÜV
- ▮ Testing of components that emit hydrogen e.g. fuel cell

Included in the standard configuration:

- ✓ Fireproof design
- ✓ Mechanical, thermal and electrical battery abuse tests in one test chamber
- ✓ Replaceable viewing window with closing flap to protect against glare
- ✓ Connection piece for thermal tests, opening and closing can be controlled pneumatically
- ✓ 5 access ports (Ø 115 mm)

