Battery test chamber with package S for testing lithium-ion energy storage devices

The extensive equipment in this safety package is designed for tests on lithium-ion batteries and is exactly in line with EUCAR Hazard Level 6.

Stress tests:

Various battery-specific parameters, such as the load state, are tested with overlapping temperature ranges. These tests are performed at the limit of the safe temperature range for the battery. This category also includes tests with higher charging and discharging currents overlapping with constant or dynamic temperatures.

Safety measures:

- Class 2 independent temperature safety device when temperature is set to 120°C
- Temperature range limited to 120°C on the controller
- Stainless-steel reversible pressure relief flap installed in the middle on top of the unit
- Enhanced door-locking mechanism with reinforced brackets
- Monitoring of CO, H₂, and O₂ in testing area atmosphere
- N₂ permanent inertization



CO₂ flushing equipment

Thurlby Thandar Instrument Distribution Glebe Road, Huntingdon, PE29 7DR, UK +44 (0)1480 412 451



EUCAR Hazard Level 6*

BINDER

Best conditions for your success



REVERSIBLE PRESSURE RELIEF FLAP

Pressure relief flap with an additional relieving spring as a safety measure in the event of a fault in the cell.



TEMPERATURE RANGE LIMITATION

Class 2 independent temperature safety device when temperature is set to 120 °C.



INERTIZATION EQUIPMENT

Option of inertization in customer test area; flow meter, needle valve, and solenoid valve included with equipment; gas tank and monitoring not included in scope of delivery.



CO₂ FIRE SUPPRESSION

Triggering of CO_2 compressed gas tank by means of manual release, upon CO concentration value being exceeded, or upon heat detector being activated.



WARNING INDICATOR LAMP

Acoustic and visual signals that alert the user to various operating states.



ENHANCED MECHANICAL DOOR-LOCKING MECHANISM

Two strong door brackets on the side of the unit.



GAS DETECTION

CO, $H_{\scriptscriptstyle 2},$ and $O_{\scriptscriptstyle 2}$ are detected and monitored in the testing area atmosphere.

FURTHER ADJUSTMENTS AVAILABLE ON REQUEST:

Our BINDER INDIVIDUAL department is able to convert lithium-ion test chambers according to special customer requirements and equip them with additional functions.



Program sequence display using indicator lamps.



Electromechanical door lock mechanism controlled in a program and/or manually.



Additional access ports available in almost all sizes and locations.

*Operator is responsible for ultimate safety measures