

Specification text: Safety enclosure for the storage of lithium batteries

Tested fire protection enclosure with a fire resistance duration of at least 90 minutes, with a fire load from outside and inside in the sense of F90 and I90 in accordance with EN 1363-1. Suitable for batteries including lithium-ion batteries up to a capacity of 625Wh (plastic case).

Safety enclosure Type QUBE® – Basic Plus free-standing floor-standing enclosure

- With tested fire resistance over 90 minutes
- With tested fire load insulation over 90 minutes
- Function test with the use of propagation tests at an official testing institute

Dimensions and technical data

- **Type QUBE® – Basic Plus safety enclosure for batteries, single-door**

External dimensions in mm	Internal dimensions in mm
H 600 W 600* D 600	H 343 W 458 D 458
Weight approx. 98 kg*	

*without extinguishing agent container

Enclosure

- Closure with narrow edge banding to protect against impact loads at the edge
- Lockable closure
- Self-closing due to special hinge
- Automatic extinguishing and cooling system in conjunction with interior temperature monitoring, particularly suitable for lithium batteries
- 9l extinguishing agent container made of quality sheet steel with corrosion-resistant polyester resin coating, pressure gauge, bracket and bilingual commissioning and maintenance instructions (German/English)
- Environmentally friendly extinguishing agent (fluorine-free)
- Corrosion-resistant extinguishing agent tray (removable)
- Ventilation system for heat dissipation during the loading process, self-closing in the event of fire
- Flash protection
- Fireproof with all-round seal to prevent leakage of smoke
- Tested in the event of fire with extinguishing system, ventilation system and integrated cable bulkhead
- 3-point socket for charging the batteries incl. switch-off function when the critical temperature is reached
- With standard cable entries, e.g. 1 x 40 mm Ø, 8 x 18 mm Ø
- Exterior color light grey, similar to RAL 7035 / Outer edges, handle and ventilation grid ultramarine blue, similar to RAL 5002

Material

- Basic fire protection panels non-flammable
- coated fire protection panels meet the requirements of DIN EN 438-2, e.g. abrasion resistance, impact resistance, scratch resistance, etc. ...
- Multi-layer, patented wall construction made of non-flammable building materials, with endothermic middle layers to keep the temperature low even in the event of fire
- Surface: high-quality coated basic fire protection panels with high impact and shock resistance as well as chemical resistance
- The standard surface coating is ≤ 0.5 mm and therefore fulfills the instructions in the MVVTB that coatings up to 0.5 mm layer thickness do not affect the assessment of the building material class.

Options

- Door hinge on the left
- Wall mounting
- Special colors and special coatings
- Positioning of cable entry
- Smoke detector in accordance with EN 54-7 for 2-way early detection of a thermal runaway
- Potential-free signaling contact for fire alarm control panel, higher-level control center, etc.
- External temperature monitoring for thermal runaway protection in the event of a fire from outside
- Tablet holder incl. USB charger for up to 15 tablets
- Modular line-up/stacking (e.g. line-up 3x2 → approx. 20 kW charging power possible)

Installation and assembly

- High-quality operating instructions with information on installation, initial operation, intended use and maintenance with enclosed documentation for the safety enclosure.

Product

Celsion Brandschutzsysteme GmbH
Dresdener Straße 51
D-02625 Bautzen
Phone: +49 3591 / 270 78 0
Fax: +49 3591 / 270 78 19
Email: office@celsion.de
Web: www.celsion.de

or equivalent.

If a different product is used, proof of the extinguishing function under the same conditions, including temperature curves, must be submitted to the planning office. Equivalence is only given if the above requirements are met.

Service:
Delivery and ready-to-use assembly

Advantages of safety enclosure Type QUBE® – Basic Plus

Maximum safety in the smallest space. The enclosure can be installed in any position. The effective extinguishing system is able to extinguish the emerging fire of a thermally discharging lithium cell and prevents the thermal runaway of all other cells in the battery case through direct cell cooling. This prevents the further release of thermal energy and toxic fumes. Charging of the batteries is interrupted immediately. The base tray holds the contaminated extinguishing agent. Thanks to the freely selectable surface, which can optionally be adapted to the existing architecture, the safety enclosure can also be installed in prestigious areas. By lining up the enclosures, a uniform front can be created visually.

Explanations:

Abbreviation	Description
MVVTB	Model administrative regulation