



Explanations see practical informations on page 6 and 84!

## BATTERY CONCRETE CABINET BBS FOR SAFE STORAGE OF LITHIUM-ION BATTERIES

### Technical description concrete body:

- ◆ Concrete cabinet made of prefabricated reinforced concrete parts with a fire resistance class F90
- ◆ Water impermeable concrete C 35/45 according to EN 206-1, XC4, XD1, XF1, XA1
- ◆ Visible sides smooth, all visible edges chamfered
- ◆ Roof pitch to rear wall with drip edge
- ◆ For forklift transport 2 x 220 x 100 mm entry opening for forklift forks
- ◆ DBGM 20 2023101699

### Design of sump pallet:

- ◆ Base sump pallet made from 3 mm galvanized sheet steel
- ◆ Liquid-tight welded according to WHG -

### Ü-sign according to StawaR

- ◆ Sump capacity 30 liter



### Pressure release

- ◆ Ceiling plate with opening and pressure relief dome
- ◆ With gas management incl. fleece mat for filtering the harmful gases in case of accident



Utility model protection

Explosion test BAM Berlin

FIRE RESISTANCE F90

BBS,  
Article no. C62-2015-B,  
with optional exterior painting



Product video:  
Lithium-ions safety  
storage in LaCont  
Battery Concrete  
Cabinet BBS

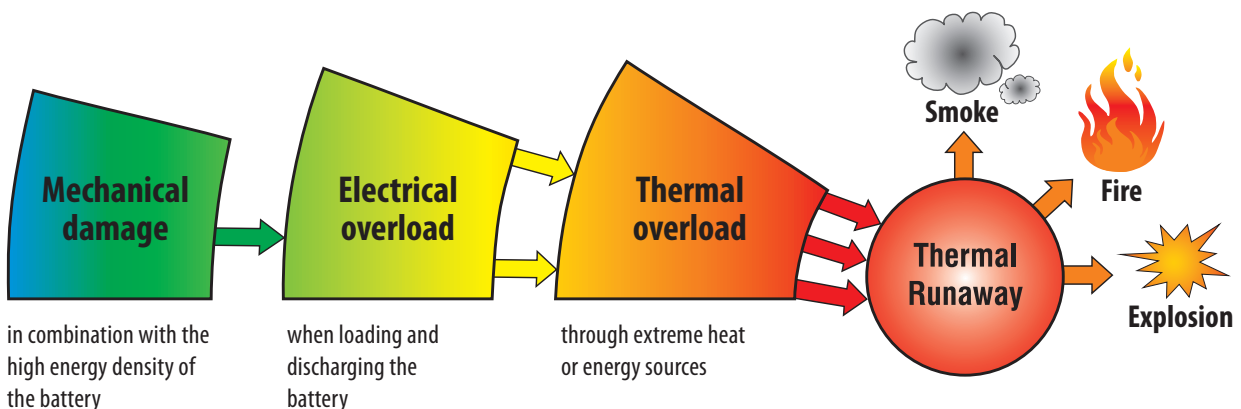


### So that you are safe!

According to the ADR\*, lithium-ion batteries are classified as class 9 dangerous goods and are thus classified as particularly critical. Safe storage with regard to fire, smoke and explosion as well as fire-resistant separation from other areas is therefore essential.

\*Regulations for the transport of dangerous goods

### Hazards in handling with lithium-ion batteries ---> Thermal Runaway





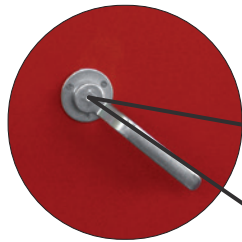
BATTERY CONCRETE CABINET BBS FOR SAFE STORAGE OF LITHIUM-ION BATTERIES

**T90-1 fire protection door BRM 1100 x 1600 mm**

- ◆ In accordance with the general technical approval of the DIBt Berlin
- ◆ Lockable
- ◆ With additional wedge lever lock
- ◆ Opening angle of door: 130°
- ◆ Galvanized and additionally painted

**Customer services:**

- ◆ Requirements for the installation surface
  - A soil load of at least 26 kN/m<sup>2</sup> must be demonstrated
  - Floor accuracy according to DIN 18202, table 3, line 3
- ◆ Anchoring to the ground is not necessary, the BBS stands firmly on the ground by its own weight
- ◆ Connection of the earthing to existing foundation or depth earth electrodes



Wedge lever lock



BBS, Article no. C62-2015-B, with optional exterior painting

Model	BBS
External dimensions W x D x H (mm)	1500 x 910 x 2314
Internal dimensions W x D x H (mm)	1100 x 630 x 1600
Adjustable storage levels	4
Dimensions per storage level W x D x H (mm)	1000 x 500 x 280
Max. load per storage level (kg)	100
Weight (kg)	2850
Article no.	C62-2015-B

Accessories	Article no.
Exterior painting, white	C62-2016-B
Additional grid shelf as storage level	C62-2017-B
Fire protection cable bushing	C62-2018-B
Fire alarm incl. potential-free contact and external switch box	C62-2019-B
Charging device with socket strip 5-fold in each storage level (4 levels)	C62-2020-B
Aerosol extinguishing system	C62-2021-B



Concerning the real test of the storage cabinet guidance was made regarding standards of ADR:

- It was observed that the battery concrete cabinet has completely fulfilled its protection goals
- Temperature on the outside of the storage cabinet has never been exceeded at any time, i.e. temperature T = 100°C
- There was no flame failure. Furthermore, there was no leakage of solid parts referring to the storage cabinet indicated by detectors
- The review of HF-measurement revealed that there was no critical hydrogen fluoride concentration (pressure release with integrated gas management) indicated by detectors

**Mode of operation of the VDS-tested extinguishing system Aerosol LiBa®Sol:**

Generally, aerosol is described as a mixture of gas with solid and/or liquid suspended particles. The release or combustion of the solid matter contained in the LiBa®Sol generators creates an aerosol of solid and gaseous particles. These spread throughout the entire cabinet in milliseconds, displacing oxygen, diluting combustible gases and starting the extinguishing process in the process!

The extinguishing process takes place by intervening in the combustion triangle. This always consists of the fuel itself, oxygen and an ignition energy (heat).

Thus, the aerosol intervenes in the chemical chain reaction of the fire process by displacing oxygen, among other things, and interrupts it.

The VDS-tested extinguishing agent LiBa®Sol is 100 % environmentally friendly, does not produce any environmentally hazardous by-products and is absolutely climate-friendly.



Aerosol extinguishing system



Safety marking according to ADR regulation

**Charging device for rechargeable batteries**

**Technical data:**

- with CE-EU declaration of conformity
- with overvoltage protection
- socket strip 5-fold per storage level
- safety switch illuminated, two-pole on/off switchable
- automatic circuit breaker 16 A
- Sockets in 45° arrangement and spacing, also for angled plugs
- rated current: 16 A
- Length 46 cm, width 6.5 cm, height 4 cm,
- Total number of sockets: 5
- Protection class (IP): IP20
- Leakage current: 13500 A



Charging device with socket strip 5-fold