ORIGINAL DÜPERTHAL

DÜPERTHAL®

BATTERY station

Safety storage cabinets

Typ 90

Operating instructions

DÜPERTHAL Sicherheitstechnik GmbH & Co. KG
Frankenstrasse 3
D-63791 Karlstein
Germany
Phone: +49 6188 9139-0
Fax: +49 6188 9139-121
Email: info@dueperthal.com
Internet: www.dueperthal.com

Table of contents

1 General information

1.1 Notes for reading

The following symbols designate specific types of information.

Tab. 1: Explanation of symbol

Symbol	Type of information
	Information for easier and more effective working
	Procedural step
⇨	Result of a procedural step
	Link to another part of the document

1.2 Type plate

The type plate is attached to the outside of the safety storage cabinet door.

Fig. 1: Type plate

1 Model
2 Serial number and year of manufacture
3 **Maximum capacity of the largest lithium ion cell**
4 Maximum load per storage shelf

2 Safety

2.1 Function of safety notices

Safety notices warn against physical or material damage and provide information on how such damage can be avoided.

The following signal words identify the degree of danger and the extent of the risk.

WARNING!

The signal word *'WARNING'* refers to a potential hazard which could result in death or serious injury.

CAUTION!

The signal word *'CAUTION'* refers to an potential hazard which could result in slight or minor injury.

NOTICE!

The signal word *'NOTE'* indicates a situation that can lead to damage to the safety storage cabinet.

2.2 Correct use

Observe the safety instructions in these operating instructions to reduce health risks and avoid dangerous situations.

Any use that is not correct use as defined in these operating instructions involves a risk of accidents and a lack of fire protection.

BATTERY station safety storage cabinets are type tested and classified as *Type 90* in compliance with *'EN14470-1'* with a fire resistance of 90 minutes.

The safety storage cabinet is to be used for the storage and charging of lithium ion batteries in working spaces.

2.3 Misuse

Any use that goes beyond the specified correct use is considered to be misuse.

DÜPERTHAL accepts no liability for damage arising from misuse.

In addition, the following safety notices must be observed:

WARNING!

Storage of living organisms in the safety storage cabinet

Living organisms can come into contact with the stored hazardous substances.

This may result in death or serious injury.

– Use the safety storage cabinet exclusively for storage of lithium-ion batteries.

⚠ WARNING!

Storage of food in the safety storage cabinet

Food can come into contact with the stored hazardous substances.

This may result in death or serious injury.

– Use the safety storage cabinet exclusively for storage of lithium-ion batteries.

⚠ WARNING!

Storage of flammable liquids together with lithium-ion batteries in the safety storage cabinet.

If flammable liquids are stored together with lithium-ion batteries, the flammable liquids can have an oxidising effect.

This may result in death or serious injury.

– Do not store flammable liquids in the safety storage cabinet.
– Use the safety storage cabinet exclusively for storage of lithium-ion batteries.

⚠ WARNING!

Objects on the cabinet roof

In case of fire, objects on the cabinet roof can impair the function of the safety technology.

This may result in death or serious injury.

– Do not store any objects on the cabinet roof.
– Using the extra load adapter

⚠ WARNING!

Leaking electrolyte

Contact with leaking electrolyte can lead to life-threatening injuries or painful skin reactions.

The consequences are death or serious injury.

– Wear personal protective equipment (PPE).
– Collect electrolyte that has leaked into the bottom tray and the cabinet interior and dispose of it immediately in accordance with accident prevention regulations.
– Dispose of faulty batteries in accordance with national and local disposal regulations.

! NOTICE!

Charging lithium-ion batteries

Fault in lithium ion batteries due to incorrect charging.

– Charge batteries in line with manufacturer's specifications.
– Do not connect multiple power sockets to the available electrical sockets.

NOTICE!

Alteration and modifications

Do not alter or modify the safety storage cabinet.

This can lead to a lack of fire protection.

– If alteration or modification of the safety storage cabinet is required, contact DÜPERTHAL.

2.4 Obligations of the operator

The operator is obliged to comply with applicable legal regulations. This includes:

- Issuing operating instructions.
- Carrying out risk assessments.
- Specifying activities by designated employees.

2.5 Demands on employees

WARNING!

Employees who do not meet these requirements

This may result in death or serious injury.

– Designate employees who meet the requirements to carry out activities.

These operating instructions set out the following employee activities:

- Specialist technical employees
- DÜPERTHAL service technicians

Only people who have been trained by the operator in use of the safety storage cabinet and handling of the stored goods are approved as specialist technical employees.

DÜPERTHAL service technicians

DÜPERTHAL employees are specifically trained by DÜPERTHAL to carry out their activities.

2.6 Stored goods

The operating instructions prepared for storage, handling and use of the stored goods must be observed.

2.7 Hazardous areas and their labelling

The following must be attached to the front of the safety storage cabinet and must be clearly visible:

- The instruction "Close the door"
- Fire resistance in minutes (e.g. *'Type 90'*)
- Name or trademark of the manufacturer
- Cabinet model, serial number and year of manufacture
- Information on the largest individual container volume that can be stored
- Information on the shelves' maximum load capacity

Furthermore, the following signs must be attached to the front of the safety storage cabinet and must be clearly visible:

Tab. 2: Prohibited action sign

Symbol	Meaning	Standard
	P003: No naked flames; fire, open ignition source and smoking prohibited	DIN EN ISO 7010:2012

Tab. 3: Warning sign

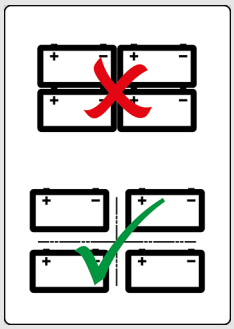
Symbol	Meaning	Standard
	W012: Warning: Electricity	DIN EN ISO 7010:2012
	W021: Warning: Flammable materials	DIN EN ISO 7010:2012
	W026: Warning: Battery charging	DIN EN ISO 7010:2012

Tab. 4: Mandatory action signs

Symbol	Meaning	Standard
	M002: Follow the instructions for use	DIN EN ISO 7010:2012
	M004: Wear eye protection	DIN EN ISO 7010:2012
	M009: Wear hand protection	DIN EN ISO 7010:2012

2.8 Safety labels in the storage areas

Tab. 5: Manufacturer's information

Symbol	Meaning	Standard
	Do not stack batteries on top of each other or store immediately next to each other.	Manufacturer's instructions

3 Technical specifications

3.1 General data

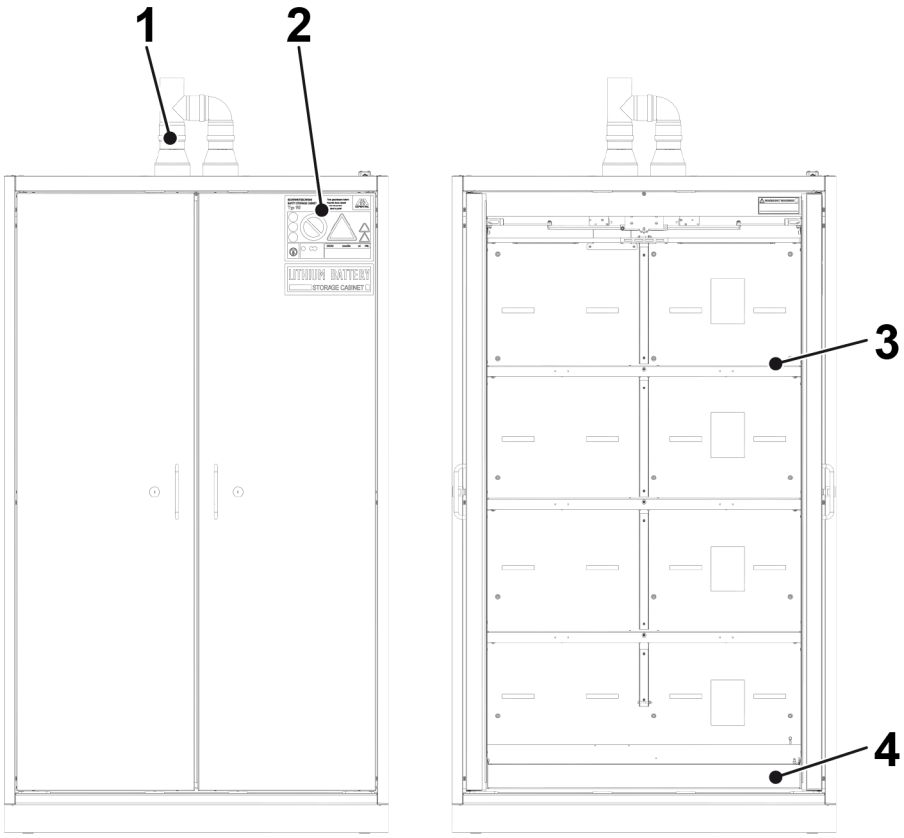


Fig. 2: General diagram of safety storage cabinet Type 90

1 Exhaust air connection
2 Type plate
3 Standing surface
4 Bottom tray

3.2 Dimensions and equipment

3.2.1 Technical specifications for BATTERY station

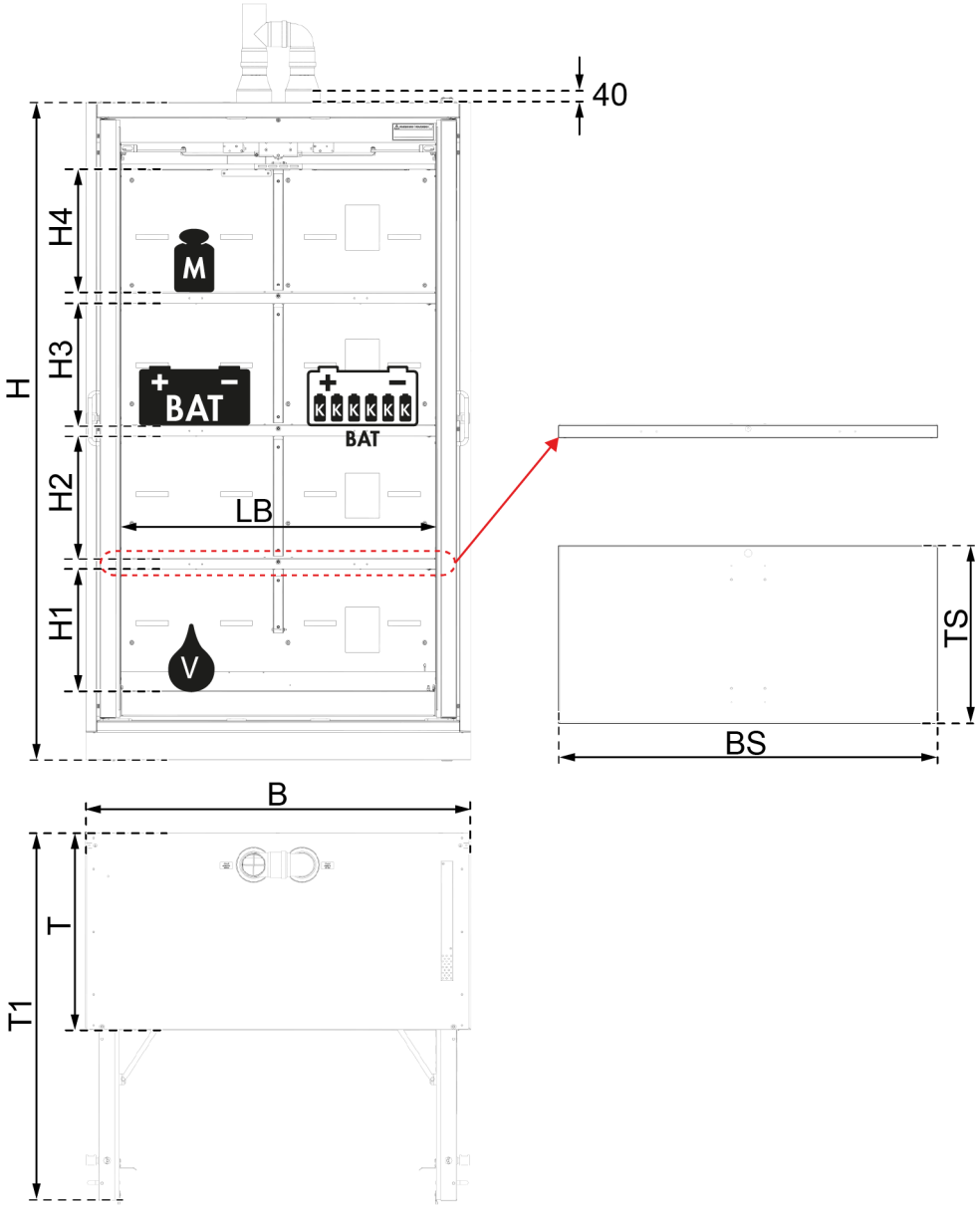


Fig. 3: Technical specifications for BATTERY station

H	Cabinet height
BAT	Battery - May consist of several lithium ion cells (C)
K	Maximum capacity of the largest individual lithium ion cell
M	Load-bearing capacity of standing surface (uniformly distributed)
BS	Standing surface width
B	Cabinet width
T1	Cabinet depth with open doors
H_1-H_4	Adjustable heights 1 to 4
V	Maximum collection volume
LB	Clear width
TS	Standing surface depth
T	Cabinet depth

	S	XS	XS (CPW)	M	L	L (CPW)	XL	XL (CPW)
H (mm)	1385	1385		2045				
B (mm)	594	1194		594	894		1194	
BS (mm)	375	975	2x 465	375	675	2x 315	975	2x 465
LB (mm)	374	2x 464	974	374	674	2x 314	974	2x 464
T (mm)	612	612						
T1 (mm)	1100	1140		1100	990		1140	
TS (mm)	457							
C (Ah)	54							
V (l)	11	33		11	22		33	
M (kg)	75							
Empty weight (kg)	250	480	500	330	455	475	560	580
Max. payload* (kg)	240			360				

* When using an extra load adapter, the max. payload is reduced.

3.2.2 Integrated electrical sockets

Tab. 6: Connection electrical specifications

Designation	Specification
Connection voltage	230
Frequency [Hz]	~50/60
Fuse protection [A]	16
Connector type	Type G

Tab. 7: Power supply technical and electrical specifications

Designation	Specification
Width x Depth x Height [mm]	375 x 150 x 375
Mains voltage [V]	230
Fuse protection per storage area [A]	10
Frequency [Hz]	~50/60
Rated insulation voltage [V AC]	3000
Rated surge voltage [V AC]	6000
Surge current [kA]	6
Installation location	Interior
Installation type	Stationary on cabinet roof
Protection rating	IP65

Designation	Specification
Operation by specialist electrician	No
Electromagnetic compatibility	Class B
Protection against mechanical influences	IK10
Type of installation	Inserts in switch box
Short circuit protection	Fault current circuit breaker
Connector type	Type G

3.3 Pressure drop during ventilation

Industrial ventilation of the safety storage cabinet results in a pressure drop at the exhaust air connection, as shown in the following diagram.

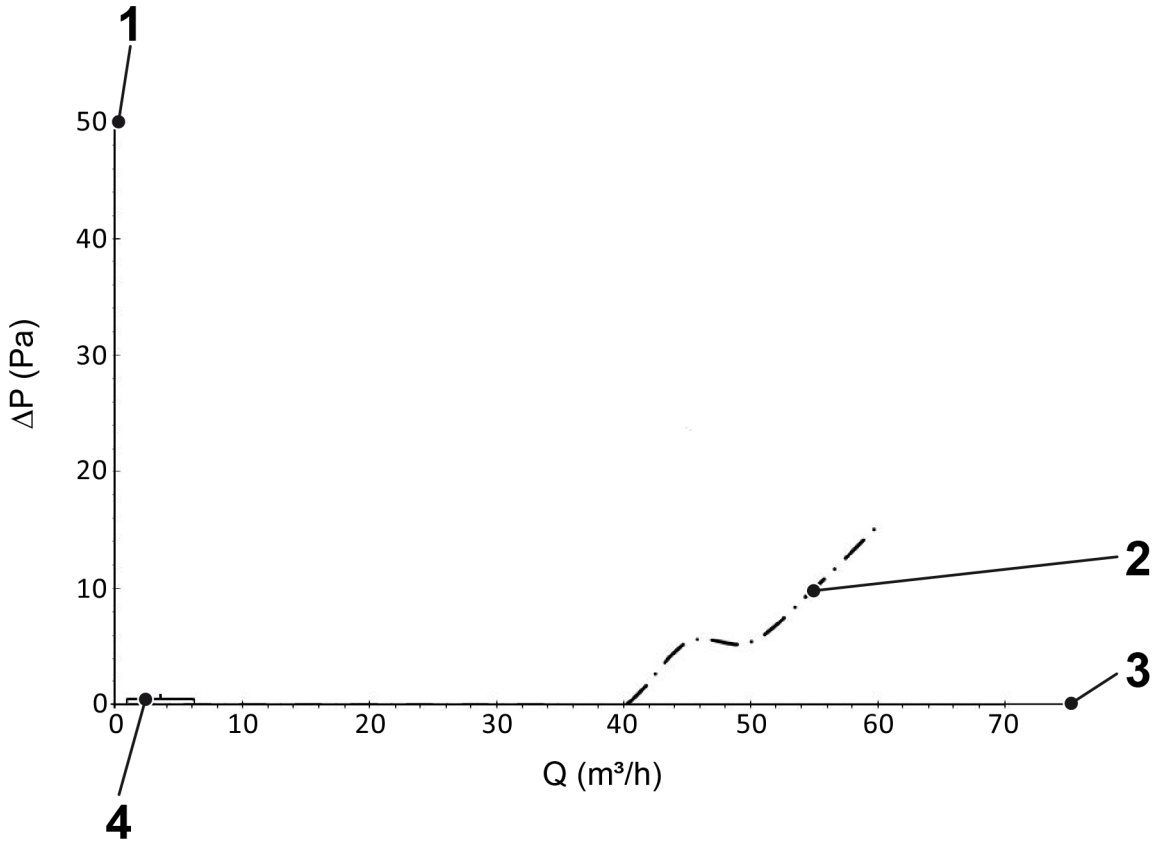


Fig. 4: Average pressure drop for cabinet depths 610 mm and 745 mm

1 Pressure drop
2 Average pressure drop from all cabinet sizes
3 Volumetric flow rate
4 Q with ten-fold air exchange (see table)

Tab. 8: Volumetric flow rate Q and pressure drop ΔP with 10-fold air exchange

Model size	Q [m³/h]	ΔP [Pa]
S	2.8	<1
XS	6.1	<1
M	4.3	<1
L	6.9	<1
XL	9.5	<1

4 Structure and function

4.1 Construction

- Cabinet carcass and doors in multi-layer construction
- External panelling: Powder-coated sheet steel
- Wall construction: Multi-layer design
- Interior surfaces: Light grey-coated decor panels
- Safety technology elements for closure of venting cut-off flaps in case of fire: Brass, spring steel (1.410)

4.2 Earthing options

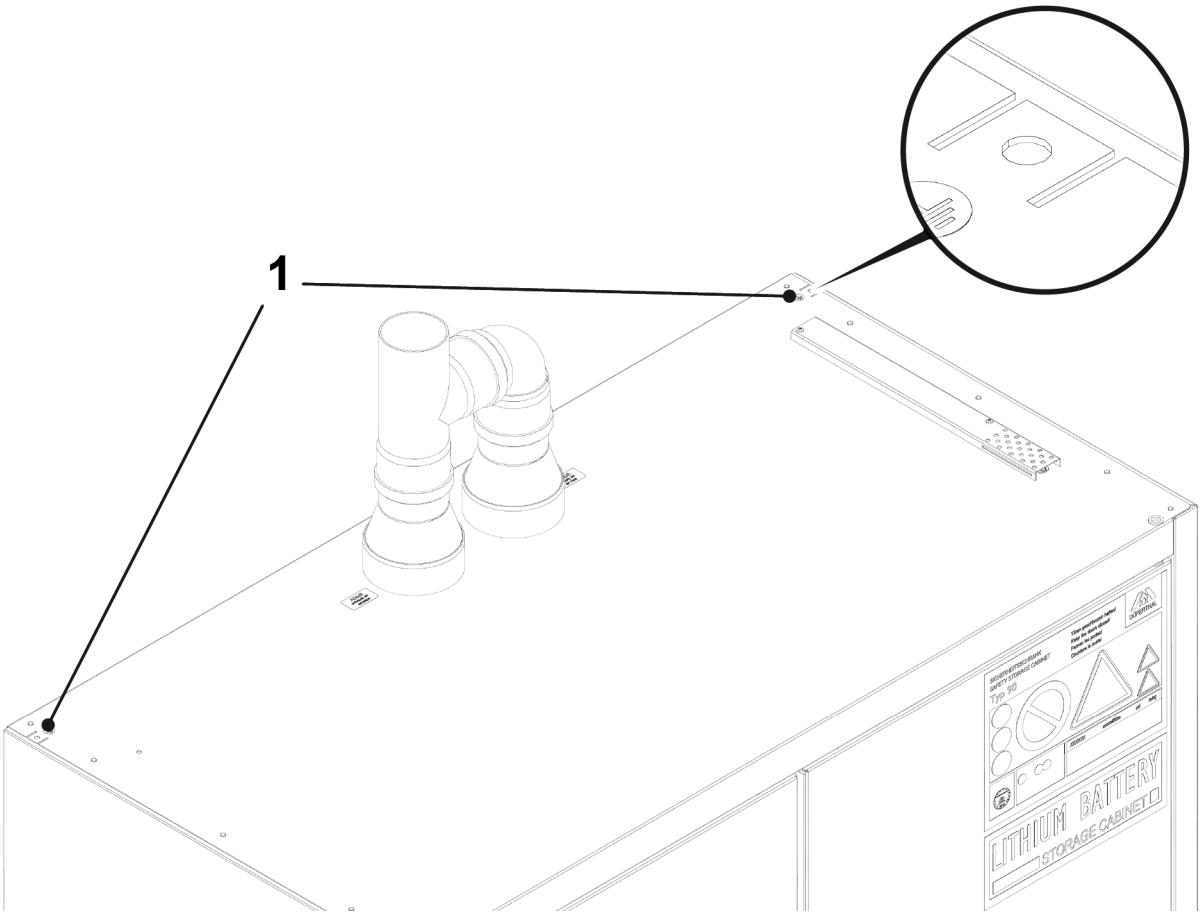


Fig. 5: Earthing options

1 Equipotential bonding saddle on cabinet roof

Earthing the safety storage cabinet prevents ignition hazards.

The interior fittings are conductively connected to one another by an equipotential bonding saddle or equipotential bonding screw on the outside of the cabinet roof.

4.3 Exhaust air connection

The exhaust air connections can be connected to an exhaust air pipe which ducts outside at a danger-free location. For this purpose, the ventilation opening is located on the cabinet roof of the safety storage cabinet.

Exhaust air connection NW 110 mm with reducer connection NW 75 mm for adaptation to an exhaust air pipe is possible.

The arrangement of the ventilation openings in the cabinet means that ventilation takes place directly above the bottom tray and is effective on every cabinet level.

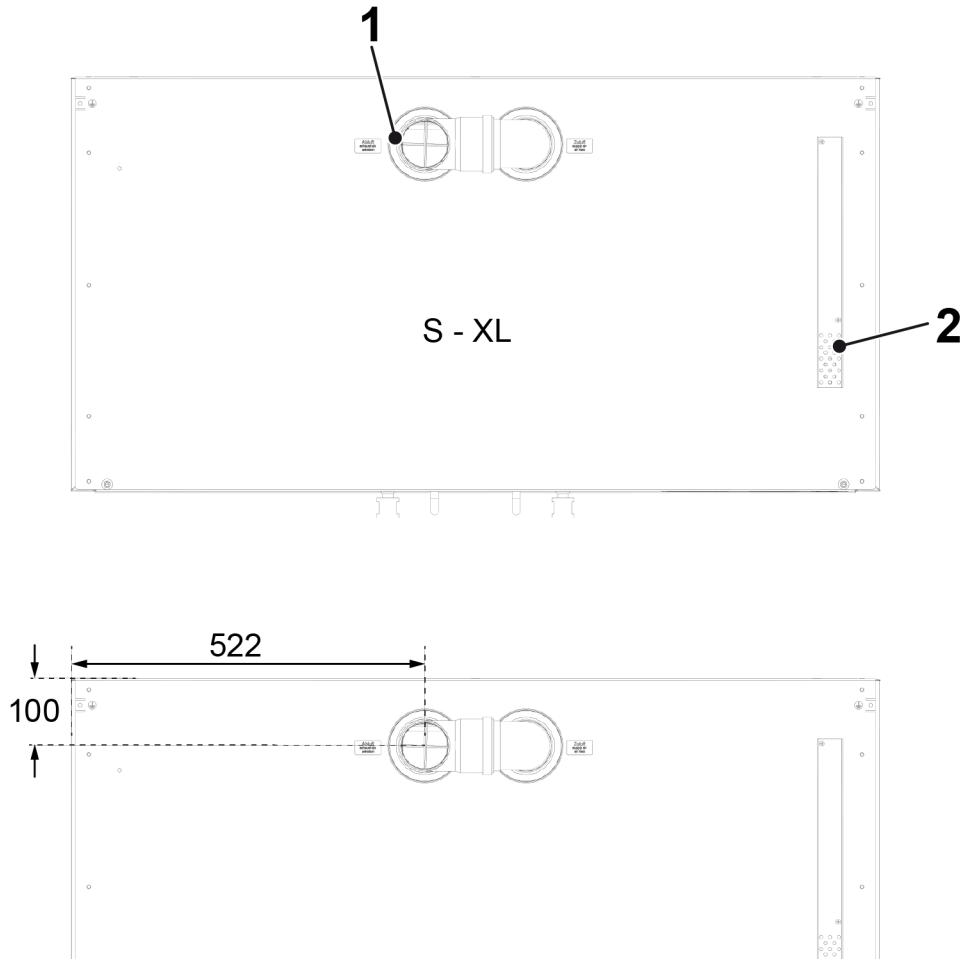


Fig. 6: Exhaust air system (view from above)

1 Exhaust air connection
2 Thermocouple

4.4 Doors

In normal situations, the wing door of the safety storage cabinet for storing lithium-ion batteries is locked permanently, ↳ *Chapter 7.1 'Open the safety storage cabinet' on page 35*.

The door can be locked with the integrated locking cylinder. The key number is imprinted on the locking cylinder and on the keys supplied, e.g. A007. Locks be subsequently adjusted to the operator's requirements.

4.5 Safety technology

4.5.1 Door closure in case of fire

At an ambient temperature of approx. 50°C, the open doors are closed by the safety technology.

In the event of a fire within the safety storage cabinet, the doors are also locked in the closed position and can no longer be opened using the door handles (backdraft locking system).

4.5.2 Closure of venting cut-off flaps in case of fire

The cabinet is also equipped with an inspection window for visual inspection of the ventilation openings for air supply and exhaust air. Above the suspended ceiling, inspection cut-outs identify the position of the closing mechanism for the ventilation openings.

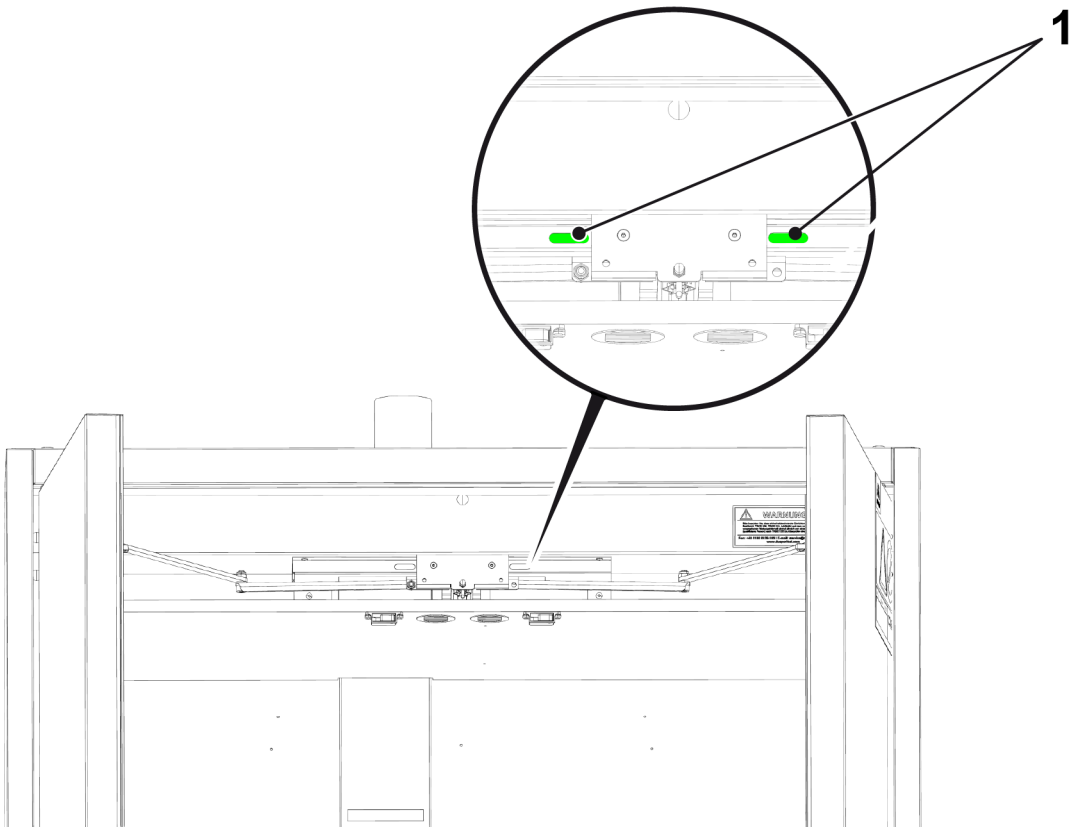


Fig. 7: Ventilation openings open

1 Green inspection cut-outs in the open ventilation openings

At an ambient temperature of 70°C, the closing mechanism is closed by the safety technology. The inspection cut-outs turn red.

4.6 Interior fittings

BATTERY station models are equipped with multiple, uniformly distributed storage levels for storing lithium ion batteries.

4.6.1 Storage level

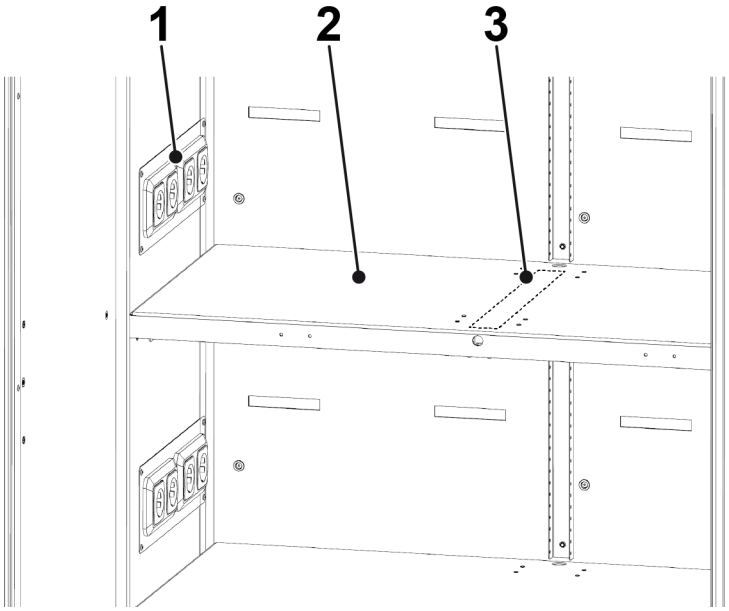


Fig. 8: Storage level

1 Integrated electrical socket
2 Storage level
3 Thermocouple

The safety storage cabinet contains storage levels that are distributed uniformly over the cabinet's interior height.

The storage levels are permanently installed in-house.

Subsequent modification may only be carried out by DÜPERTHAL service technicians.

Storage levels can also be divided into individual storage areas side by side or one above the other.

Each storage level is equipped with a temperature-dependent triggering thermocouple (50°C) for closing the open doors and activating the backdraft locking system.

A total of 4 integrated electrical sockets are available per storage area.

4.6.2 Integrated electrical sockets

For the BATTERY station safety storage cabinets, electrical sockets are available for charging batteries using the integrated power supply. The number of electrical sockets varies according to the size and construction of the safety storage cabinet.

	Without centre partition wall	With centre partition wall
S	8	-
XS	8	16
M	16	-
L	16	32
XL	16	32

4.6.3 Bottom tray

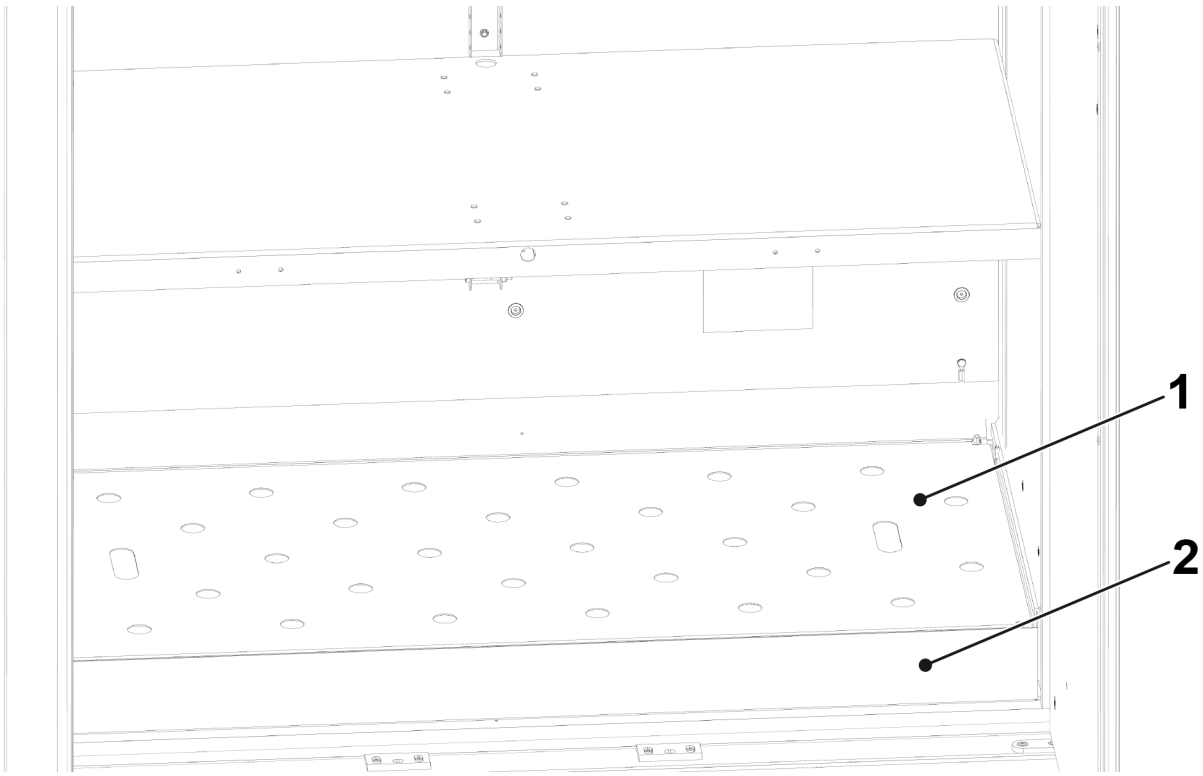


Fig. 9: Bottom tray with shelf

1 Perforated shelf
2 Bottom tray

The function of the bottom tray in the floor area of the safety storage cabinet is to collect leaking liquids in the cabinet interior. The perforated shelf integrated in the bottom tray is the lowest storage level.

4.7 Pipe penetration (optional)

Tested penetrations are optionally available for the safety storage cabinet with Type 90 classification. The penetrations are attached to the safety storage cabinets from the outside and can be provided with holes. Refer to the separate instructions for the pipe penetrations.

When used correctly, it has no negative effect whatsoever on fire resistance. Unused, open holes in the pipe penetrations must be sealed.

! NOTICE!

Later attachment of pipe penetrations

Incorrect attachment in the wrong location can cause damage to the safety storage cabinet.

- They should only be attached on the approved surfaces (see additional instructions for pipe penetrations).
- Holes only based on defined penetration profiles (see separate mounting instructions for each cabinet type).

! NOTICE!

Routing and using pipe penetrations

The routing and use of pipes, cables and hoses are the responsibility of the operator.

Incorrect handling can damage the safety technology in the safety storage cabinet and cause it to fail.

– Carry out a separate risk assessment of the overall setup.

4.8 Extra load adapter

The safety storage cabinet with Type 90 classification is equipped with a tested extra load adapter. The extra load adapter must be used for supporting loads on the safety storage cabinet. When used correctly, it has no negative effect whatsoever on fire resistance. Refer to the separate instructions for the extra load adapter.

⚠ WARNING!

Objects on the cabinet roof

In case of fire, objects on the cabinet roof can impair the function of the safety technology.

This may result in death or serious injury.

– Do not store any objects on the cabinet roof.
– Using the extra load adapter

The load-bearing capacity of the cabinet is reduced by the extra load (see additional instructions for extra load adapter).

4.9 Fuse box

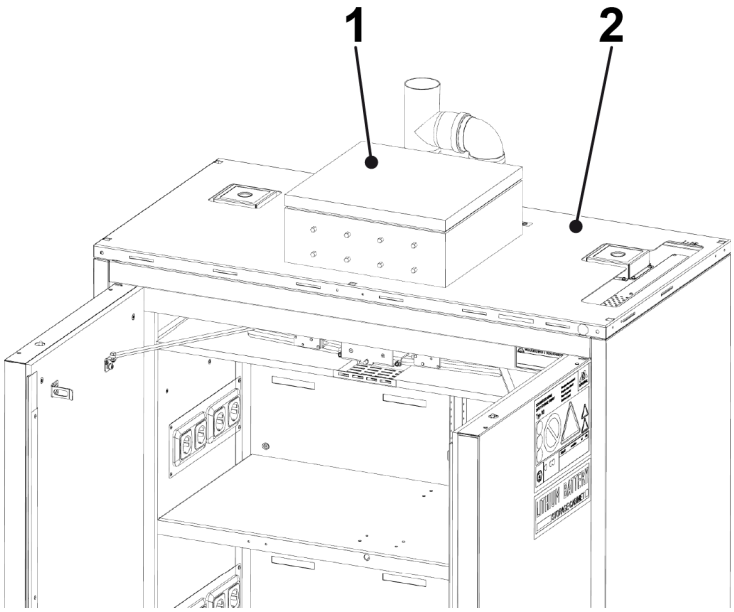


Fig. 10: Extra load adapter with fuse box

1 Fuse box
2 Extra load adapter

The integrated electrical sockets are connected to the fuse box. In case of a fault inside the cabinet, the fuses disconnect the electrical sockets from the mains power.

5 Transport

The safety storage cabinet is packaged for transportation and is protected against damage by transport restraints. The transport restraints should be refitted before any transportation.

WARNING!

Risk of crushing due to tipping or falling safety storage cabinet

If the safety storage cabinet tips over or falls when not transported with due caution, this can cause potentially fatal crushing.

- Wear personal protective equipment (PPE).
- Only transport with two people.
- Only transport the safety storage cabinet upright and unladen.
- Only drive under the safety storage cabinet using suitable transport equipment.

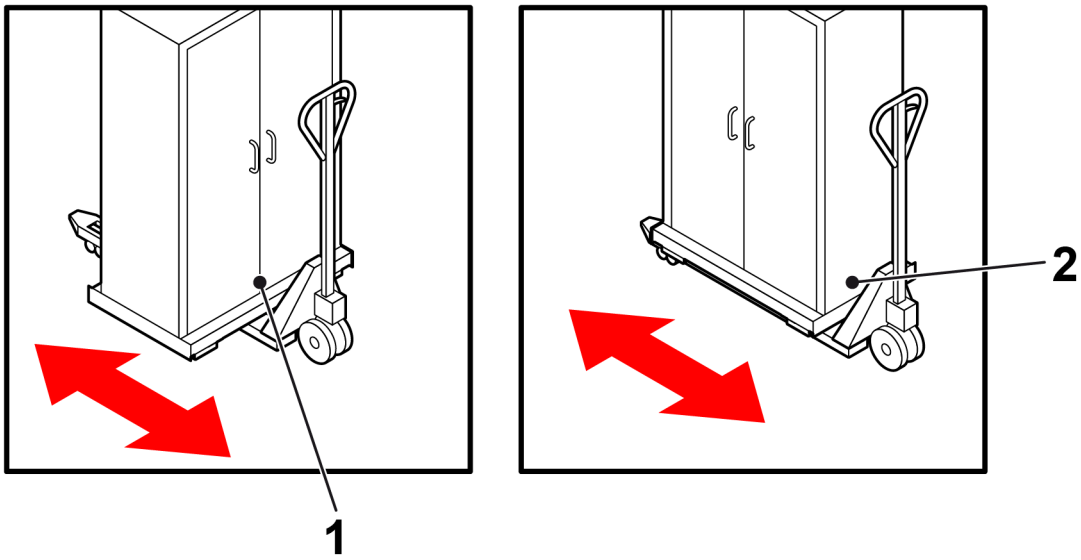


Fig. 11: Transporting the safety storage cabinet

1 Pick up centrally from the front
2 Pick up centrally from the side

NOTICE!

Handling the transport restraints

Incorrect handling can damage the safety transport skids and the safety storage cabinet.

- Transport restraints and safety transport skids should only be removed at the installation location.
- Replace the safety transport skids after transport to the installation location with the enclosed adjustable feet.

! NOTICE!

Tipping the safety storage cabinet over during transport

Damage to the safety storage cabinet caused by incorrect handling.

- Only pick up the safety storage cabinet from the side or back wall.
- Only pick up the safety storage cabinet using special and suitable transport or lifting equipment.
- Pick up the safety storage cabinet once it is securely lashed and is not at risk of slipping.
- Do not damage the adjustable feet during transport.

6 Installation and commissioning

Install the safety storage cabinet so that the annual maintenance activities can be carried out without restriction.

6.1 Requirements on the installation location

The safety storage cabinet is approved for installation in a building.

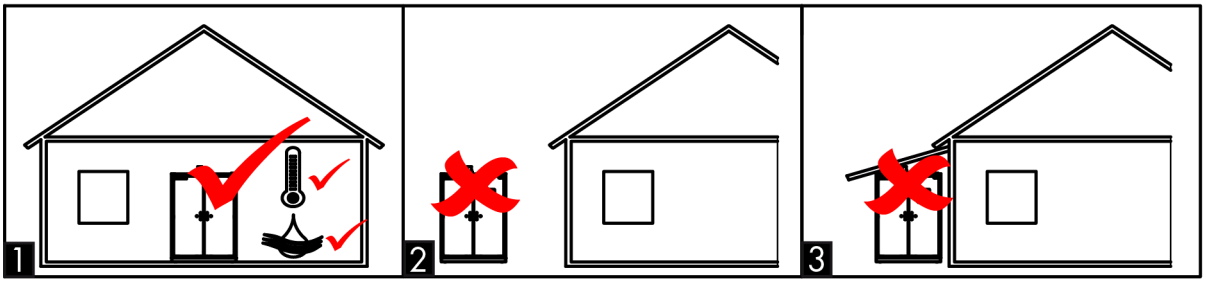


Fig. 12: Requirements on the installation location

Consider the following in relation to the installation location:

- The surface must be able to bear the weight of the safety storage cabinet when fully loaded.
- The surface must be horizontal in order to guarantee problem-free functioning of the safety storage cabinet.
- The load-bearing capacity and stability of the surface must be assured both in normal situations and in the event of a fire.
- Do not install the safety storage cabinet near sources of heat.
- Protect the safety storage cabinet against moisture.
  - At a relative humidity of **>**70 **%** use in closed and heated buildings is permissible for a few weeks each year.
- The operating temperature must be between -5°C and **+**40°C.

6.2 Attaching the adjustable feet

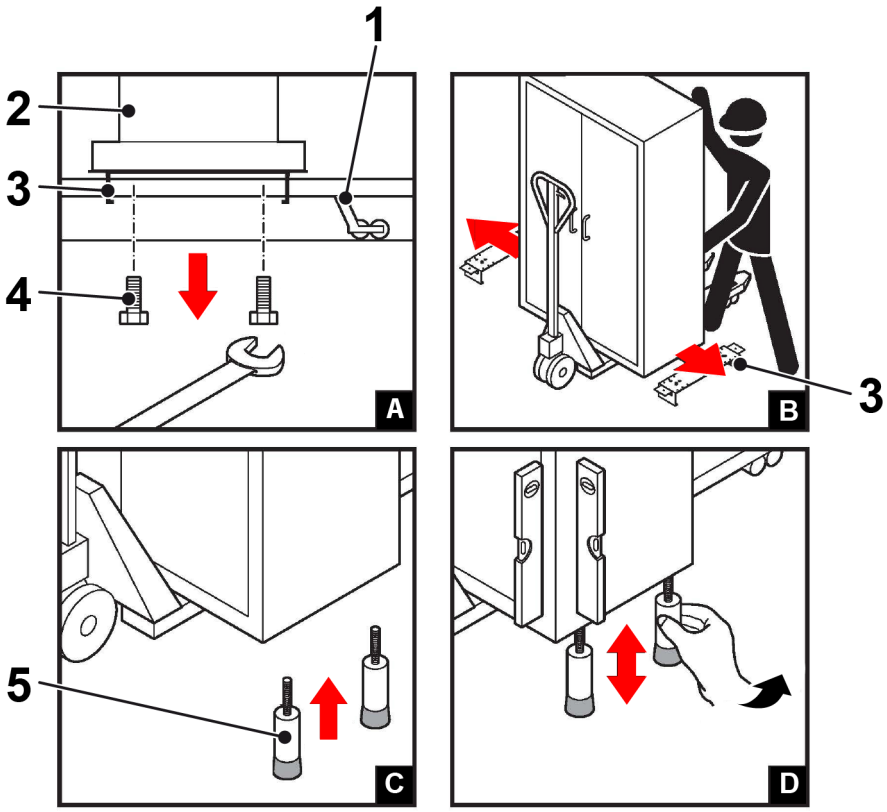


Fig. 13: Attaching the adjustable feet

1 Transport equipment for the safety storage cabinet
2 Safety storage cabinet
3 Safety transport skids
4 Attach the safety transport skids (4x screw, size 19 mm)
5 Adjustable foot

Personnel:

- Technical specialist employees

1. Transport the cabinet to its place of use.
2. Remove packaging.
3. Remove the adjustable feet from the cabinet roof.
4. Raise the cabinet and loosen the screws for the safety transport skids (A).
   ⇨ The safety transport skids can be removed (B).
5. Screw the adjustable feet completely into the bottom of the cabinet from underneath (C-D).
6. Position the cabinet and set it down carefully.

6.3 Align the safety storage cabinet

The alignment procedure described below is used for precision alignment. Remedy any major floor unevenness of more than 15 mm on site.

Long adjustable feet are fitted in the corners of the base as standard. These are used to align the safety storage cabinet.

Aligning with adjustable feet

Personnel:

- Technical specialist employees

1. Lift the cabinet using suitable lifting equipment.
2. Screw the adjustable feet in or out by hand.
3. Set the safety storage cabinet back down.

Aligning without adjustable feet

Personnel:

- Technical specialist employees

Tool:

- Suitable tool

Optionally, the safety storage cabinet can be supplied without adjustable feet.

The safety storage cabinet is supplied without alignment elements. An alignment may be necessary in individual cases.

1. Raise the safety storage cabinet slightly.
2. Place steel or stainless steel spacers underneath the safety storage cabinet.
3. Set the safety storage cabinet down carefully.

6.4 Check the alignment of the safety storage cabinet

If the safety storage cabinet is not aligned properly, the open wing doors will automatically close themselves or open fully, Chapter 6.3 'Align the safety storage cabinet' on page 31.

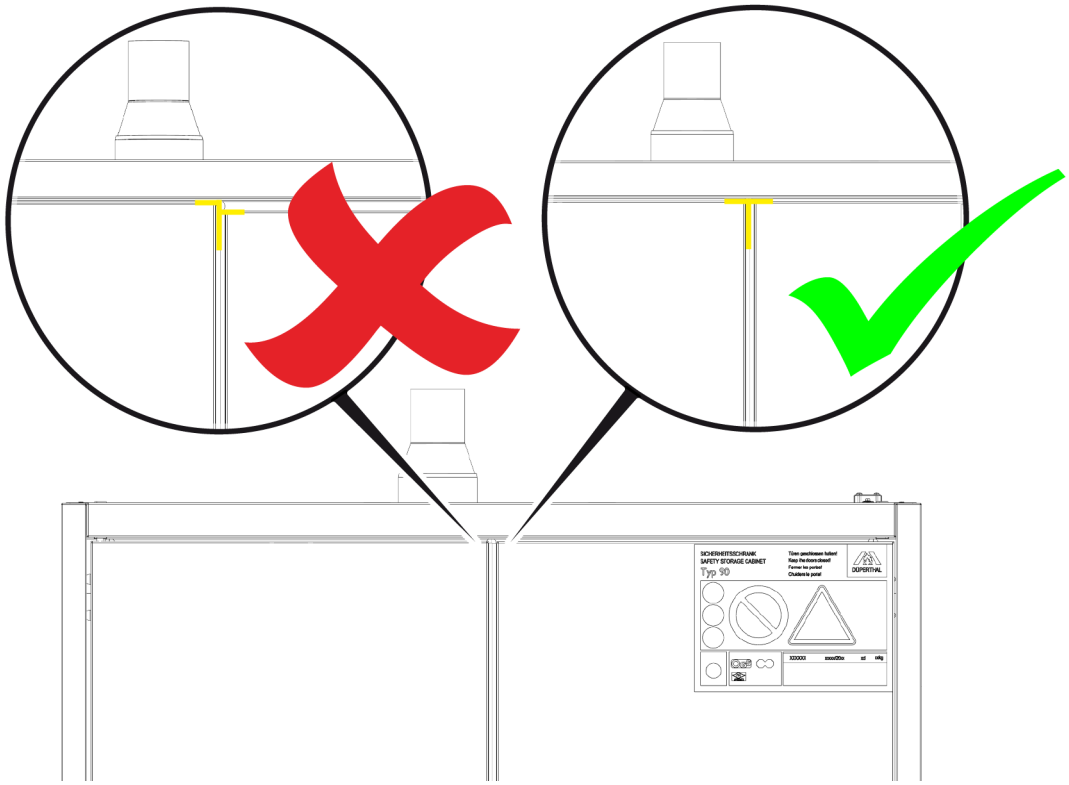


Fig. 14: Checking alignment

Correct alignment of the safety storage cabinet:

- when the doors are closed, the door gaps are of equal width.
- With two doors, the central gap and ceiling gap form an even "T".

6.5 Mount the plinth panel

The adjustable feet are covered and protected by the plinth panel.

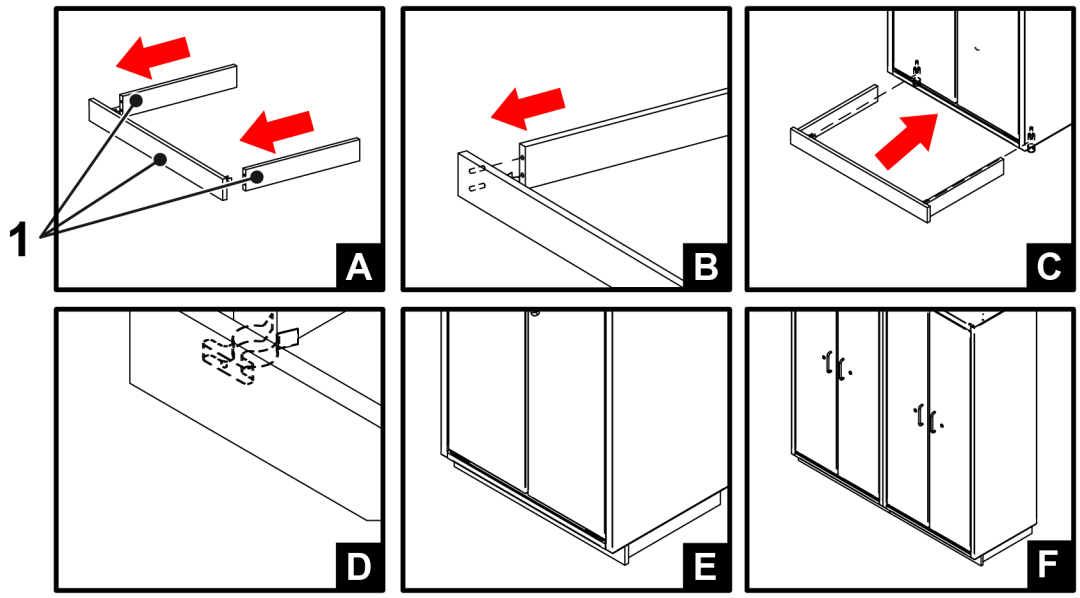


Fig. 15: Mounting the plinth panel

1 Three-part plinth panel

Mounting the plinth panel

Personnel:

- Technical specialist employees

1. Connect the side pieces of the plinth panel to the front cover (A-C).
2. Push the three-part plinth panel from the front underneath the cabinet (D-F).
3. Connect the three-part plinth panel using the spring clip to the front adjustable feet.

6.6 Venting the safety storage cabinet

⚠ WARNING!

Fumes and fire residues

In case of fire, fumes and fire residues can escape from the safety storage cabinet through the cracks in the door and the ventilation openings.

The consequences are death or serious injury.

- Switch off the power supply.
- The safety storage cabinet may only be opened by fire brigade employees.
- Implement decontamination procedures.

Installation of industrial ventilation or a connection to an existing ventilation duct must be carried out by a qualified company and is not a service provided by DÜPERTHAL.

The safety storage cabinet can be operated without a connection to a ventilation duct.

6.6.1 Safety storage cabinet with connection to a ventilation duct

The safety storage cabinet can be operated with a connection to a ventilation duct.

Personnel:

- Technical specialist employees

1. Connect the exhaust air line to the exhaust air connection socket.
2. Connect the pipeline with a collar to the exhaust air connection socket.

6.6.2 Safety storage cabinet with connection to an industrial ventilation system

In case of fire, switch the industrial ventilation off to prevent oxygen from entering the safety storage cabinet uncontrollably.

Personnel:

- Technical specialist employees

1. Connect the exhaust air line to the exhaust air connection socket.
2. Connect the pipeline with a collar to the exhaust air connection socket.
3. After installing the safety storage cabinet, check the connection to a ventilation duct with smoke tubes.

6.7 Earth the safety storage cabinet

The cabinet and the power supply system are connected to the earthing system of the building using the power supply system earthing pin plug.

7 Operation

7.1 Open the safety storage cabinet

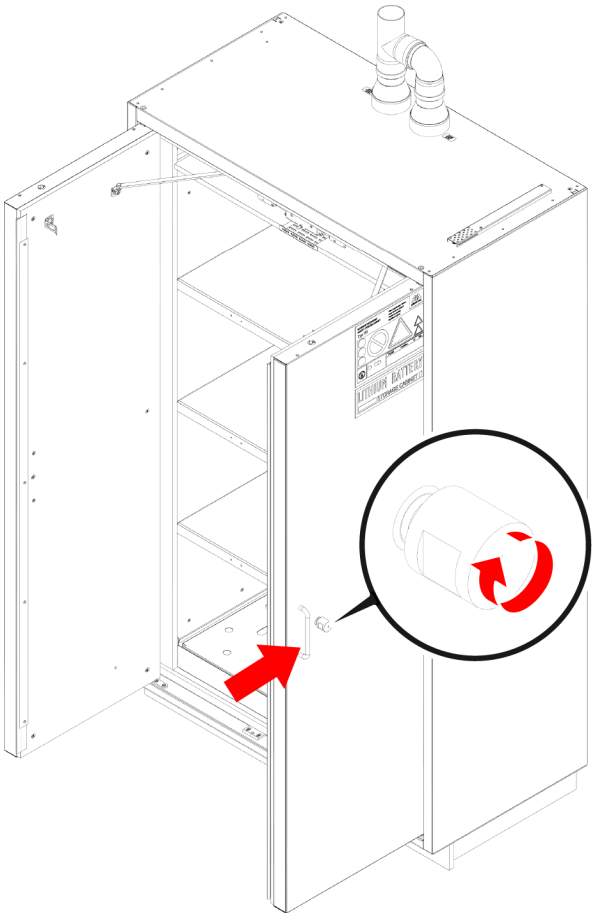


Fig. 16: Door operation with door handle

WARNING!

Blocked doors

Doors that are held open by objects impair the function of the safety technology.

This may result in death or serious injuries as a result of inadequate fire protection.

– Close the doors after every work process.

Opening the door

Personnel:

- Technical specialist employees

1. Turn the thumbturn next to the door handle 180° and hold it.
2. Open the safety storage cabinet by pulling on the door handle of the wing door.
   ⇨ The wing door remains open in any position.
3. Release the thumbturn.

⇨ The wing door locks automatically.

Close the door

Personnel:

- Technical specialist employees

The process of storing or removing the lithium-ion batteries from storage is complete.

1. Close the door fully using the door handle.
   ⇨ The door will lock automatically, clicking audibly into place.
2. Check the locking system by pulling on the door handle.

In the event of the safety storage cabinet not being aligned properly, the open wing doors will automatically close themselves or open fully.

7.2 Storage level

NOTICE!

Covering the thermocouples

Material damage due to malfunctioning of the safety technology.

– Store lithium-ion batteries in such a way that the areas with the temperature-dependent triggering thermocouples remain uncovered.

7.3 Charging batteries in the safety storage cabinet

NOTICE!

Charging lithium-ion batteries

Fault in lithium ion batteries due to incorrect charging.

– Charge batteries in line with manufacturer's specifications.
– Do not connect multiple power sockets to the available electrical sockets.

Personnel:

- Technical specialist employees

1. Connect flat lithium ion batteries to the electrical socket in the cabinet interior using a suitable charger.
2. Charge lithium ion batteries in line with the manufacturer's specifications.

7.4 Checking and cleaning the bottom tray

⚠ WARNING!

Leaking electrolyte

Contact with leaking electrolyte can lead to life-threatening injuries or painful skin reactions.

The consequences are death or serious injury.

- Wear personal protective equipment (PPE).
- Collect electrolyte that has leaked into the bottom tray and the cabinet interior and dispose of it immediately in accordance with accident prevention regulations.
- Dispose of faulty batteries in accordance with national and local disposal regulations.

! NOTICE!

Connect the bottom tray to the safety storage cabinet with a potential connection

Damage to the safety storage cabinet due to missing potential connection.

- After dismantling, re-connect the bottom tray to the potential connection.

Personnel:

- Technical specialist employees

→ Perform a daily visual inspection for extraneous substances.

The storage of lithium-ion batteries without the perforated shelf in the bottom tray reduces the collection volume defined and required in the tested version.

Store lithium-ion batteries in such a way that a visual inspection of the bottom tray for extraneous substances is possible every working day.

8 Opening the safety storage cabinet after a fire

After a fire, the safety storage cabinet must not be opened for at least 24 hours, and only with the utmost caution and by specialist employees.

WARNING!

Fumes and fire residues

In case of fire, fumes and fire residues can escape from the safety storage cabinet through the cracks in the door and the ventilation openings.

The consequences are death or serious injury.

- Switch off the power supply.
- The safety storage cabinet may only be opened by fire brigade employees.
- Implement decontamination procedures.

WARNING!

Damaged safety storage cabinet due to fire or extinguishing agents

This may result in death or serious injury.

- Do not use safety storage cabinets that have been damaged by fire or extinguishing agents.

WARNING!

Hazard due to lithium-ion batteries that remain undamaged

This may lead to death or serious injury.

- The safety storage cabinet may only be opened by fire brigade employees.

No longer use the safety storage cabinet following an accident.

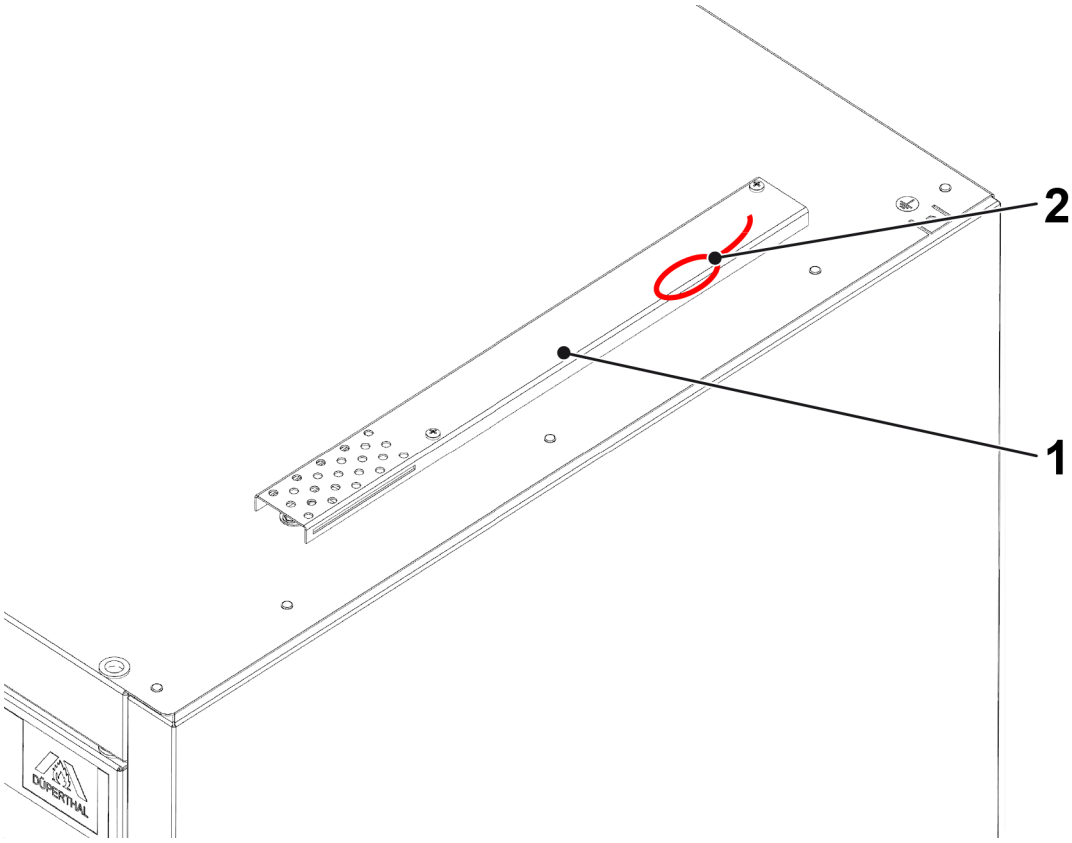


Fig. 17: Emergency release system

1 Cover
2 Loop

Operating the emergency release system

Personnel:

- Fire brigade

1. Unscrew / remove cover.
2. Pull out loop until resistance point is reached.
   ⇨ Opens the additional locking system inside the safety storage cabinet.

9 Maintenance

Check the safety storage cabinet for any externally visible damage or defects.

Always perform checks:

- After installation.
- Before commissioning.
- After changes.
- After maintenance.

The safety storage cabinet should also be inspected periodically at the following intervals.

Interval	Maintenance work	Personnel
Daily	Bottom tray and storage levels ■ Check in accordance with regulations governing water legislation ■ Collect and properly dispose of leaked electrolyte immediately.	Laboratory and warehouse employees

Interval	Maintenance work	Personnel
Monthly	Closing of the doors ■ Open the door and inspect the closure.	Technical specialist employees
	Industrial ventilation (if present) ■ Check the effectiveness of the ventilation with a woollen thread or with a smoke tube in the cabinet in front of the exhaust air duct at the ventilation grilles. ■ Remove contamination at the exhaust air opening.	Technical specialist employees
	Seals ■ Check the sealing strips are seated properly in the carcass frame and on the end faces of the doors. ■ If visible damage is found, replace the sealing strips immediately.	Technical specialist employees
	Labelling ■ Inspect the safety labels on the safety storage cabinet to ensure they are complete.	Technical specialist employees

Interval	Maintenance work	Personnel
Annually	Safety storage cabinet ■ Mechanical and electrical test on entire safety storage cabinet	DÜPERTHAL service technicians

If faults occur, assist the technical customer service by providing the cabinet model, production and key number, along with a description of the fault.

Safety-relevant safety equipment must be tested annually by a qualified person in compliance with BetrSichV and the maintenance interval stipulated by the manufacturer as set out in TRBS 1203.

10 Faults

Fault description	Cause	Remedy	Personnel
Doors do not close.	Safety storage cabinet is not aligned correctly.	Install the safety storage cabinet so it is horizontal. ↳ *Chapter 6.4 'Check the alignment of the safety storage cabinet' on page 32*	Technical specialist employees
	Doors are held open by objects.	Do not wedge or hold doors open with any objects.	Technical specialist employees
	Safety storage cabinet is not correctly filled.	Make sure that containers in the safety storage cabinet are uniformly distributed.	Technical specialist employees
No extractor present.	Venting cut-off flaps closed, as closing mechanism has been triggered.	Replace the locking mechanism.	DÜPERTHAL service technicians
Doors do not move easily.	Moving parts, such as hinges, are dirty or corroded.	■ Remove rust. ■ Lubricate parts. ■ Remove corrosive substances from the safety storage cabinet. ■ Notify technical customer service.	Technical specialist employees
Doors open again after being closed.	Safety storage cabinet is not aligned correctly.	■ Unscrew the front adjustable feet slightly. ■ Align the safety storage cabinet so it is horizontal. ↳ *Chapter 6.3 'Align the safety storage cabinet' on page 31*	Technical specialist employees
Doors close again after being opened.	Safety storage cabinet is not aligned correctly.	■ Unscrew the rear adjustable feet slightly. ■ Align the safety storage cabinet so it is horizontal. ↳ *Chapter 6.3 'Align the safety storage cabinet' on page 31*	Technical specialist employees
Doors cannot be opened manually once they are locked.	Emergency locking system for the doors triggered by accident within the safety storage cabinet (self-ignition of a lithium-ion battery).	Notify the fire brigade to avoid an explosion (backdraft effect) when opening.	Fire brigade
Battery is not charging.	Fuse in the fuse box tripped by short circuit.	Inspect the fuses in the fuse box and switch on again. Remedy the cause of the overvoltage (e.g., faulty charging station).	Technical specialist employees
	Fault current circuit breaker in fuse box tripped.	Inspect the fault current circuit breaker in the fuse box and switch on again. Remedy the cause of the fault current.	Technical specialist employees
Battery is not charging (with optional Smart-Control 10T accessory)	Monitoring unit reporting fault (see display on Smart Control 10T)	Remedy fault displayed and confirm.	Technical specialist employees

11 Spare parts and accessories

Only original parts from DÜPERTHAL are to be used for the safety storage cabinets.

- Storage shelves
- Bottom tray
- PP insert
- Anti-slip mat made from rubber
- Door handle
- Perforated sheet insert
- Plinth panels
- Venting connection socket
- Ventilators
- Exhaust air monitoring units
- Extra load adapter

12 Disposal

CAUTION!

Dismantling the safety storage cabinet

Risk of injury due to improper dismantling of the safety storage cabinet.

– Ensure that the safety storage cabinet is only dismantled by specialist technical employees.

The safety storage cabinet can be completely dismantled by specialist technical employees.

Recycle the individual material components separately.

Comply with national and local disposal regulations.

To save resources, do not place parts of the safety storage cabinet or the whole cabinet in bulky or domestic waste.

13 Certificates

CE Declaration of Conformity

in accordance with Machinery Directive 2006/42/EC, Annex II A

We,

DÜPERTHAL Sicherheitstechnik GmbH & Co. KG
Frankenstrasse 3, 63791 Karlstein,

hereby declare that the following machine:

Machine designation: Safety storage cabinet for the storage and charging of batteries

Machine model: BATTERY station

Machine size: S, XS, M, L, XL

Machine type: 69-HHBB67-xyz(ss)

Key:

Machine size vs. machine type		S	XS	M	L	XL
Height	HH	13	13	20	20	20
Width	BB	06	12	06	09	12
Colour	x	0, 4, 5, x				
Definition of fittings and features	yz	70, yz	70, 72, yz	70, yz	70, 72, yz	70, 72, yz
Special marks	(ss)	A, D, L, R, U, S, T (only if necessary)				

If -xyz is mentioned in the machine number, the order number will define the colour, fittings and features and special marks.

complies with all relevant requirements of Machinery Directive 2006/42/EC.

Institution responsible for review of QS system according to annex X:

TÜV SÜD Management Service GmbH
Ridlerstrasse 65, 80339 München

Additionally, the machine complies with the following harmonised and national standards and specifications:

Transposed harmonised standards: DIN EN ISO 12100:2011

Transposed national standards and technical specifications:

DIN EN 14470-1:2004
DIN EN 16121:2017
DIN EN 16122:2012
DIN EN 31000:2017
DIN EN 61349-2:2011

Authorised person for compilation of technical documents: _____
(signee)
Frank Backhaus / CE-authorised person

Oerlinghausen, 26.07.2019
(place, date)

_____
(signee)
Franz-Josef Hagen / Managing director

Dokument: D00101500 Rev.: 00