

Assembly and operating manual

*Floor-standing cabinet for storing and charging
lithium-ion batteries*

PRIOCAB-Li EI90

EP.A.10921EN-1

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Dear
customer,

Thank you for purchasing a high-quality PRIORIT
product.

To ensure we can guarantee that the entire system will function free from errors, please carefully observe the following operating manual.

Failure to observe this manual will void any warranty guarantees.

We expressly reserve the right to make technical changes for the purpose of improving our product, or as required by changes to the law – including without any separate notification.

This operating / assembly manual may not be reprinted or duplicated in whole or in part without the written approval of PRIORIT AG.

PRIORIT AG

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Important notes



The product must be fitted flush and level!



When storing individual parts, e.g. of an unhinged door, do not place them on the corners and cover the storage area with soft material beforehand, e.g. with a packing blanket!



Before putting into operation, connect the battery in the smoke detector and check the function of the smoke detector!



Caution/Warning/Attention

Danger to persons from electric current.

Info:

Warning 230V AC

Dangerous voltage. May cause death, serious physical injury or considerable damage to property. Disconnect all poles of the unit from the power supply before disassembling/assembling or changing the setup. Observe VDE 0100 for 230 V mains connection.



Caution: There may be defective batteries in the cabinet! These pose a danger. Protect yourself from leaking electrolytes or other hazardous substances by taking adequate protective measures.

General safety information

- This operating / assembly manual must always be stored at the location where the fire protection enclosure will be used.
- Legally required safety information must be posted in an area visible to users.
- All safety and hazard notices and the type plate must be kept in legible condition.
- Observe the relevant VDE regulations.
- Observe the general building law and the building regulations.
- Observe the requirements of the fire authorities.
- Observe the regulations required for handling lithium-ion batteries.
- Observe the accident prevention guidelines and the workplace directive.
- Instructions given by the technical supervisory service must be followed.
- Observe the relevant standards for assessing fire protection and construction aspects.
- Only use products that are in proper working order.
- Ensure that the required safety checks are carried out by personnel authorised by us.
- Damage and malfunctions that are possible due to improper transport and installation due to the heavy weight can only be safely avoided by specialist personnel trained and authorised by us.
- Impairment of the stability of the enclosure when the doors are open must be expected if the enclosure has not yet been screwed to the building structure.
- The swivel range of the door must always be kept clear.
- Observe the technical information in our catalogue or data sheet for the respective product.
- Unauthorised persons must not be allowed access to the enclosures.
- The doors of the enclosures must be kept closed.
- Observe all instructions in these operating and maintenance instructions.
- Screwing to the building structure may only be carried out with approved and suitable screws/dowels.
- The suitability of the screws/dowels must be checked depending on the building.
- The enclosures must not be glued, painted or otherwise coated.
- The enclosures must not be damaged on the body (holes, screws).
- The enclosure does not have an emergency release! Persons inside the enclosure cannot free themselves!
- The locking systems must not be changed or replaced.
- The enclosures may only be connected to a socket outlet that is protected by a 16 A circuit breaker and a residual current circuit breaker. The necessary fuses must be provided by the customer!



Caution / Warning / Attention
Danger to persons from electric current.

Warning 230 V AC

- May cause death, serious physical injury or considerable damage to property. Before dismantling the ventilation unit, disconnect all poles of the unit from the supply voltage. It is essential to observe the safety instructions of VDE 0100 for 230 V AC mains connection.

Intended use

- The products described in these operating/assembly instructions are manufactured in accordance with the state of the art and the recognised safety regulations.
They may only be:
 - used as intended and
 - used when they are safe and in good working order
- The enclosures may only be used for storing and charging "commercially available lithium-ion batteries".
- Only chargers and lithium-ion batteries in perfect technical condition may be used.
- Only lithium-ion batteries in perfect condition may be stored and charged.
- The enclosures consist of coated, non-metallic plate-shaped components. The edges are colour-coded.
- When handling the products and for the correct handling of the cable entry, please follow these operating instructions precisely.
- The enclosures must not be used for storing hazardous substances.
- No fan heater or similar may be placed in the cabinet and operated there.
- Any other use is not deemed proper use. PRIORIT is not liable for the resulting or consequential damages.

Transportation

- The enclosures are shipped packed upright on the pallet.
- If the packaging is damaged, then the freight carrier must be notified of this in writing on the delivery slip – a "simple acknowledgement" provided to the delivering freight company will exclude recognition of damage in transit.
The same applies if any packages are missing according to the delivery slip.
- The pallet must always be picked up from the narrow side with forks inserted fully to the end of the pallet.
- Only open the pallet at the installation site, in order to prevent damage during transportation to the installation site.
- Do not use pointed or sharp objects such as knives when opening the pallet, as they may damage the enclosure. Please use caution!
- Dispose of packaging materials in an environmentally appropriate manner or reuse them.
- If the fire protection enclosure is not used or installed immediately, it must be stored in a suitable location. → do not store outdoors.
- Transport must be carried out in compliance with the safety regulations!
- Transport the enclosure upright on the transport pallet.
- Do not undo the strapping until you reach the installation site.
If the enclosure has to be turned over, this may only be done without jerking and over the entire surface of the back or side panel.
- PRIOCAB fire protection enclosure with integrated pedestal that can be moved underneath.
The front panel must be unscrewed for use.
- Do not lay the enclosure on the door(s)!!
- The enclosure must be closed here.
- Please keep in mind that the fire protection enclosure is very heavy.
- It must generally be carried by at least 2 people.
- Tilting to the side or rear wall is only permitted for fitting purposes!
- In general, the enclosure may be tilted to the side or backwards by up to 45°.



- If it is tilted by 90°, then the door must be secured all around with appropriate spacer blocks – alternatively, the door panel can also be dismantled.
- In the case of 2-panel enclosures, the doors should generally be dismantled if the enclosure is to be laid on its side or back.
- The outer edges must be protected accordingly.
- The weight must be taken into account -> follow the accident prevention regulations here!
- Enclosure must be secured accordingly.

The most important facts at a glance

- Note the danger of tipping over during transport!
- Do not remove the protective film, edge protectors or other packaging material until you reach the immediate installation site!
- Pay attention to the enclosed assembly material on the protective foil or on the enclosure!
- Never transport the enclosure with the doors open!
- Always have at least 2 people transport the enclosure!
- When transporting with a forklift truck, use forks whose length is in accordance with the enclosure's dimensions.
- Watch out for any protruding parts.
- When transporting with a crane, do not step under suspended loads.
- Any damage must be reported to us immediately.
- The products must not be stored outdoors and must be protected from moisture (water).

General information

- Please note: As a general rule, defective batteries should not be stored inside buildings.
- Do not install damaged components – this will immediately void the warranty and usability certificate.
- Unless it is fitted fully and appropriately, the enclosure does not bear the required usability certificate under building approval regulations.
- Always observe building law regulations and guidelines, as well as instructions from the responsible building authority and the responsible commissioned fire protection expert.
- As the installing technician, you should only issue an unrestricted manufacturer's declaration of compliance with the building approval if installation was completed in a compliant manner.
- Please observe the relevant VDE regulations.
- Observe the accident prevention guidelines and the workplace directive.
- The swing area of the doors must always be kept clear.
- Unauthorised persons must not be allowed access to the enclosures.
- The doors of the fire protection enclosures must be kept closed during operation.
- Secure enclosures against tipping over

Information in this manual

- This manual is not a manufacturer's declaration, nor is it considered a usability certificate under building approval regulations.
- The information in this manual applies to a wide range of different products. Binding technical information, and information related to technical certifications, is only provided on the proof of usability under building approval law, the manufacturers' declarations submitted by the constructing company, and our order confirmation, which is considered part of the purchasing agreement upon signing by our contractual partner.

Installation conditions of fire protection enclosures

- Subsurface must be flat
- Only suitable for indoor installation
- Installation site must be frost-free and dry, ambient temperature +5°C to +30°C
- Not suitable for outdoor installation
- Surface/wall must be suitable (load-bearing capacity, classification)

Check the suitability of the enclosed dowels in relation to the wall properties.

The enclosure must be aligned at the final installation site. For this purpose, the enclosure can be lifted at the corners and a height adjustment can be made with shims.

The enclosure must then stand horizontally.

The enclosure must be secured to prevent it from tipping over.

Check that the fire protection seals are undamaged.

Check that the door is properly locked when closing the enclosure.

Special features

- Floor-standing enclosure
- Doors can be unhinged, thus reducing weight during transport
- Door locking via swivelling lever with double-bit actuation
- Cable entry at top + bottom
- Cable bulkhead for individual entry
- External fixing lugs
- Door opens into the enclosure, 180° opening angle
- Ventilation in the rear wall of the enclosure
- Shelf support rail for the installation of mesh shelves

Included in delivery

- We deliver the enclosure so as to ensure it can be reasonably assembled.
- The PRIOCAB-Li 90 is delivered as described in the brochure. Please refer to the brochure for optional ordering options.
- 230V fan switches off automatically in case of fire.
- Smoke detector with switching base – connection to fan unit
- Fan unit with integrated smoke detector.
- Grating shelves with floor supports

Design variants

- Control unit with fire detection
- Extinguishing generator
- Optionally up to 4 x 5-socket power strip
- Or up to 4 x 10-socket power strip

Warranty, transfer declaration

In order to ensure the optimal function of our products, the assembly instructions must always be observed.

PRIORIT's warranty applies to the delivered products.

Any modifications or changes to the design are permitted only following prior consultation with PRIORIT; otherwise the warranty will be null and void.

The installer/setup technician must provide a guarantee for all assembly work.

Any warranty or liability claims for personal injury or property damage are excluded if they were caused by one or more of the following:

- Improper assembly, commissioning, operation, and maintenance,
- Failure to observe the instructions on transportation, storage, operation, and assembly,
- Improper repairs or
- Catastrophes caused by third parties or force majeure.

Intellectual property rights

In order to protect innovations and the design, utility model specifications have been submitted to the German Patent Office.

1. Installation

Check that the supplied fixing accessories are complete:

1. 2 x suspension lugs
2. 10 x countersunk screws 4.5x20
3. 1 x double bit key
4. 2 x countersunk screws 6.0x120

Opening and closing the door(s)

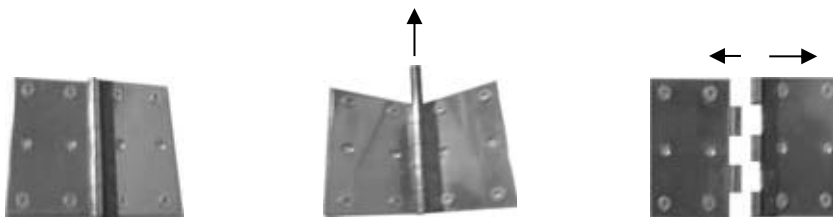
Open:

- Insert the key into the lock.
- Turn the key a quarter turn clockwise and pull out the swivelling lever.
- Turn the swivelling lever 180° anticlockwise upwards.
- Open the door.

Close:

- Close the door, making sure that the swivelling lever is in the open position.
- Press the door slightly and turn the swivelling lever 180° clockwise downwards.
- Allow the swivelling lever to audibly engage in the swivelling lever holder again.
- Remove the key.

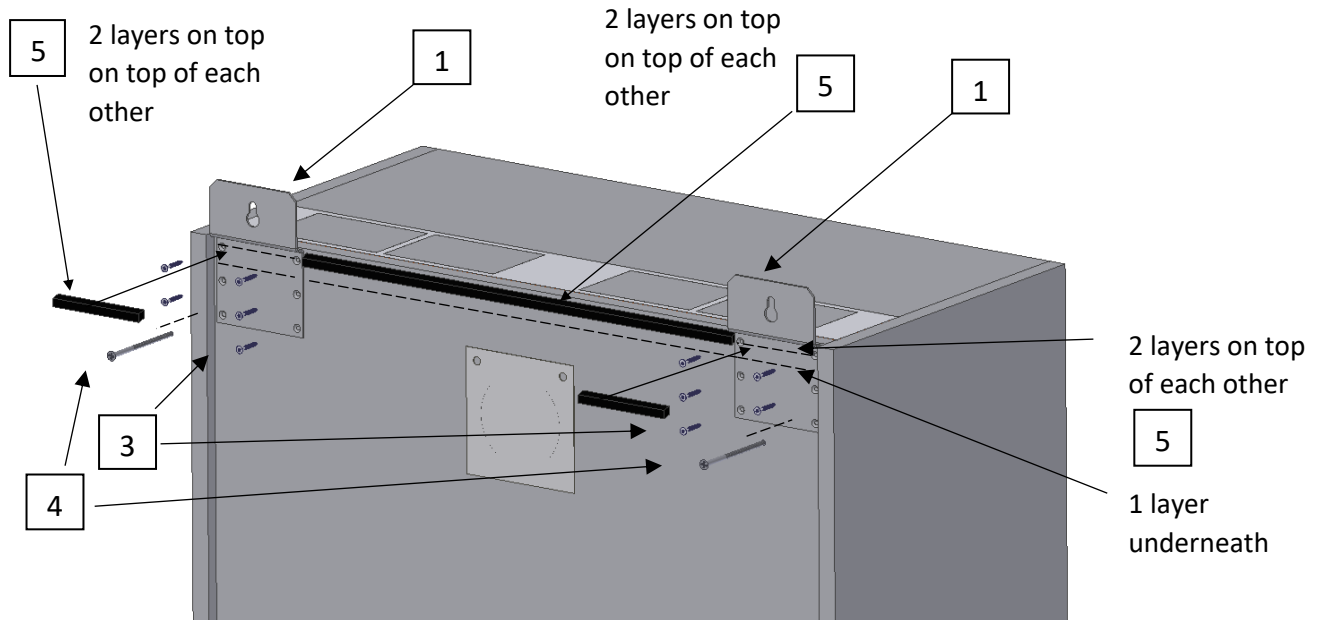
Note on unhooking the doors



To unhook the doors, push the pin out of the hinges!

For safety reasons, the door leaves should always be unhooked by at least 2 people.

Fastening the suspension brackets on the back of the enclosure



Tighten screw 4 with max. 2 Nm or screw 3 with max. 2.5 Nm!

1 2 suspension brackets
2 countersunk screws 6.0x120

4

3 10 countersunk screws 4.5x20
see details above

5 Intumescent (stick on the suspension brackets),

Selecting the dowels

For fastening, dowels with steel screws that are generally approved by the building authorities or technically assessed in Europe and are suitable for the intended use must be used in accordance with the static requirements.

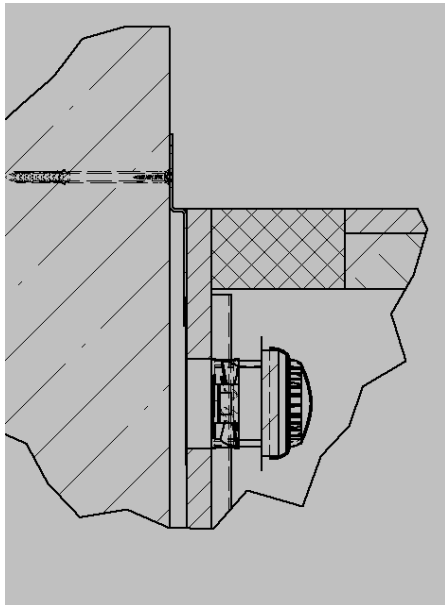
The special provisions of the respective general technical approval or European technical approval or European technical assessment must be observed.

The selection of suitable wall plugs for masonry must be made depending on the type of brick (solid or perforated brick) and the different materials such as brick, sand-lime brick or normal, lightweight and aerated concrete.

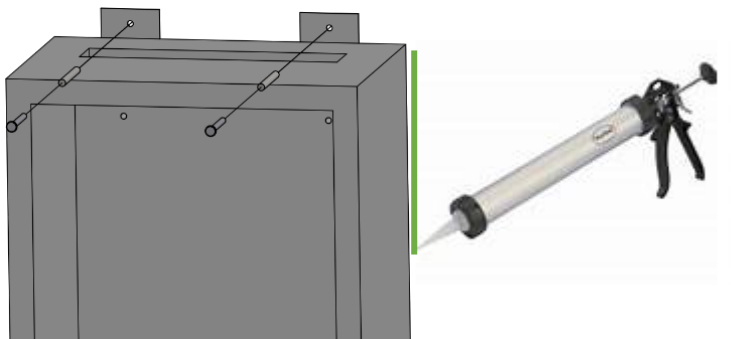
The wall plugs we supply are suitable for DIN masonry and bricks.

In the case of unknown masonry, pull-out tests of the dowels must be carried out!

Wall mounting PRIOCAB

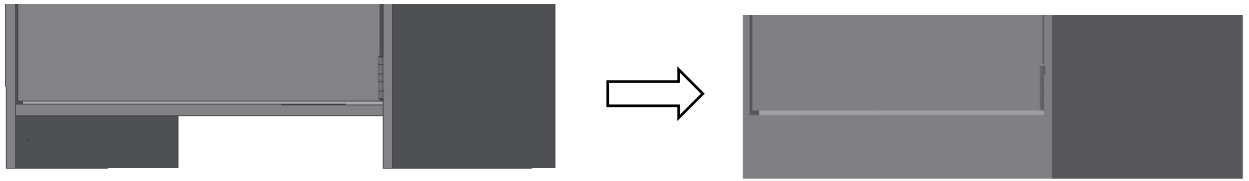


- The wall for mounting must be straight and free of any unevenness!
- Align the fire protection enclosure horizontally on the wall.



- Mark the pilot holes through the fixing lugs at the top.
- Make holes for the dowels.
- Insert plug.
- Fix the enclosure.
- If necessary, re-hinge the doors..
- Seal the connection of the side wall to the on-site wall with silicone.
- Ventilation openings at the top and bottom must be kept clear!

2. Assembly instructions for PRIOCAB plinth panel

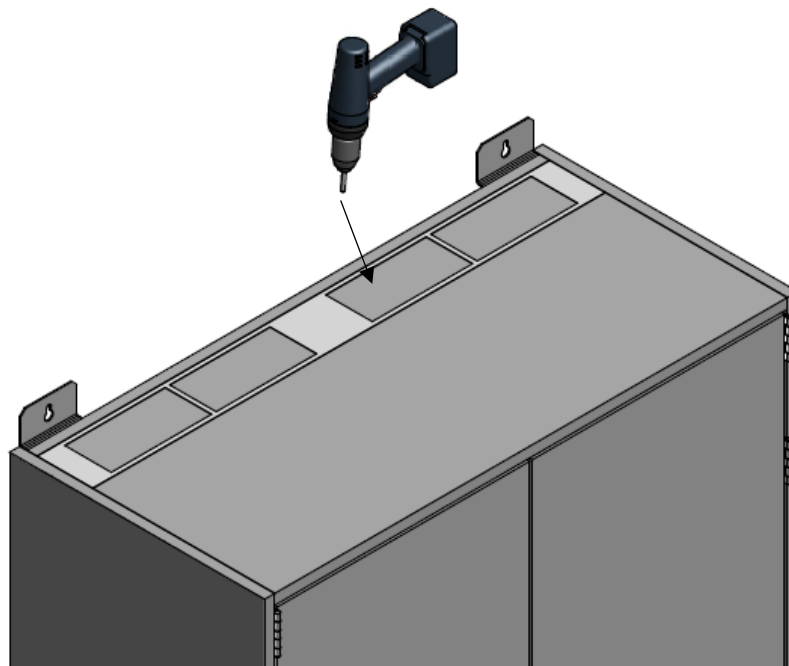
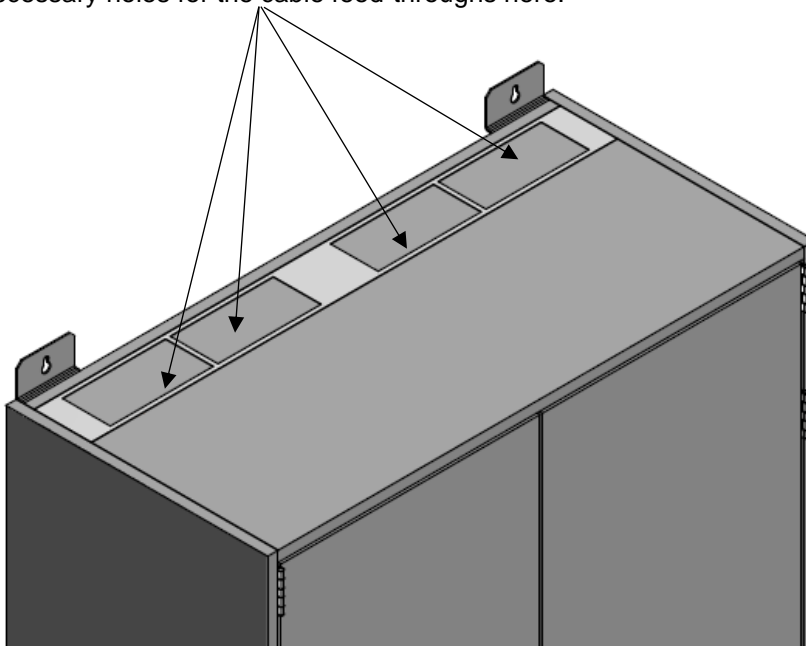


<p>1.</p> <p>Transport and Positioning</p>	
<p>2.</p> <p>Hold the plinth panel and remove it from the rear wall by loosening the countersunk screws A.</p>	
<p>3.</p> <p>Screw the plinth panel onto the double wall from the front using the countersunk screws A from point 2 and the accessory pack.</p>	
<p>1x</p>	

3. Cable entry

- Pre-drill the point where the cable is to be inserted according to the cable diameter. Pay attention to internal insulation, mounting plates and fans!
- Insert existing cables through the cable bulkhead of the enclosure.

Drill the necessary holes for the cable feed-throughs here.



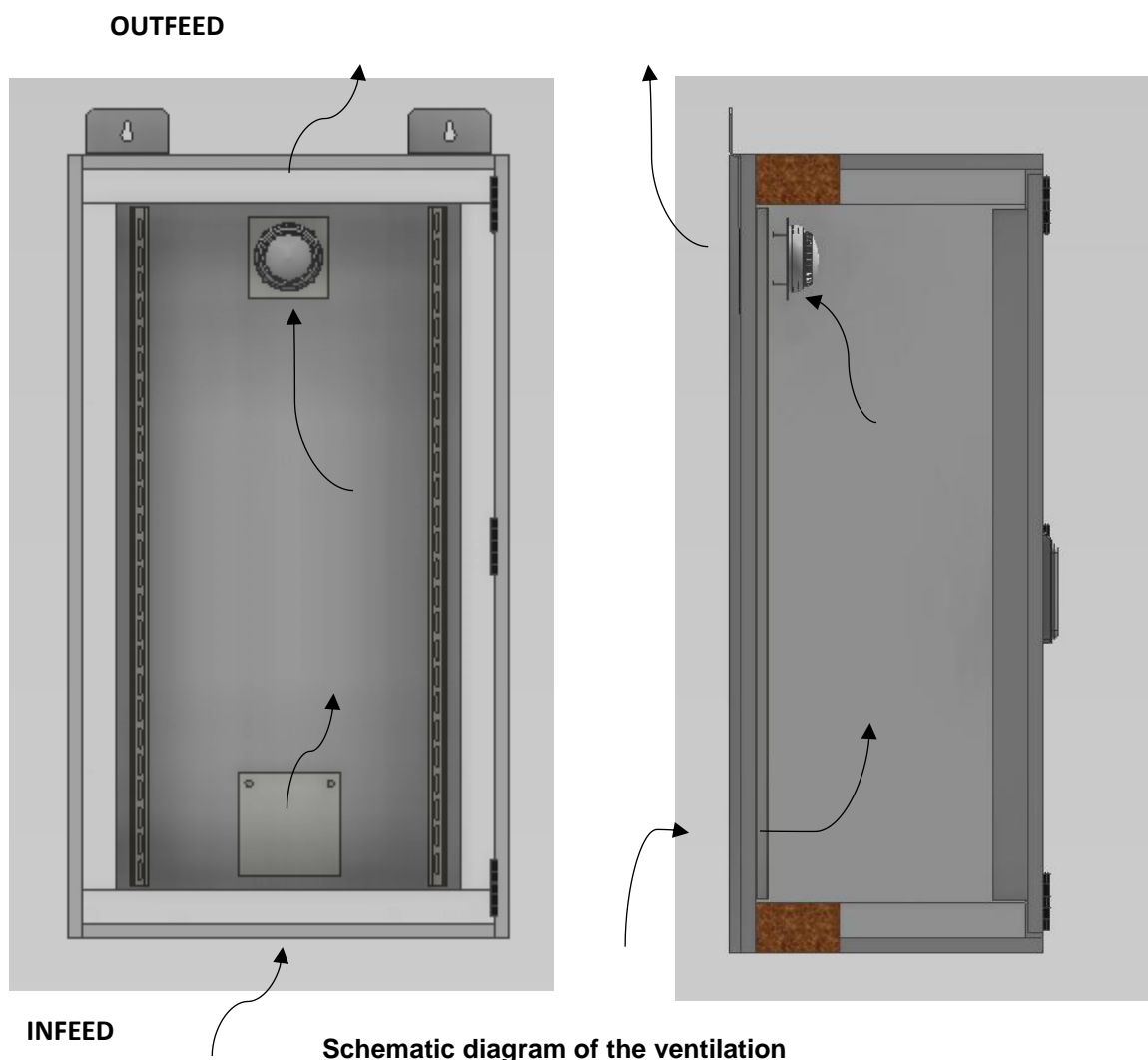
After inserting the cables, please fill the existing gaps with mineral wool.

4. Commissioning

In the version with a control unit, the enclosure can be put into operation by means of a mains plug. The LEDs indicate the operating mode

Green LED	Unit is in operation
Red LED	Fault – permissible temperature exceeded or smoke developing in the enclosure; disconnect unit from power supply; take safety measures

5. Ventilation diagram



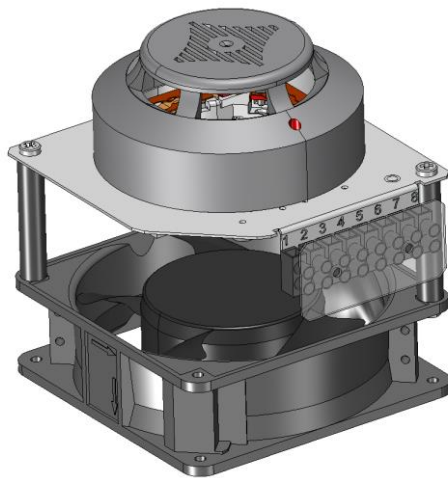
Caution: To ensure sufficient ventilation, no more than 60-70% of the surface of the grating shelves should be occupied. It is forbidden to cover the entire surface of the grating shelves.

6.1 EBEL-VENT-L230R fan

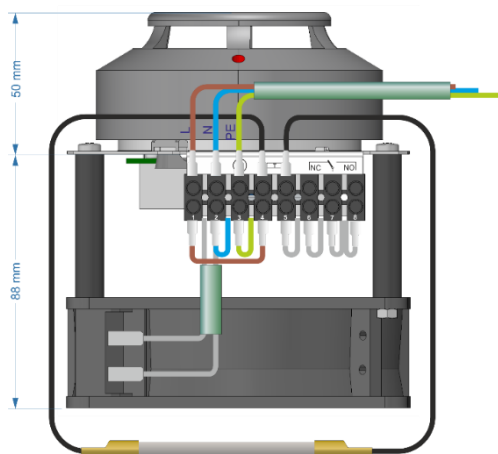
The fan must be connected with 230V/AC. If the optional control unit with fire detection is installed, the fan is already connected.



6.2 Fan unit: technical specifications

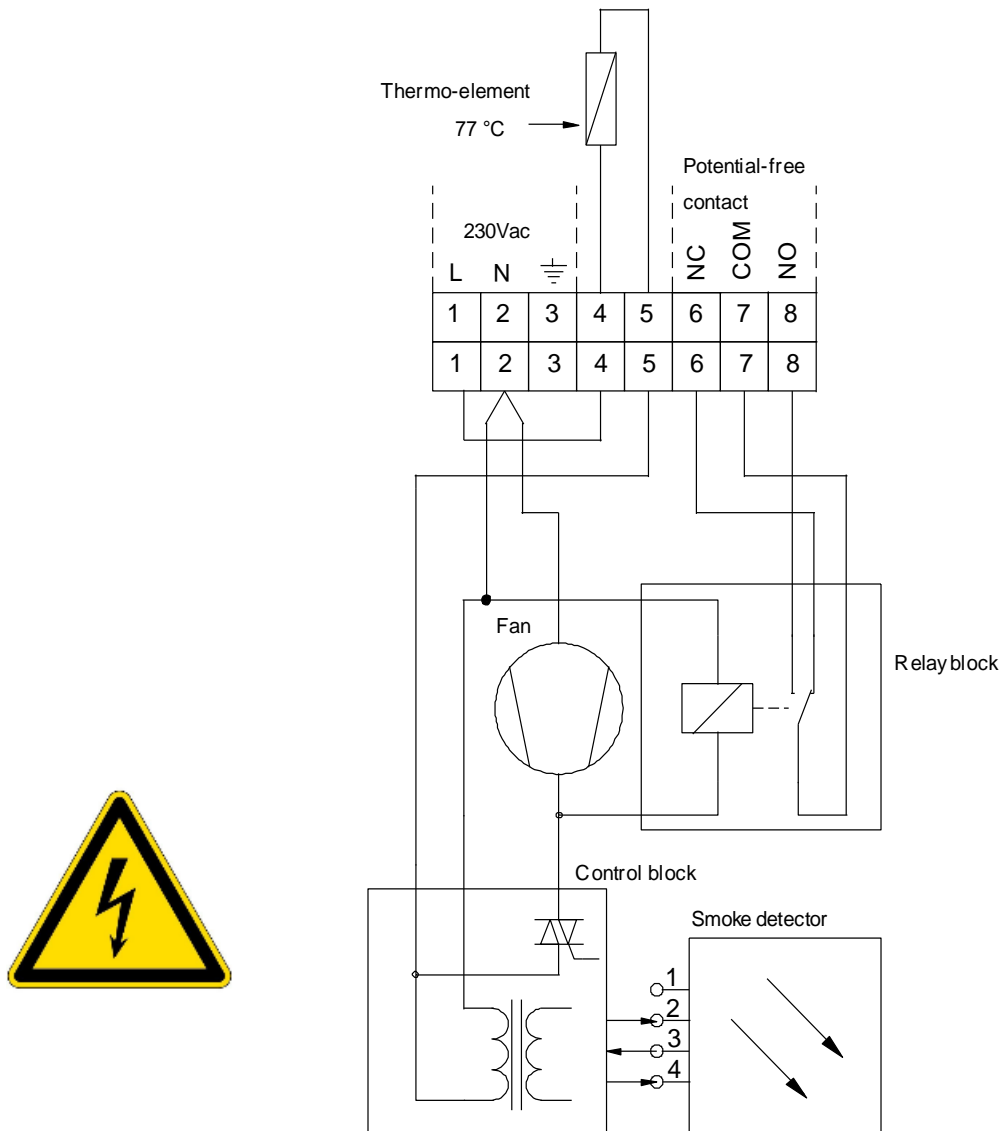


Power supply	
Operating voltage	185...230...245V/AC 50Hz
Power consumption	0.14A
Description of work	22W
Fan	
Speed	2850 Min-1
Air flow	0.0274 m³/s (98.64 m³/h)
Static pressure	8.64mmH₂O
Noise level	45 dB(A)
Operating temperature	-10...70°C
Thermal fuse	
Protection level	77°C
Output relay	
Contact load	Max. 230 Vac/1A 24Vdc/3A



Smoke detector	
Type	SPD-3.1M
Manufacturer	Arton UA
Light signalling	Red LED
Connection method	2-wire line
Power supply	10...30Vdc
Monitoring current	95uA
Electricity for alarm	6...30mA
Average life	10 years
Degree of protection	IP32
Operating temperature	-30...+55 °C
Compliance with standards	EN 54-7

6.3. Wiring diagram



Caution/Warning/Attention

Danger to persons from electric current.

Info:

Warning 230V AC

Dangerous voltage. May cause death, serious physical injury or considerable damage to property. Disconnect all poles of the unit from the power supply before disassembling/assembling or changing the setup. Observe VDE 0100 for 230 V mains connection.



Before putting into operation, connect the battery in the smoke detector and check the function of the smoke detector!

Caution/Warning/Attention

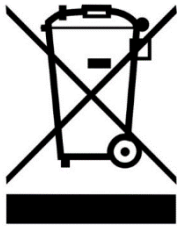
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Info:



Warning 230V AC

Dangerous voltage. May cause death, serious physical injury or considerable damage to property. Disconnect all poles of the unit from the power supply before disassembling/assembling or changing the setup. Observe VDE 0100 for 230 V mains connection.



Environmental protection

Electrical waste products should not be disposed of along with household waste. Please recycle electrical components at a designated place. You can obtain advice on proper recycling from your local authority.

7. Dismantling the fan unit

on the PRIOCAP LI fire protection enclosure

Warning:

The following work may only be carried out by a qualified electrician!



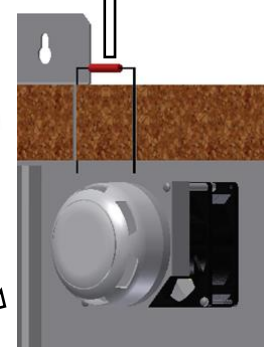
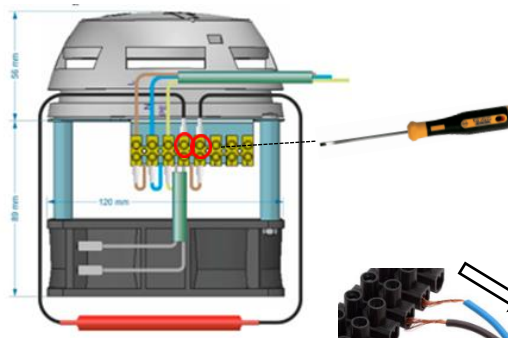
1. Disconnect the fan unit from the supply voltage at all poles and observe VDE 0100 for 230 V mains connection before starting disassembly. Ensure voltage-free state.

Warning 230 V AC

Dangerous voltage. May cause death, serious physical injury or considerable damage to property.

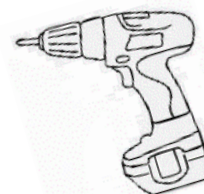
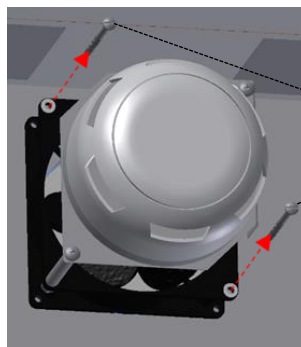


2. Disconnect and remove the temperature sensor.
Loosen the two contacts on the terminal strip with a flat-edged screwdriver. Pull the heat sensor together with the cable out of the enclosure from the outside. Seal the remaining holes with mineral wool.

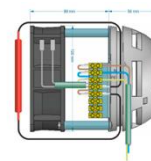
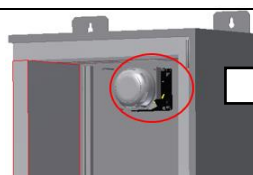


3. Dismantle the ventilation unit:

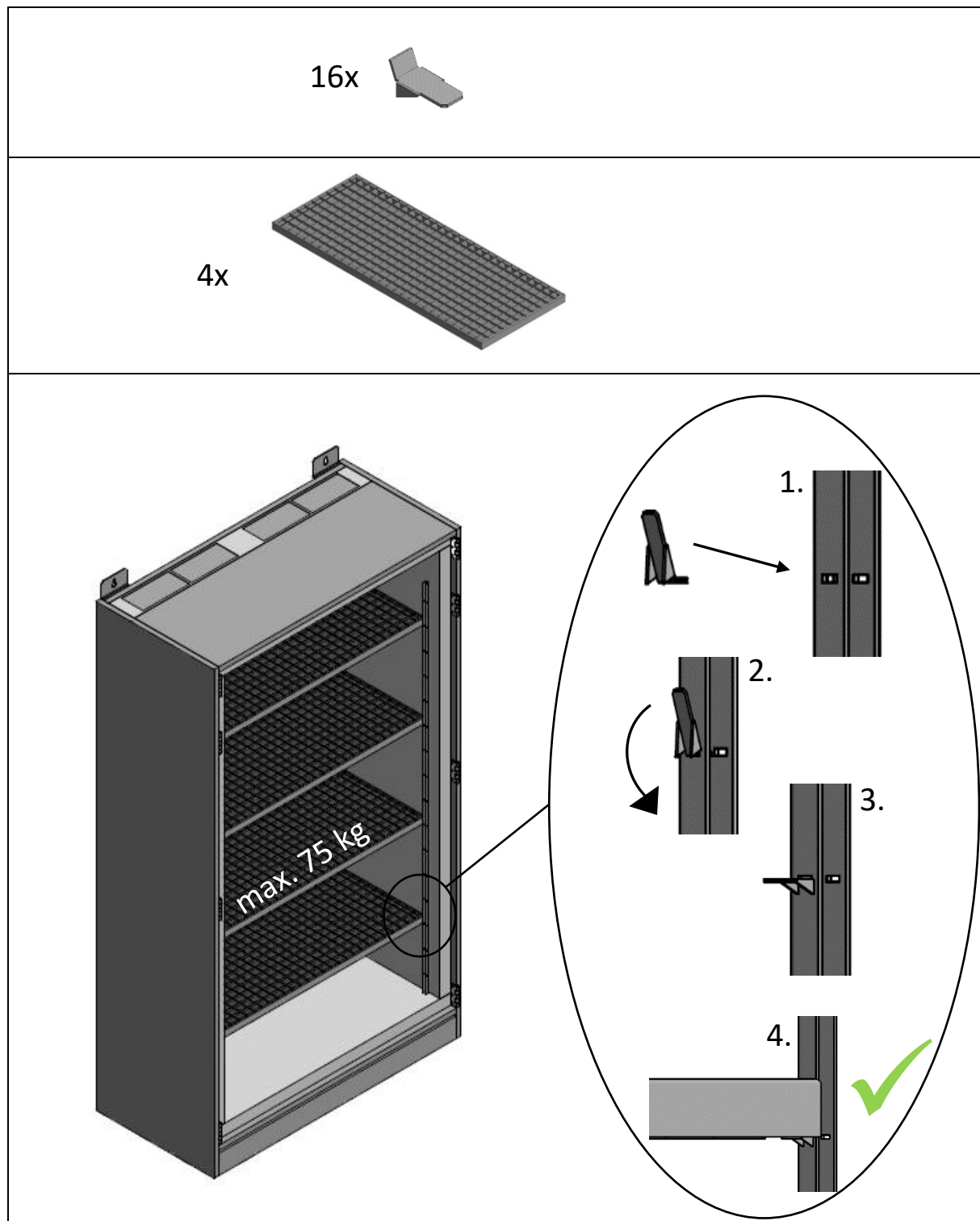
Hold the ventilation unit with one hand and loosen the 2 fastening screws (4.5 x 55 mm) on the fan.



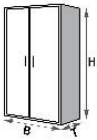
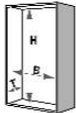
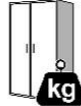
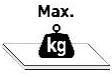
4. Remove the EBEL-VENT-L230R ventilation unit and the supply cable from the enclosure.



8. Support system



9. Enclosure: technical specifications

Article number	 H x B x D			 H x B x D			 approx.	 approx.
ESL92.12444.BAT	2048	1148	549	1804	1004	440	410	75

10. Power strip: technical specifications

	5-socket power strip	10-socket power strip
Max. voltage	250 Volt	250 Volt
Max. power	3600 Watts	3600 Watts
Degree of protection	IP20	IP20
Overvoltage protection	Yes	Yes

11. Extinguisher generator: technical specifications

Extinguishing agent	Aerosol
Release type	Autonomous – without power supply
Triggering	From 180°C or contact with open flame
Life cycle	10 years – maintenance-free

12. Functional test, safety check, care and maintenance

- The fire protection enclosure should be maintained at least once annually and checked for proper function. We recommend that you complete a functional check (visual inspection). The safety check can only be carried out with the necessary level of care and attention by a qualified employee, as sufficient experience and a comprehensive level of knowledge are indispensable for this.
- Commonly available, mild household cleaners can be used for external cleaning of the fire protection enclosure.
- The door locking mechanism should be oiled 2 x per year.
- The fire protection enclosure must be protected against water, moisture penetration, or water spray.
- If safety-relevant damage is detected, the fire protection enclosures must be repaired with original parts before further use.
- The ventilation unit, smoke detector and battery must be checked twice a year.