

Assembly and operating manual

Fire protection enclosure

PRIOELEC EHL/ESL

EP.A.10564EN-20

Last updated

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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, 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, check the function of the smoke detector!



Caution/Warning/Attention

Danger to persons from electric current.

Info:

Warning 230 Vac

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 Vac mains connection.



Only qualified electricians are permitted to work in the cabinet.

IP44

IP protection class 44 is only achieved when the fire protection enclosure is mounted on a suitable wall. The wall and floor must meet a fire resistance of F30 or F90. For free-standing installation of the fire protection enclosures, an additional rear panel must be fitted, which must be ordered as an additional item.

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 requirements of the fire authorities.
- Observe the general building law and the building regulations.
- 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.
- Note the sum of the power losses of the installed devices and wiring compared to the specified power loss of the enclosure. The indicated power losses are idealised values, they are based on average ambient values such as temperature, humidity, mounting surface, uniform arrangement of the switching elements, etc.
- Furthermore, please note that depending on the placement of the installed elements, "heat pockets" can form, therefore ensure that the installations are distributed as evenly as possible; if necessary, this should be checked by means of a control measurement in the interior.
- Unauthorised persons must not be allowed access to the enclosures.
- The doors of the enclosures must be kept closed during operation.
- Improper installation may impair the protective function.
- 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 locking systems must not be changed or replaced.
- Make sure that all caps are always on the screw heads!

The enclosures must not be damaged on the body.

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 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.
- Any other use is not deemed proper use. PRIORIT is not liable for the resulting damage and consequential damage.

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 dry location. → do not store outdoors.
- ESL fire protection enclosure with integrated base that can be moved underneath. The front panel must be unscrewed for use.
- 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.
- Do not lay the enclosure on the door(s)!!
- The enclosure must be closed during transport.
- 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 panel 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.
- Outer edges must be protected with edge protectors (see packaging ex works). The weight must be taken into account -> follow the accident prevention regulations here!
- Enclosure must be secured appropriately, taking into account the weight.



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.

General information

- 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.
- 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. Note any necessary deviations on the declaration, if these are significant in scope.
- Please observe the relevant VDE regulations.
- Observe the requirements of the fire authorities.
- 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 enclosure 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
- Storage and transport conditions -5° C to + 40° C
- Installation site must be frost-free and dry, ambient temperature +5°C to +40°C
- Not suitable for outdoor installation
- Surface and wall must be suitable (load-bearing capacity, classification, fire-resistance class)

Before installing the electrical wall mount enclosures (EHL), conscientiously check the suitability of the wall properties with regard to the heavy weight of the enclosures.

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

Observe the power loss of the installed devices and wiring compared to the specified power loss of the distributor (VDE 0660, part 500/504).

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 against tipping (mounting material is included in the accessory pack)
Check that all fire protection seals are undamaged.
Check that the door is properly locked when closing the enclosure.

Overview of the enclosure specifications

- Floor-standing enclosure (ESL) or surface wall mounting (EHL)
- Door can be unhinged, thus reducing weight during transport
- Door locking via swivelling lever with double-bit actuation
- Cable entry at top + bottom
- Cable bulkhead suitable for cable entry
- External fixing lugs
- Door opens into the enclosure, 180° opening angle
- Ventilation in the rear panel of the enclosure
- C-rails for direct mounting of mounting plates or equipment racks

Included in delivery

- We deliver the enclosure so as to ensure it can be reasonably assembled.
- The fire protection enclosures are delivered as described in the brochure. Please refer to the brochure for optional ordering options.

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 not permitted and will result in the loss of the existing product certificates and warranty.
- Project-specific designs that involve a modification or change to the design require consultation with PRIORIT.

- 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

1.1 Installation accessories

Check that the supplied accessories are complete:

- | | | | |
|--------------|---|--------------|-------------------------------|
| <div>1</div> | 2x suspension lug | <div>2</div> | 1x double bit key |
| <div>3</div> | X countersunk screws 4, 5x20 | <div>4</div> | 2x countersunk screws 6.0x120 |
| <div>5</div> | 6x short and 3x long strips
Fire protection seal | <div>6</div> | 1x insertable air filter |

Opening and closing the door(s)

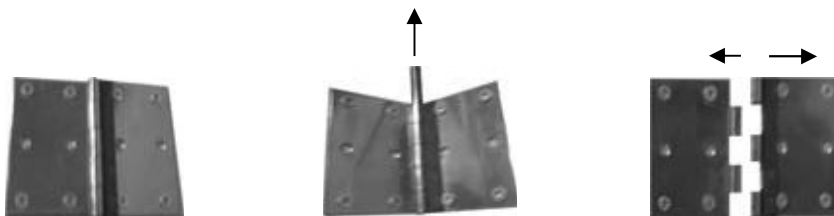
Open:

- 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.

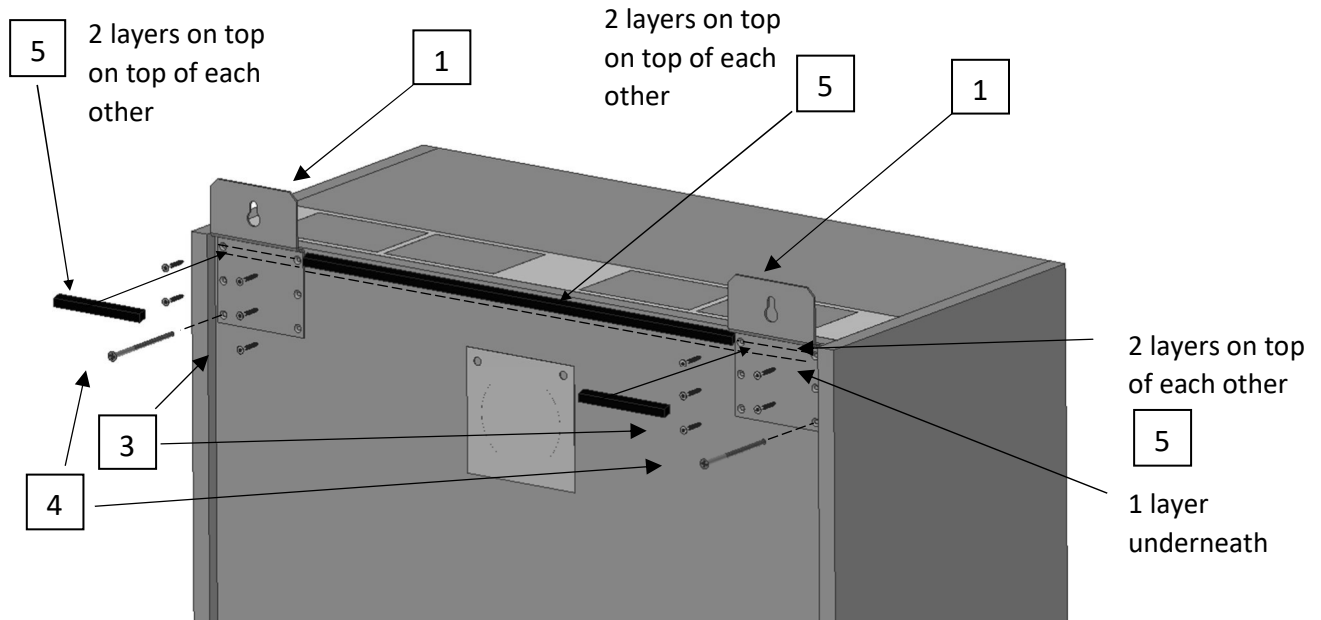
Note on unhooking the doors



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 lugs on the back of the enclosure



Tighten screw 4 with max. 1 Nm or screw 3 with max. 2.5 Nm!

- | | | | |
|---|-------------------------------------|---|---|
| 1 | 2 suspension lugs | 4 | 2 countersunk screws 6.0x120 |
| 3 | 10 countersunk screws details above | 5 | Intumescent (stick on the suspension lugs), see |

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.

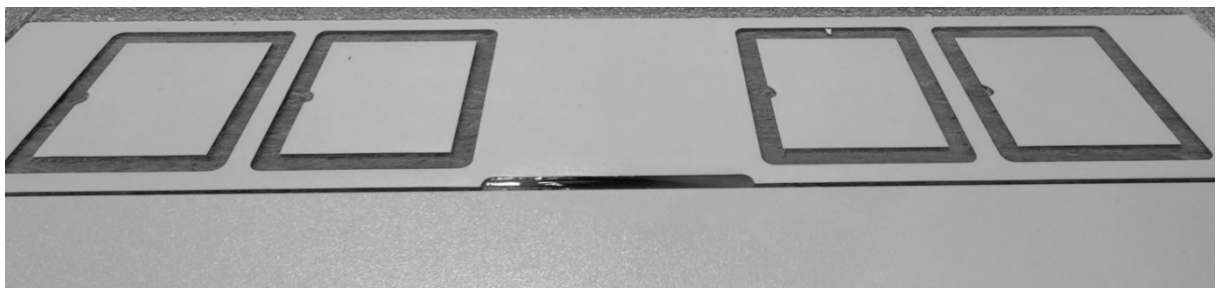
In the case of unknown masonry, pull-out tests of the dowels must be carried out!

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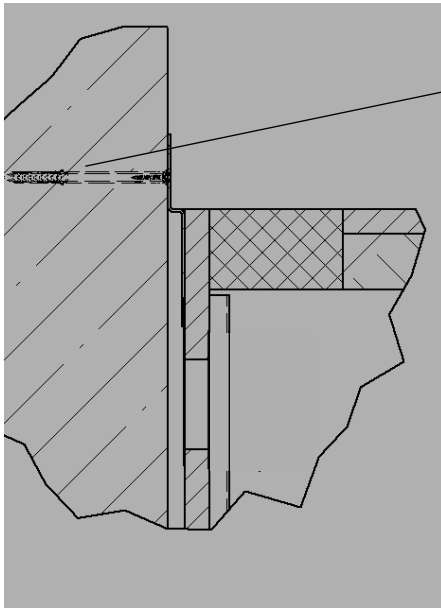


The sealing straps on the back of the enclosure must not be removed!



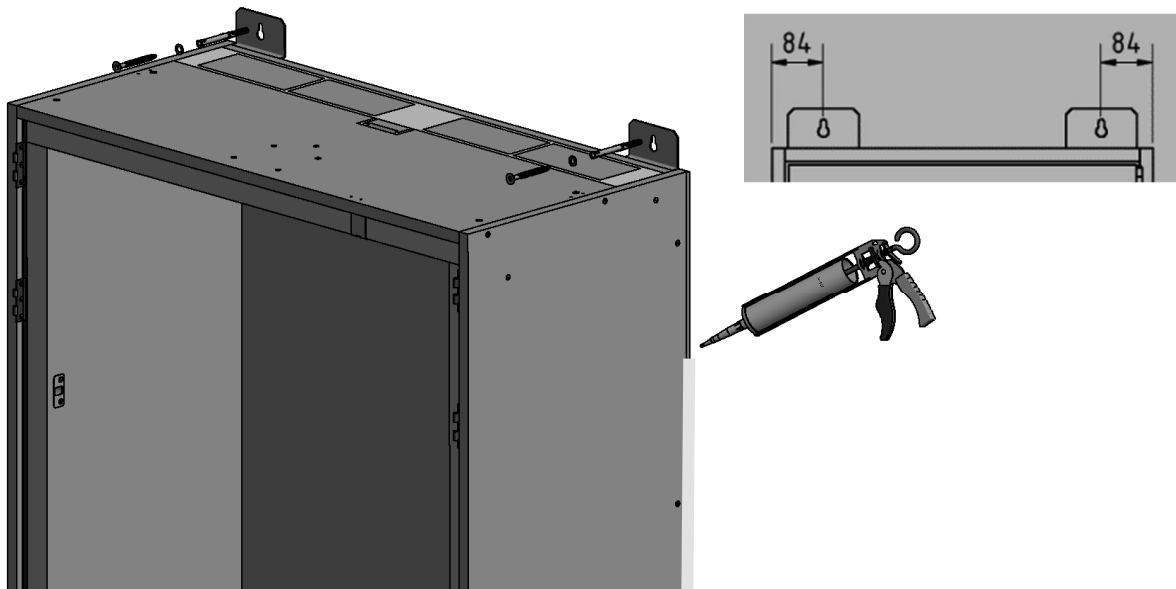
Checking the silicone seam for cracking (see Maintenance)

1.2 Wall fastening EHL/ESL30



Hanging brackets with screwing or dowel suitable for the wall type.

- 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 via the position of the fixing lugs.
- 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!

1.3 Wall fastening E90 including cable cooling duct

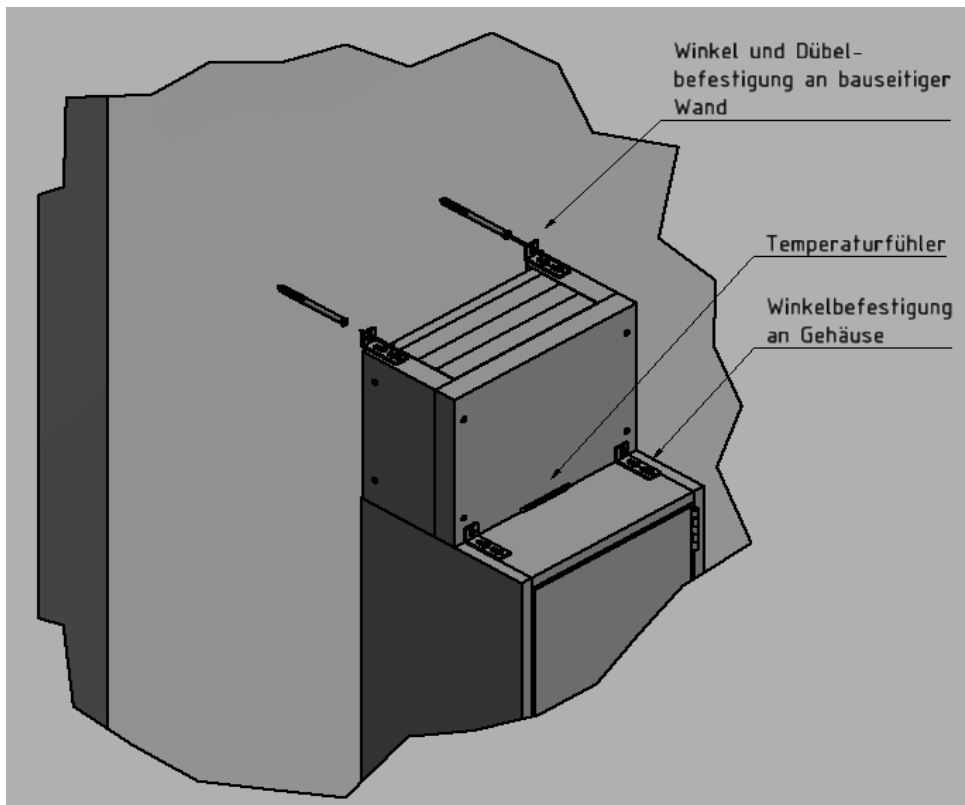
The wall fastening is the same as for the E30 cabinet, see point 1.2.

For EHL90./ESL90, a cable cooling duct must be fitted over all inserted cables. The cable cooling duct must be filled with mineral wool, melting point $>1000^{\circ}\text{C}$ (included in delivery).

Fastening the cable cooling duct

Screw the cable cooling duct to the enclosure and to the wall with 2 angle brackets each. Use 2 dowels each for fastening to the wall (use suitable fastening material) Use panhead screws 4.5x35 incl. U-washers for fastening to the enclosure and to the cable cooling duct.

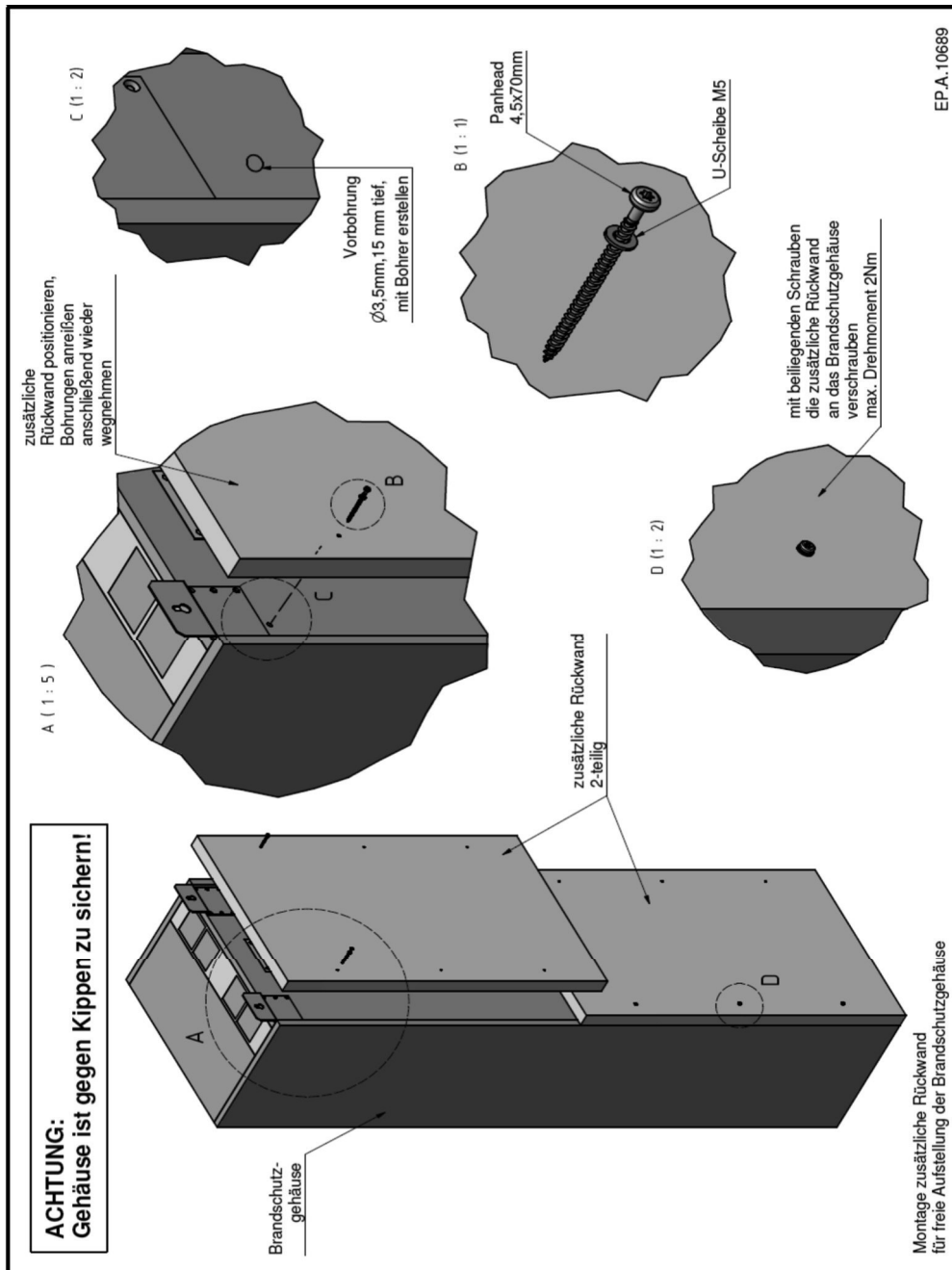
- **ATTENTION:** Temperature sensor must not be inside the cable cooling duct!



IP protection class 44 is only achieved when the fire protection enclosure is mounted on a suitable wall. The wall and floor must meet a fire resistance of F30 or F90.

For free-standing installation of the fire protection enclosures, an additional rear panel must be fitted, which is available in the accessories.

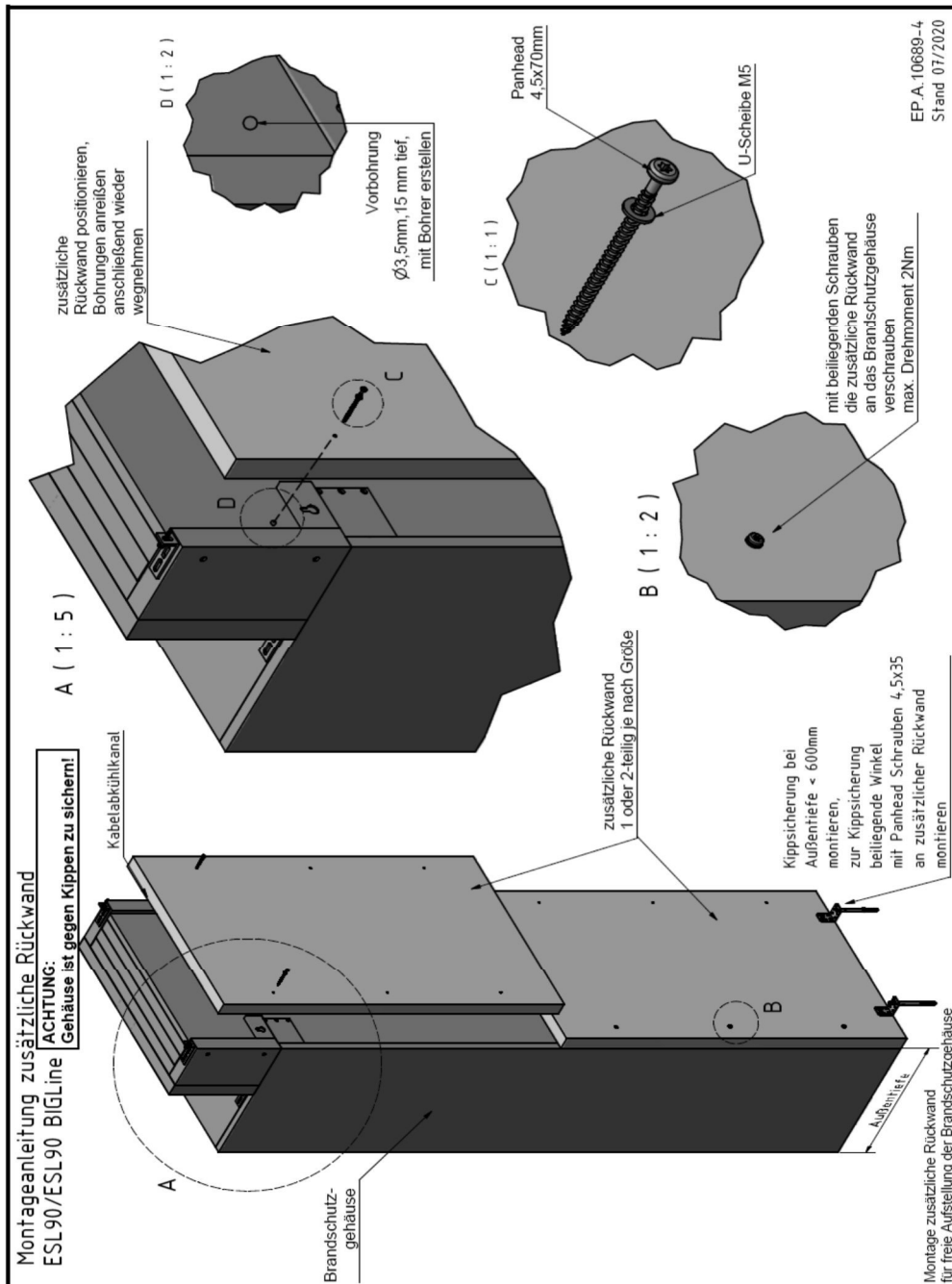
1.4 Free-standing mounting E30



IP protection class 44 is only achieved when the fire protection enclosure is mounted on a suitable wall. The wall and floor must meet a fire resistance of F30 or F90.

For free-standing installation of the fire protection enclosures, an additional rear panel must be fitted, which is available in the accessories.

1.5 Free-standing mounting E90

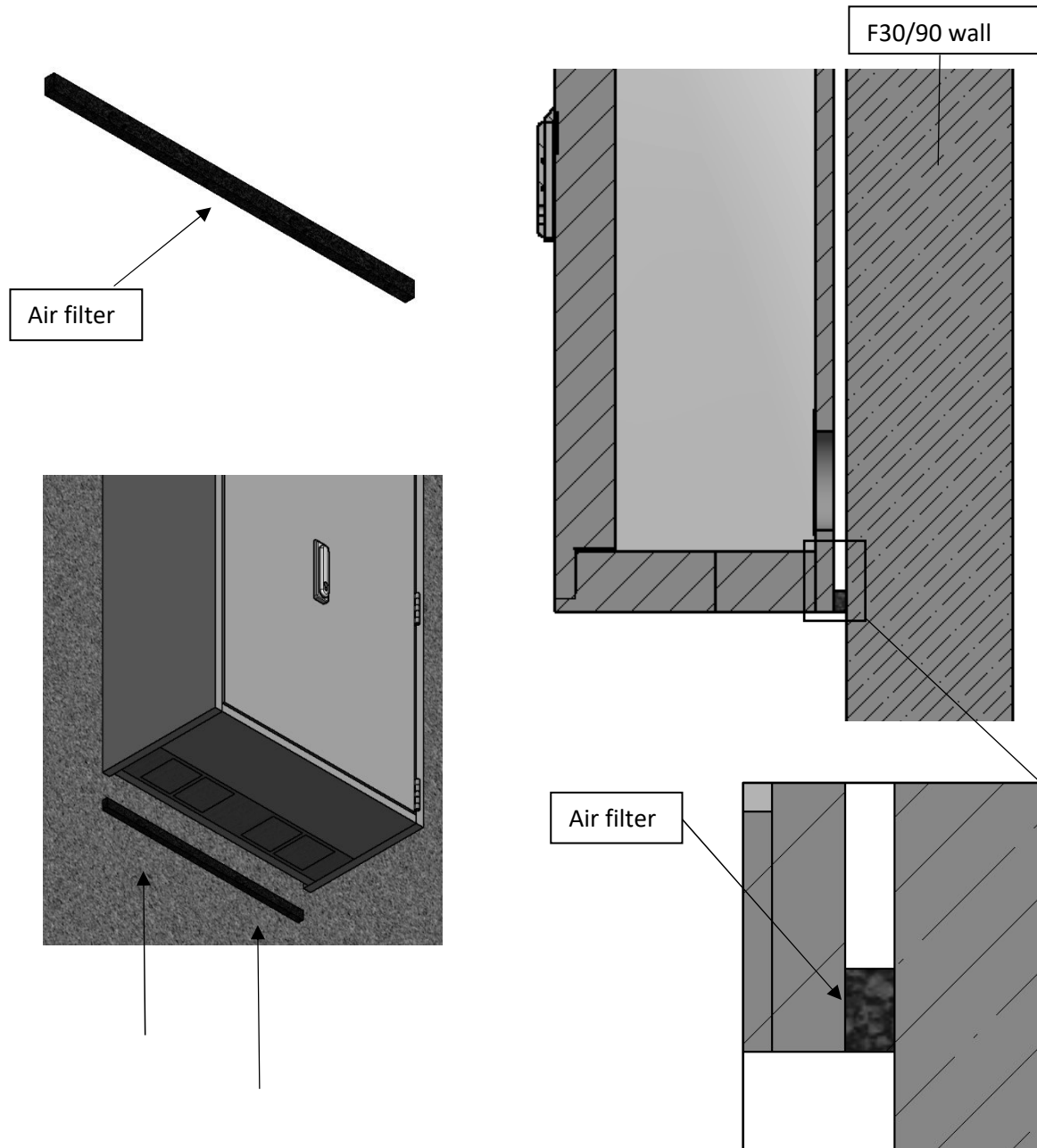


IP protection class 44 is only achieved when the fire protection enclosure is mounted on a suitable wall. The wall and floor must meet a fire resistance of F30 or F90.

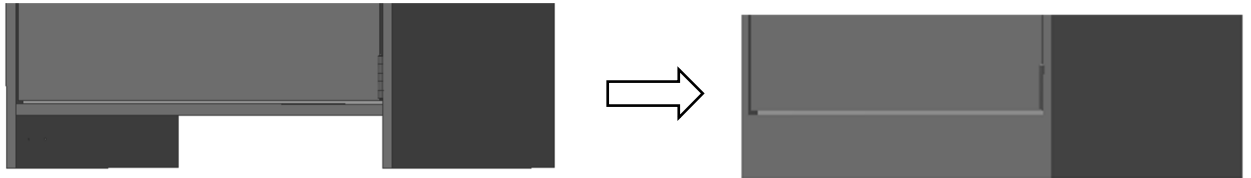
For free-standing installation of the fire protection enclosures, an additional rear panel must be fitted, which is available in the accessories.

1.6 Inserting air filters

After attaching the enclosure to the wall, push the air filter (see fig.) flush into the lower ventilation gap.


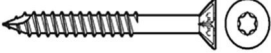

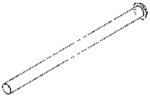

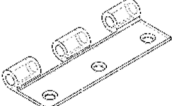



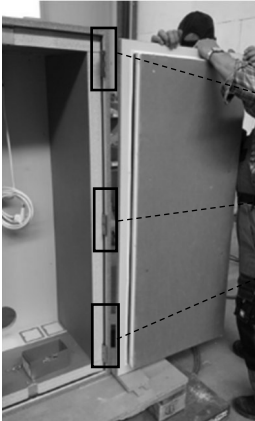
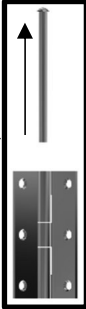
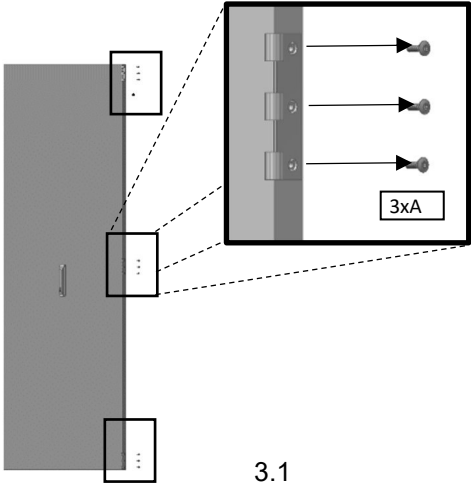



1.7 Assembly instructions for the plinth panel of the ESL enclosure



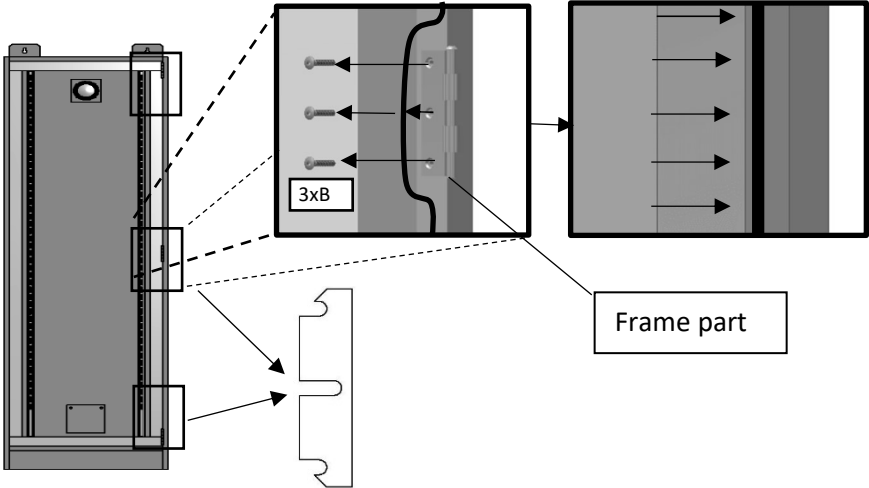
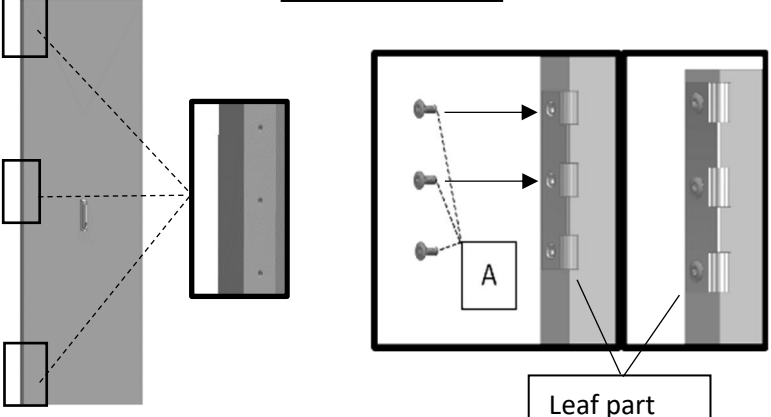
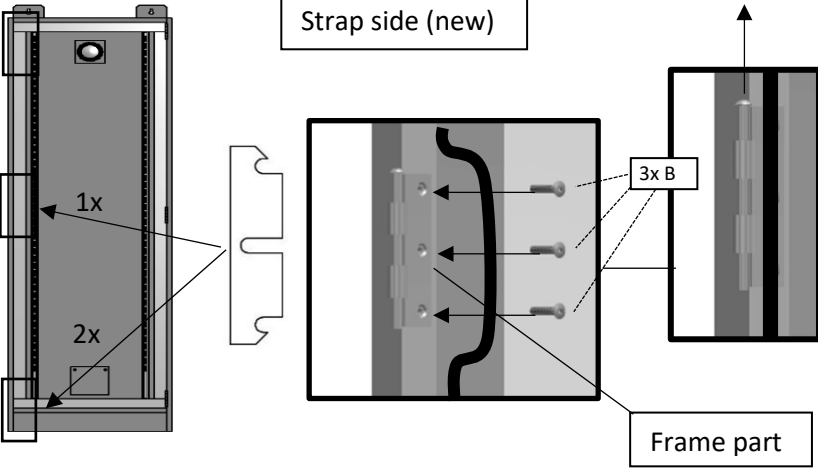
<p>1.</p> <p>Transport and Positioning</p>	
<p>2.</p> <p>Hold the plinth panel and remove it from the rear panel by loosening the countersunk screws A.</p>	
<p>3.</p> <p>Screw the plinth panel onto the double wall from the front using the countersunk screws A from point 2 and the accessory pack.</p>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

1.8 Assembly instructions: changing the stop side (EHL/ESL)

 <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px;">A</div>  <p>9 pcs 4.5 x 35mm</p> </div> <div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px;">B</div>  <p>9 pcs 4.5x20mm</p> </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 10px;"> <div style="text-align: center;">  <p>3x bolts</p> </div> <div style="text-align: center;">  <p>3x frame part</p> </div> <div style="text-align: center;">  <p>3x leaf part</p> </div> <div style="text-align: center;">  <p>3 x distance</p> </div> </div>	
<p>1.</p> <p>Find a suitable storage location and prepare it with chocks.</p>	<p>1.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <p>e.g.</p>
<p>2.</p> <p>Dismantling the door leaf:</p> <p>Hold the door leaf firmly.</p> <p>Pull pins out of straps.</p> <p>Lift out the door leaf and position it horizontally with the outer surface on the shelf.</p>	<p>2.1</p> <div style="display: flex; align-items: center;">   </div>
<p>3.</p> <p>Dismantle the hinges on the door leaf.</p> <p>Remove and store screws and hinges</p>	<p>3.1</p> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;">Door leaf side (old)</div>   </div> <p style="text-align: right;">3.1</p>

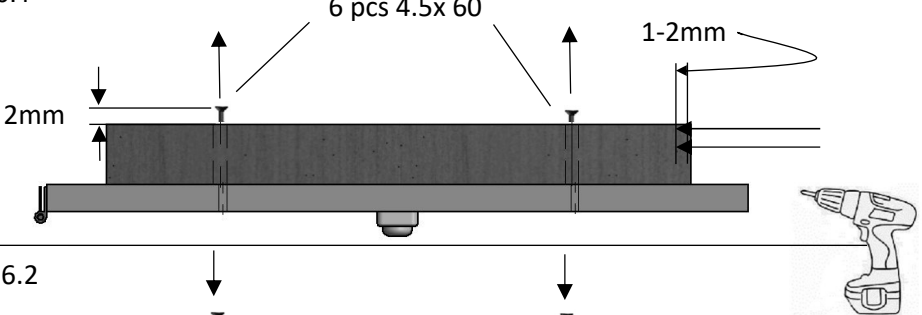
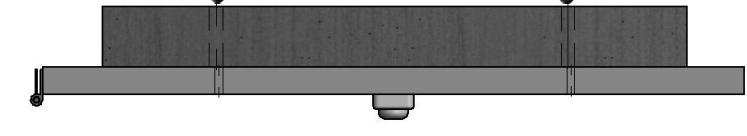
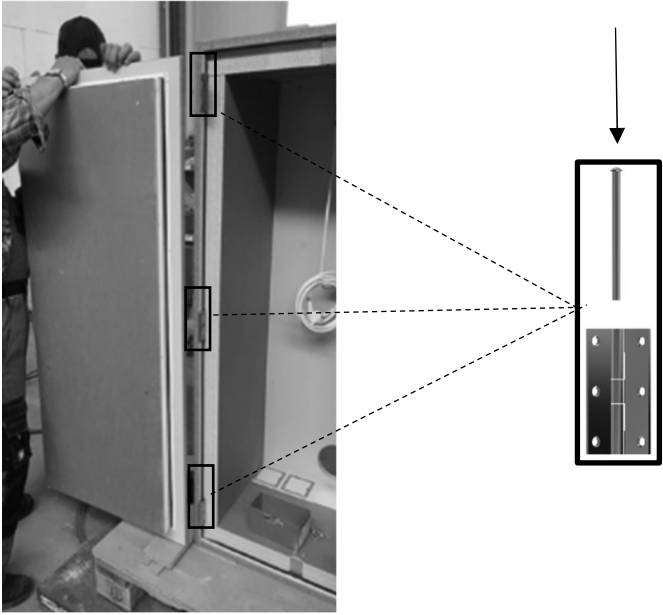
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<p>Loosen the sealing strip in the area of the straps.</p> <p>Dismantle the hinges on the leaf and body.</p> <p>Remove and store screws, distance brackets and hinges.</p> <p>Press the sealing strip back on evenly.</p>	<p>3.2</p> <p>Strap side (old)</p>  <p>3xB</p> <p>Frame part</p> <p>3.2</p>
<p>4.</p> <p>Screw the leaf part with the corresponding screws on the desired side (opposite side) into the pilot holes provided in the door.</p>	<p>4.</p> <p>Door side</p>  <p>A</p> <p>Leaf part</p>
<p>5.</p> <p>Loosen the sealing strap.</p> <p>Screw the frame part with spacer bracket onto the desired strap side.</p> <p>Press the sealing strip onto the now mounted frame part.</p>	<p>5.</p> <p>Strap side (new)</p>  <p>1x</p> <p>2x</p> <p>3xB</p> <p>Frame part</p>

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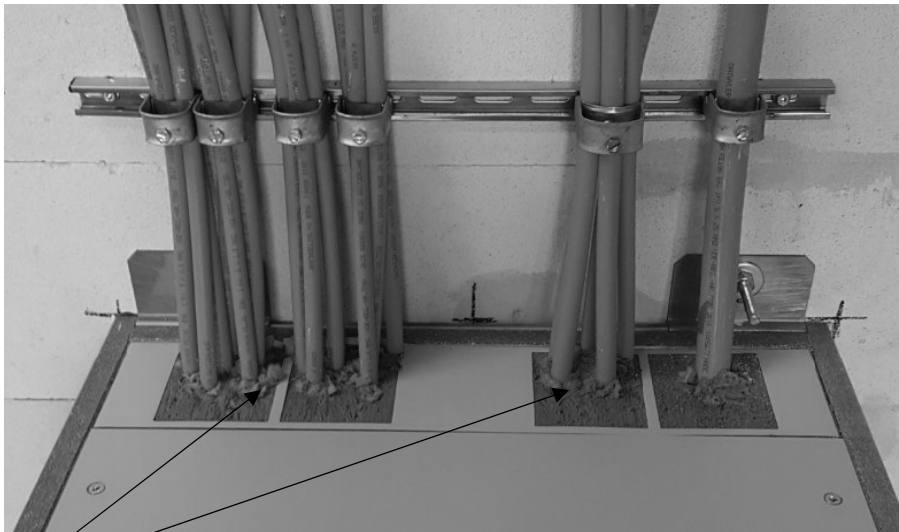
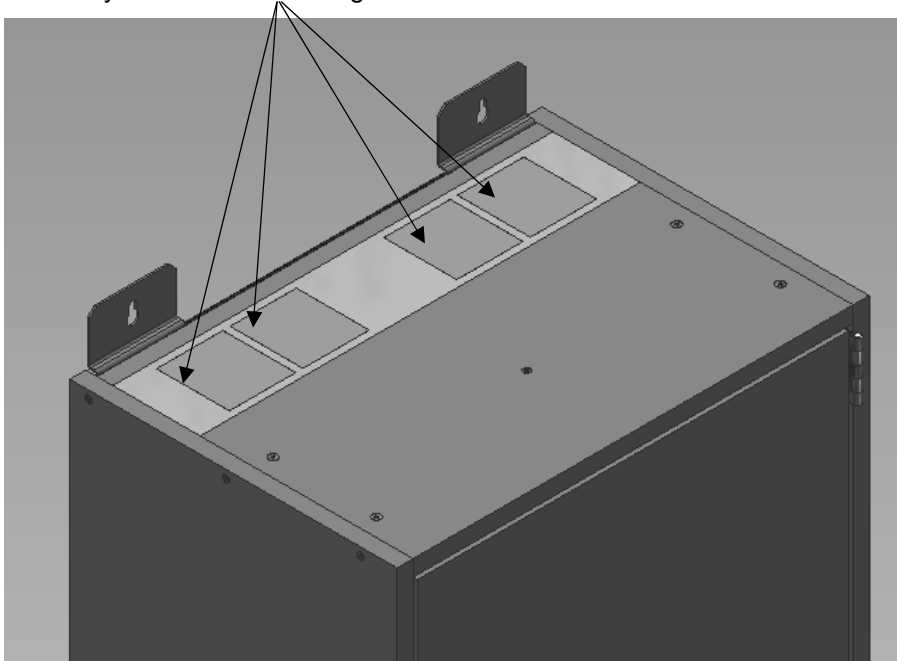
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<p>6.</p> <p>Loosen the inner layer and press it evenly 2mm in the direction of the straps.</p> <p>Hold the inner layer pressed down and at the same time countersink the corresponding screws with a cordless screwdriver.</p>	<p>6.1</p>  <p>6.2</p>  <div data-bbox="668 801 1134 1113" style="border: 1px solid black; padding: 10px;"> <p>Warning:</p> <p>When installing, take care to avoid overtightening the screws!</p> <p>Maximum tightening torque of the screws 1 Nm!!!</p> </div>
<p>7.</p> <p>Bring the door close, connect the leaf and frame parts with a bolt and push them all the way through.</p>	<p>7.1</p> 

1.9 Cable entry

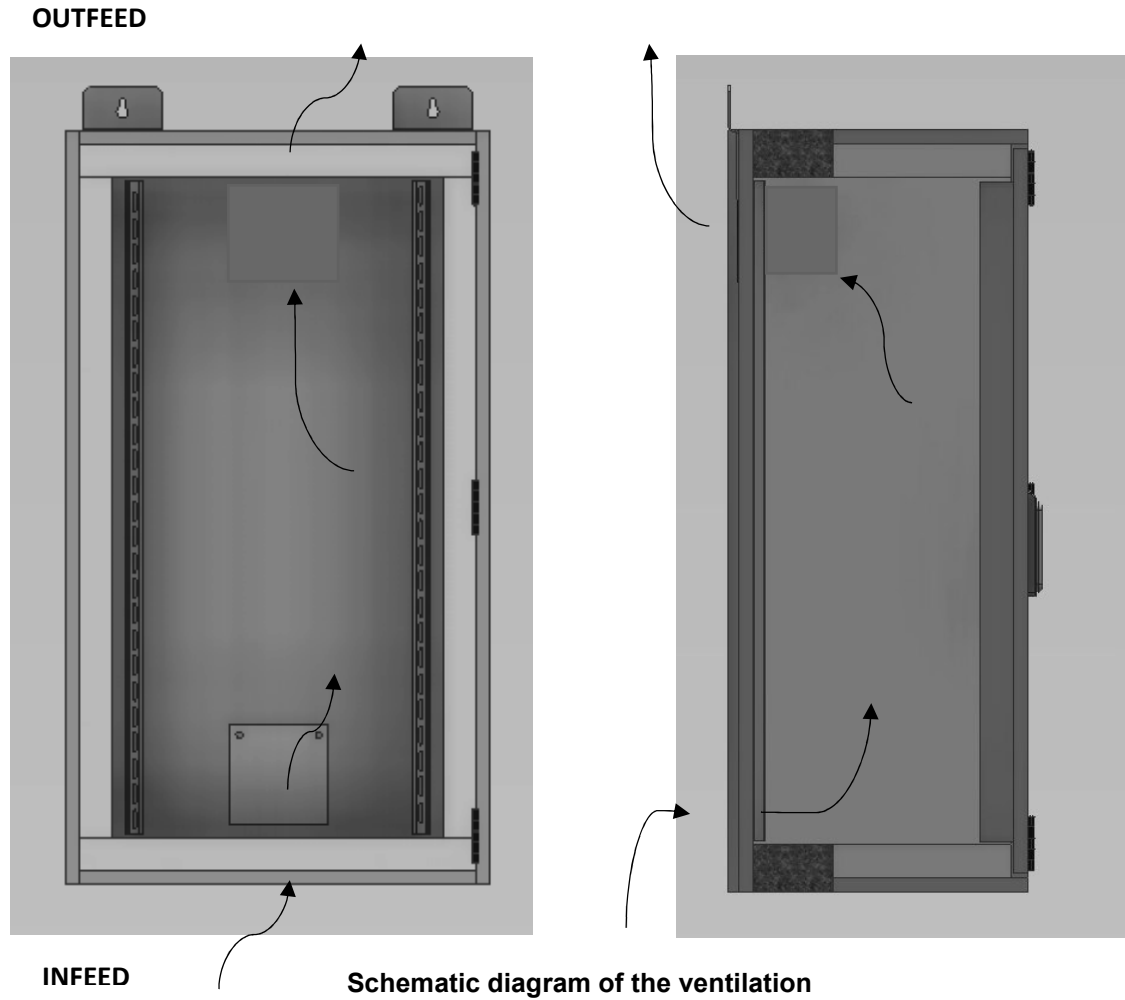
- The point where the cable is to be inserted according to the cable diameter must be pre-drilled.
- Insert existing cables through the cable bulkhead of the enclosure.

Drill the necessary holes for the cable glands here.



After cable installation, the existing gaps must be stuffed with mineral wool to achieve protection class IP 44.

2. Ventilation scheme



Empty enclosure, with integrated thermal fuse.

A ventilator unit, for example, can be connected to the thermal fuse.

3. Fastening system

General

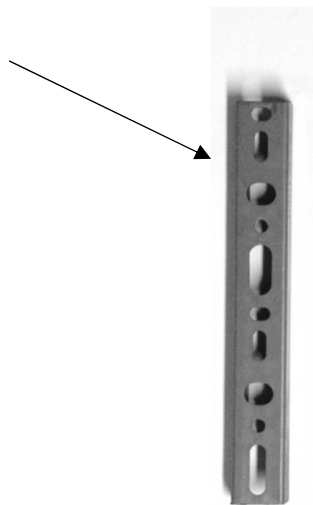
Fastening rail for electrical wall mount enclosure EHL and electrical floor-standing enclosure ESL.

Included in delivery

Number varies by type

- 2 pcs C-mounting rail + screwing

C-rail
(vertical)



4. Functional test, safety check, care and maintenance

- Service the fire protection enclosures at least twice a year and check for proper functioning. We recommend that you complete a functional check (visual inspection) every month. 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.
- Checking the silicone seam for cracking (2x a year).
- 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.
- Check the filter mat at regular intervals (depending on environmental influences) for possible contamination and clean or replace if necessary.