



Product

Sharebox Auto S18

Document

S18 Installation, Service Maintenance Manual

Doc no: TE-S18-01		Written by
Date: 07.06.21		Michel Saxlund
Revision no	S18 Installation, Service Maintenance Manual	Approved By
05		Leif Arne Dalane

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1 Introduction

The Sharebox Auto S18 is a free-standing safe according to EN1143-1:2019.

It is designed for key-exchange, more specific to hold and exchange car-keys. The user can deliver a car-key and/or pick up a car-key, typically outside a car dealership, workshop, or car-rental-facility.

The cabinet is connected to a back-end Server, and the user communicates with this server to get access to the key.



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2 Technical Description

2.1 Main modules

The “secure part” is the Frame and the Cabinet. Opening this “back door” gives access to the internal mechanism for service or key-access in case of malfunction or power outage.

A rotating drum moves the key-lockers to the desired position for access. The same drum has a “blank-position” without a key-locker. When the cabinet closes, the drum returns to its “blank-position”.

2.2 HSE

Be aware of the following potential hazard point when installing the Sharebox Auto S18.



When lifting and placing the cabinet there is a risk of getting crushed unless extra care is taken in consideration.



When lifting and placing the cabinet there is a risk that the cabinet can tumble over.



There is a risk of crushing fingers when opening door.



There is risk of high voltage if the current is not locked out.

NOTE: READ THROUGH THE WHOLE MANUAL PRIOR TO INSTALLATION

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2.3 Size and weight

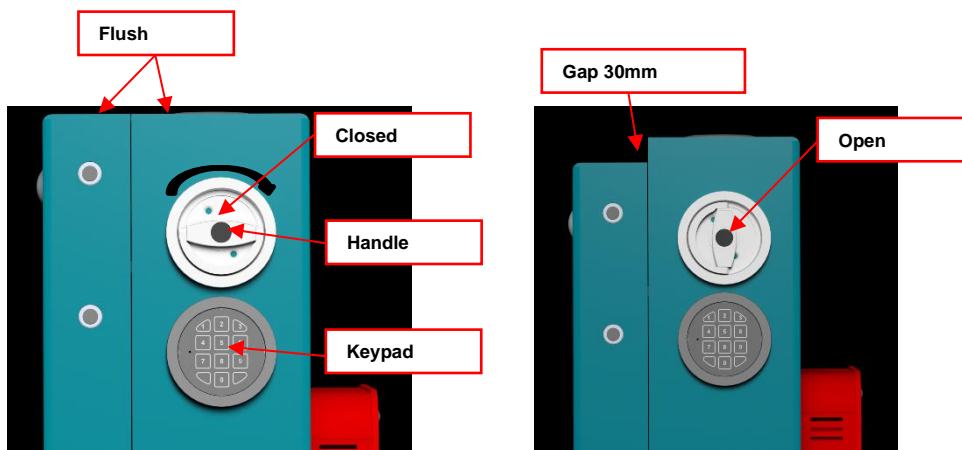
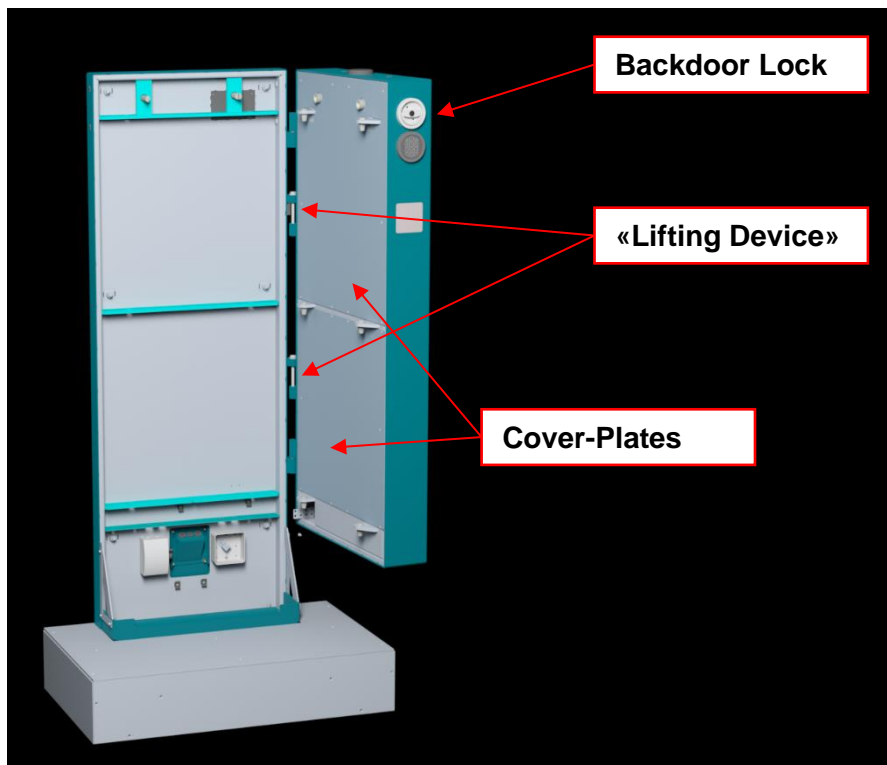
	Outside total	Outside secure cabinet
Height	2020 mm	1500 mm
Width	996 mm	650 mm
Depth	612 mm	225 mm
All tolerances +/- 5mm and +/- 3kg		
Weight w/ concrete base	543 kg	
Weight wo/ concrete base	320 kg	



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2.4 Backdoor Lock

Backdoor lock and boltwork is placed in the upper part of the cabinet, with entry-unit (keypad) and handle-unit thru the wall. Pin-code to backdoor lock is provided by contacting Sharebox Support. Opening the lock enables turning of the handle (clockwise to open), which again draws movable lockbolts out of the back frame. With these bolts withdrawn, it is possible to lift the cabinet upwards with a lifting-device placed along the hinges. Lifting the cabinet will draw lockbolts out of the backframe. The backdoor is now unbolting, and the cabinet can be rotated open.



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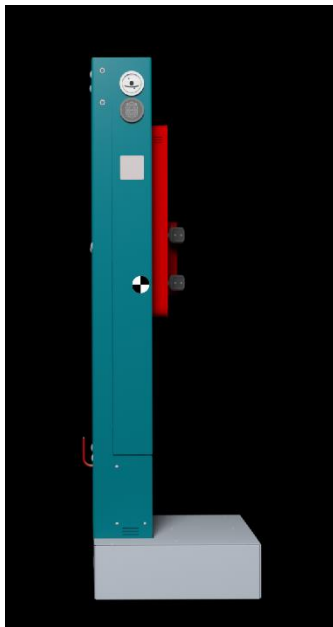
3 Instructions for installation

3.1 Overview and positioning of Sharebox Auto S18 cabinet

There are two ways of installing the Sharebox Auto S18.

1. **With** the concrete base the cabinet is shipped on (recommended)
2. **Without** using the concrete base, that the cabinet is shipped on

3.1.1 Center of Gravity (CoG)



Note that the Sharebox Auto S18 is a heavy object (543 kg) with a CoG marked on illustration below. The high CoG can make the object unstable during transport and extra caution is needed.

3.1.2 Concrete slab for Ground Fixing

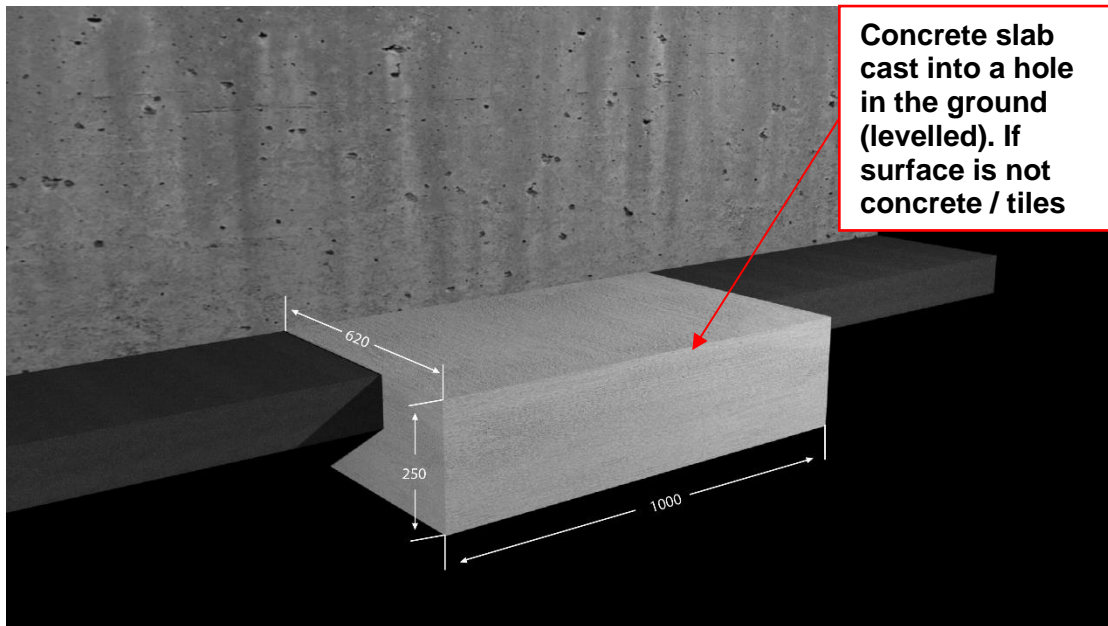
Prior to installation of the Sharebox Auto S18 the area of installation needs to be prepared.

If the ground is something else than concrete (e.g., asphalt), a concrete-slab must be cast **into** the ground. This will also be a nice way to level off the footprint of the cabinet.

Use extra reinforcement of the concrete depending on the ground conditions and/or fibre reinforced concrete.

The concrete need to be minimum 250mm thick to allow proper fixing of bolts.

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Size of Concrete Slab (plate) need to be at least **Width=1.0m x Length=0.5m**.

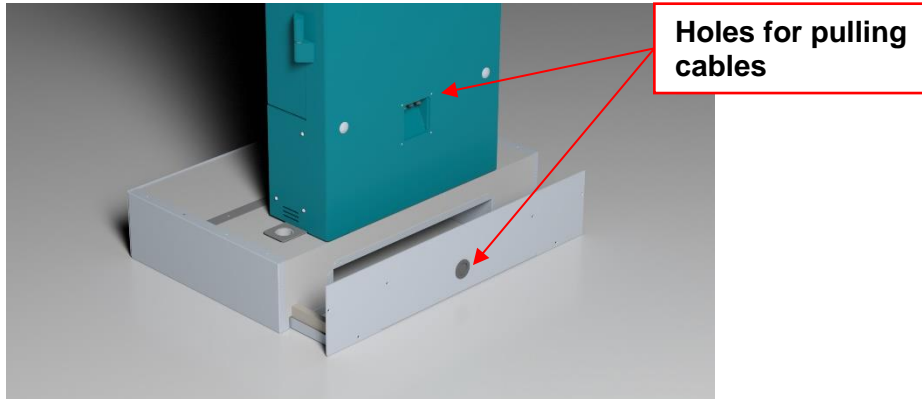
The mounting surface need to be levelled and uncracked concrete of minimum thickness 250mm, and minimum quality C20/25.

3.2 Installation with concrete base



The Sharebox Auto S18 is delivered on a concrete base that is easy to install. The cabinet can be lifted or positioned directly on to the concrete slab.

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The hole (for pulling cabling) that indicated what side is towards back/wall. After positioning the Sharebox Auto S18 into position over the concrete slab the back plate needs to be fixed to the concrete base frame with that indicated what side is towards back/wall. After positioning the Sharebox Auto S18 into position over the concrete slab the back plate needs to be fixed to the concrete base frame with 6 screws.

3.2.1 Positioning the cabinet with concrete base

The Sharebox Auto S18 comes with a concrete base with a desinged to be lifted with a forklift or jackrolley. In order to lift the cabinet into position, simply remove the front plate and insert the pallet fork under the cabinet.

Position the cabinet with concrete base onto the concrete slab that is made and fix it with expanding anchor bolts.

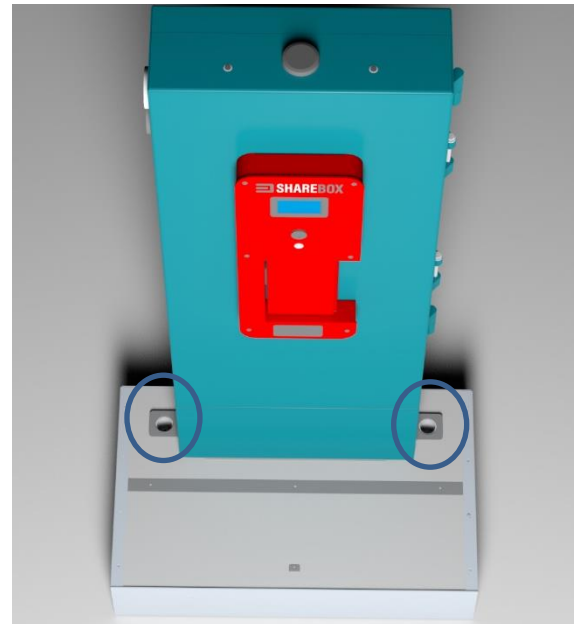
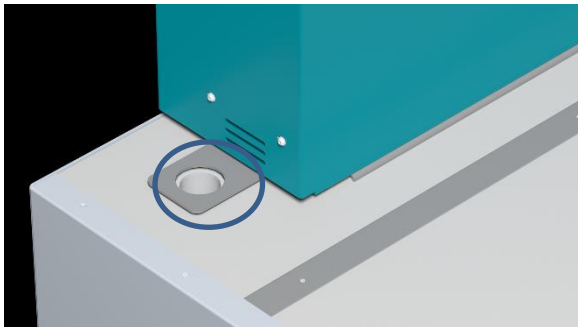


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NOTE: Take extra caution when lifting the cabinet with a forklift or jack trolley as it can fall backwards.



After aligning the Sharebox Auto S18 onto the pre-made concrete slab. The top plate can be taken off. This is done by removing 8 torx screws (T25). The two mounting holes for fixing will be visible. Pre-drill one hole on each side using the premade holes(marked with blue circle below)
Use proper expanding ancor bolts(e.g HILTI HSA F M12x250 or M12x300) in order to fix the whole object on to the pre-made concrete slab.

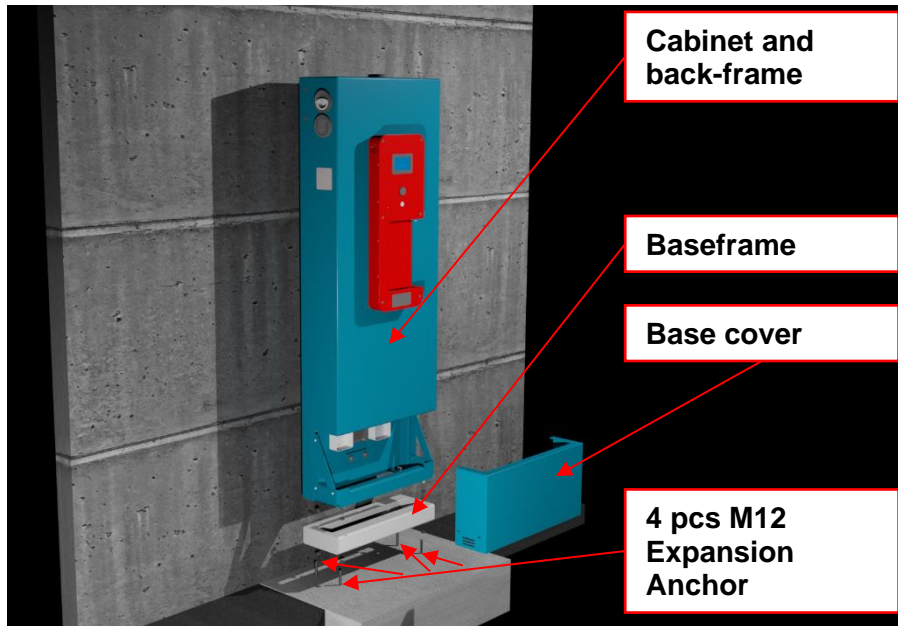


After the Sharebox Auto S18 is properly fixed to the concrete slab. The front plate and top-plate can be put back on and fixed with the torx screws used for removing it.

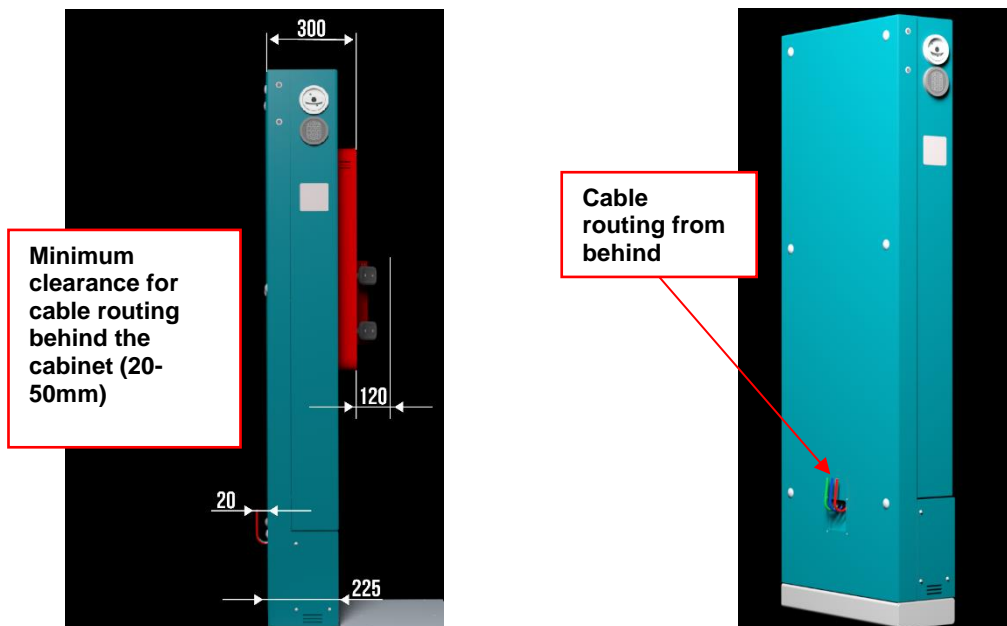
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3.3 Installation with baseframe instead of concrete base

If there is not enough space either in height or width the Sharebox Auto S18 can be installed without using the concrete base. This type of installation is more time-consuming and with a higher HSE factor.

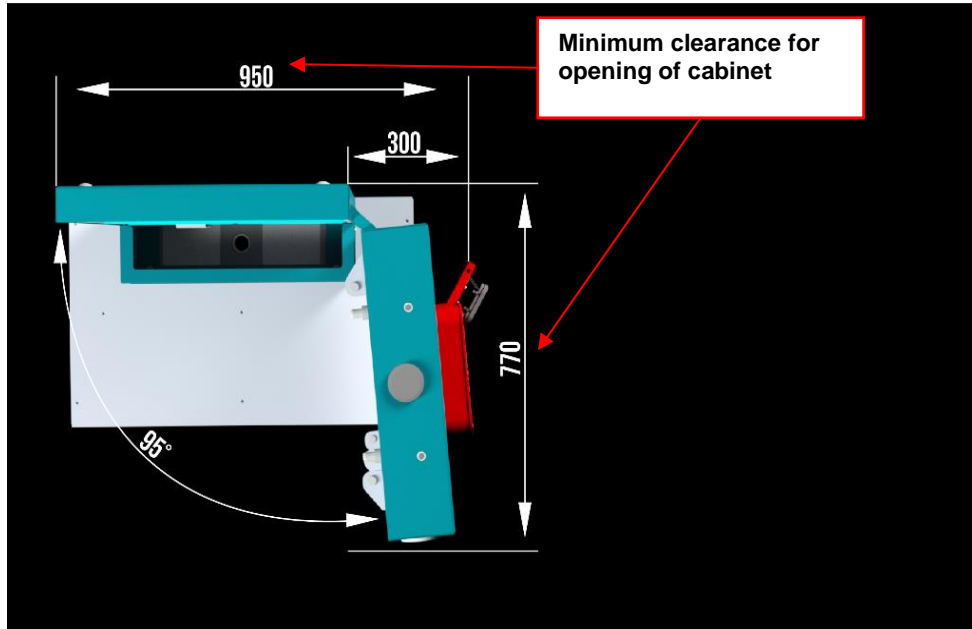


Prior to installation, take note of the details below.



Note that the Cabinet need to swing open for service, so the area seen below must not have obstacles higher than 350mm. A free area of 30mm above the top of cabinet is needed when doing service.

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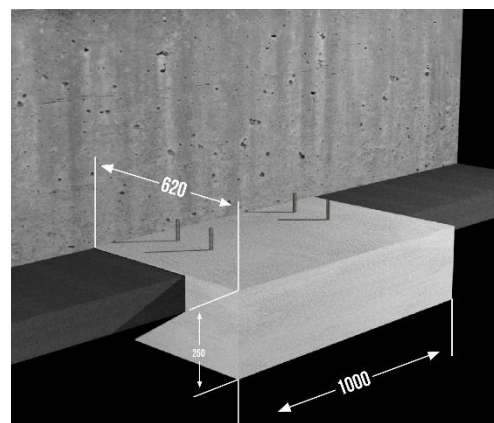
3.3.1 Ground fixing bolts when not using concrete base

If the area where the Sharebox Auto S18 has either a concrete surface or with tiles the Base-frame can be installed directly. If the surface is tarmac or other “soft ground” a mounting surface need to be made with levelled and uncracked concrete of minimum thickness 250mm, and minimum quality C20/25.

Drill hole for 4 psc of Expansion-anchors (e.g. HILTI HSA)

- Size : M12
- Bolt-length : 100mm
- Depth of drill-hole : 72mm
- Nominal anchoring depth : 64mm

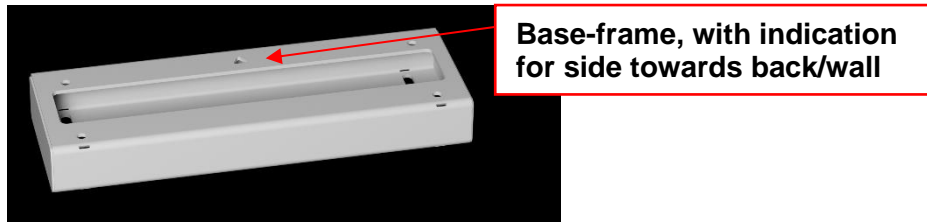
The Base-frame can be used as a template to mark-up (and drill) holes. Level the Base-frame if needed and fix it to the ground. The holes are slotted to enable some adjustment of position.



Drill hole for 4 psc of Expansion-anchors and fit according to instruction.

Note that the arrow on the frame is to point to the back / wall.

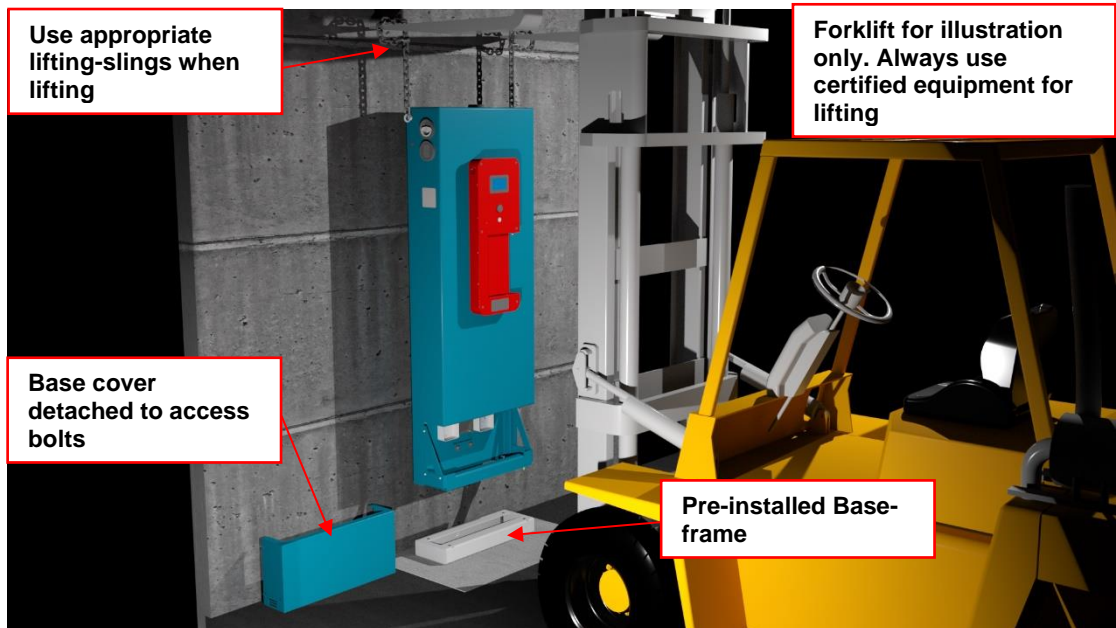
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3.3.2 Lifting the cabinet without concrete base

Use appropriate slings etc. and connect to the eyebolts fixed on top of the cabinet. Weight of the cabinet is approximately 320 kg.

Lift the cabinet on to the Base-frame and align with the 4 holes. Bolt the cabinet to the Base-frame with 4 pcs of M12 bolts, nuts and washers. Keep the lifting-slings attached for safety until the 4 bolts are tightened to the base frame.



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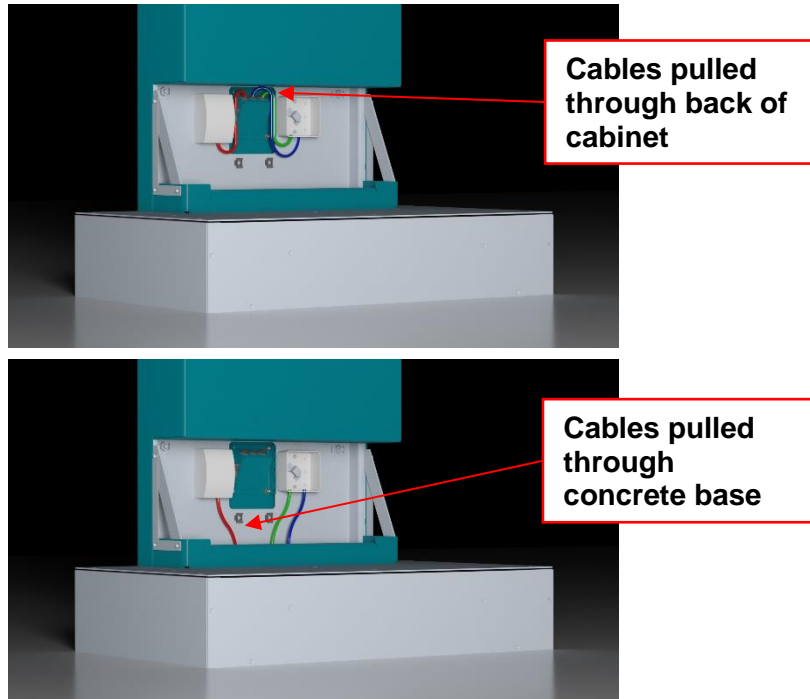
3.4 Connecting Cables

Cable-connection is to be done in the base of the product, in junction-boxes found behind the Cover. Cables can be routed in either thru the back-frame or through the base (floor/ground).

The cables are 230VAC power and ethernet (Data).

Optional alarm connection.

Illustrations below are simplified.



Power and Signal is separated.

Data cable is shielded and grounded at connection-point.

Cable-tie points are provided.

Suggested spec for incoming cables. Consult qualified electrician if needed.

Type of cable	Cable-spec	Connector in cabinet
Power Cable 110-230V AC	H07 RN-F, 3 x 2.5kv (OD12mm)	SDS 316 AUX
Data Cable	Cat 5 or better. Shielded	RJ45 Grounded
Optional: Alarm-feedback	2x0.75kv	Wago etc. (reconnectable)

The product is EMC-tested according to standards for "light industry"; EN55032 for emission and EN55024/35 for immunity.

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The cabinet communication is always started by the cabinet using these ports:

1. Outgoing TCP/UDP Port 5938 for Teamviewer
2. Outgoing TCP/UDP Port 5959 to 5970 for Remoteit
3. Outgoing TCP/UDP Port 443 towards Sharebox server (IP 185.67.45.109)

The cabinet always uses ethernet communication if available. Otherwise an onboard 2G modem will be used to establish connection to Sharebox server.

TeamViewer:

Outbound connection: TCP/UDP Port 5938
 Destination IP addresses: *.teamviewer.com

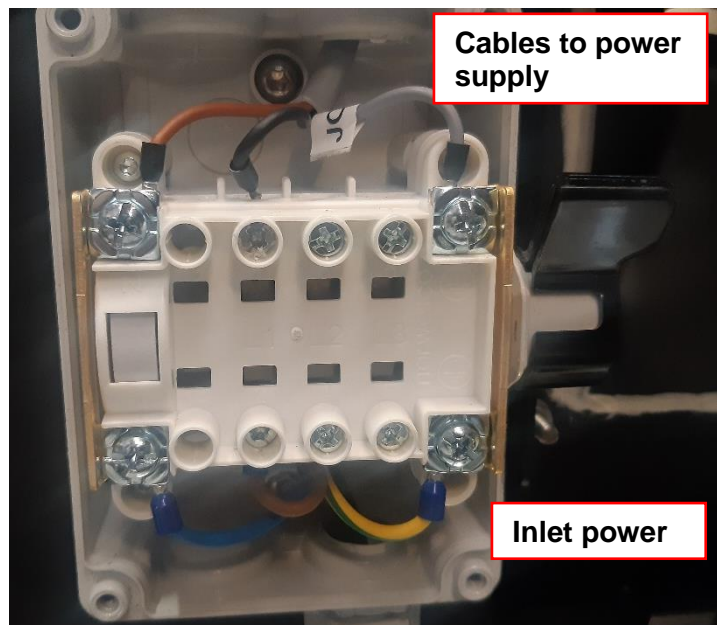
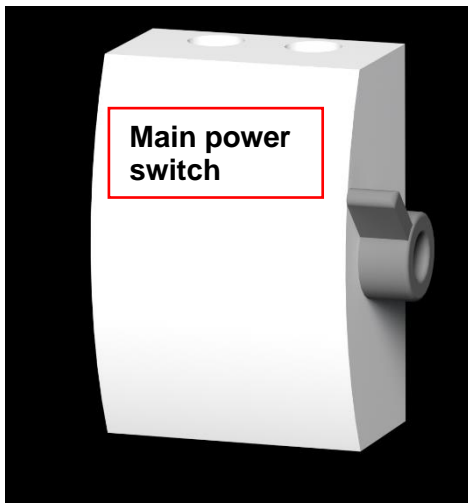
Information can be found here:

<https://community.teamviewer.com/t5/Knowledge-Base/Which-ports-are-used-by-TeamViewer/ta-p/4139#toc-hId-792961694>

RemoteIT:

Outbound connection: ports 443 TCP and 80 TCP, UDP from port 5959 to 5970 Destination IP addresses: *.remot3.it, *.rt3.io

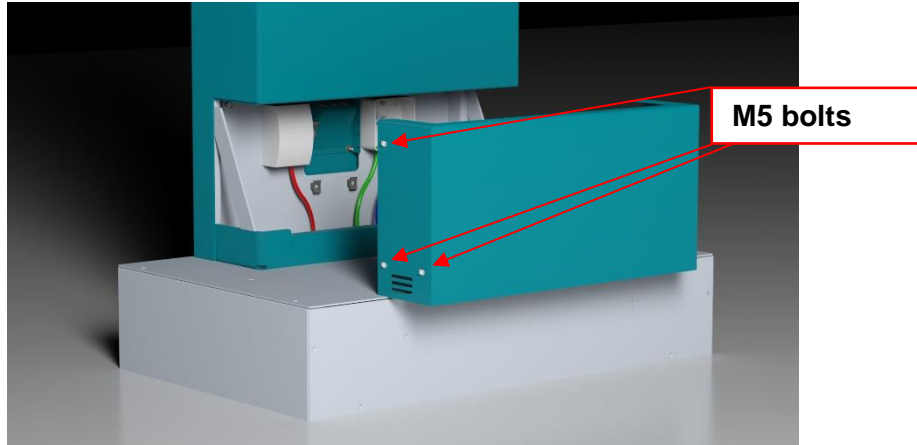
The Sharebox Auto S18 is fitted with a main power switch. Power cables from the cabinet are pre-connected and ready to be connected with the inlet power.



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3.5 Fit Cover

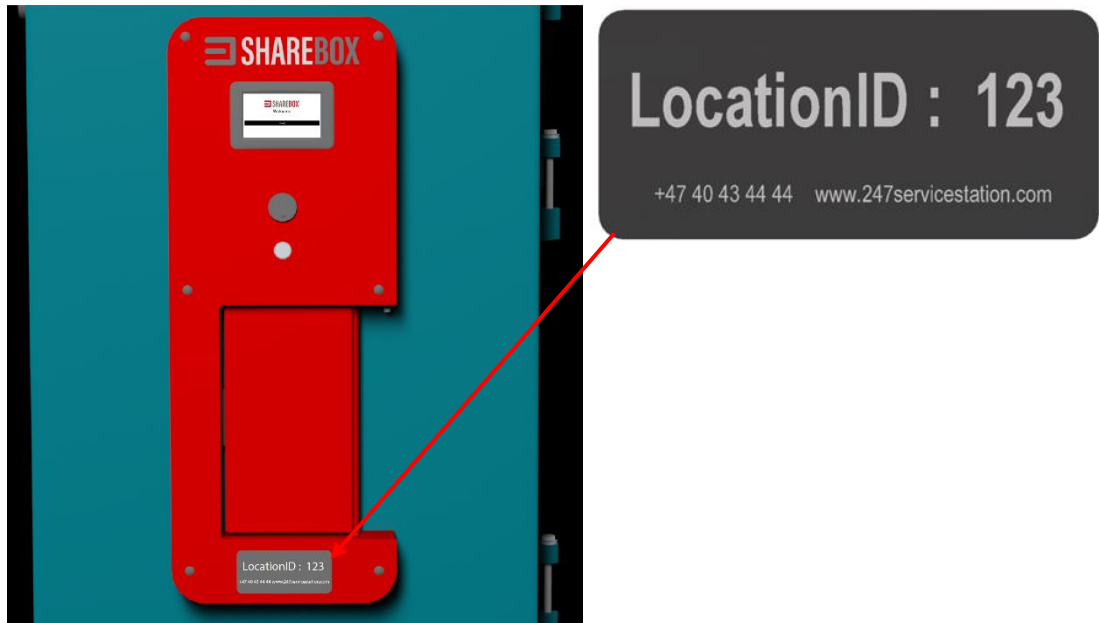
Fit the lower cover and fix with 6 x M5 “mushroom-head” bolts (A4-stainless-steel). from outside



3.6 Confirm function and connection

The product is ready when power and data is connected.

Contact Sharebox support to confirm that the cabinet is online and perform self-test as required. The cabinet responds to its “Location ID number” found on the front plate.

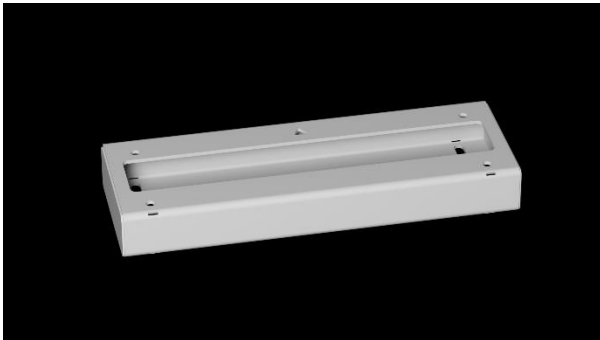
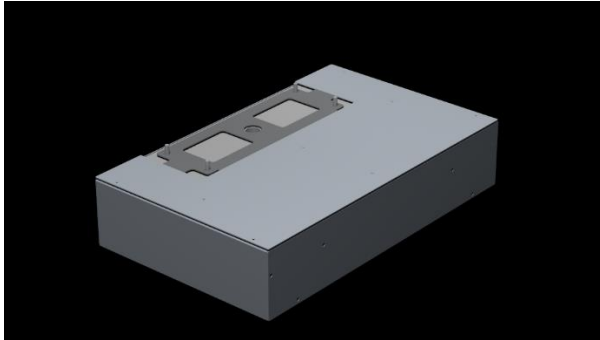


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3.7 Return of unused materials

The Concrete bases and base frame are reusable items. Please contact Sharebox for return arrangement.

The products listed below are fully able to be used again. Sharebox will be highly appreciated if the products can be reused for further installations elsewhere.



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4 Maintenance

4.1 Removal of foreign object



In order to keep the cabinet in good working conditions all foreign object needs to be removed from the door on the front of the cabinet.

Examples of this is; Snow, ice, slush or dust.

This must be done as a daily routine and, if needed, even more often. As snow/ice may obstruct the door when opening.

4.2 Daily maintenance

A quick overview of the cabinet is always a good way to see that all is in working order. This routine will also give indications of any wear and tear.

4.3 Cleaning of the Sharebox

The Sharebox Auto S18 has a powder coating that prevents that dirt sticks to the surface of the cabinet. Sharebox recommend to keep the cabinet clean and keep dust and water spray off the cabinet. For cleaning we recommend using a cloth with clean water. The touch panel must only be cleaned with a dry cloth.

NOTE: no chemical detergent or similar must be used when cleaning the cabinet.

4.4 Periodically maintenance

As the temperature changes between summer to winter and winter to summer. The climate presents like on car, gives some challenges. But with the correct maintenance small defects and irregularities can quickly be fixed.

For the front panel Sharebox recommends keeping it free of any dirt and snow. If any water ingress is found, contact your Sharebox representative.

Any unforeseen and irregularity must be reported to Sharebox to the following e-mail: operations@sharebox.global