SHAREBOX®

Product	**Sharebox Auto S18**
Document	**S18 Installation, Service Maintenance Manual**

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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.

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.

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

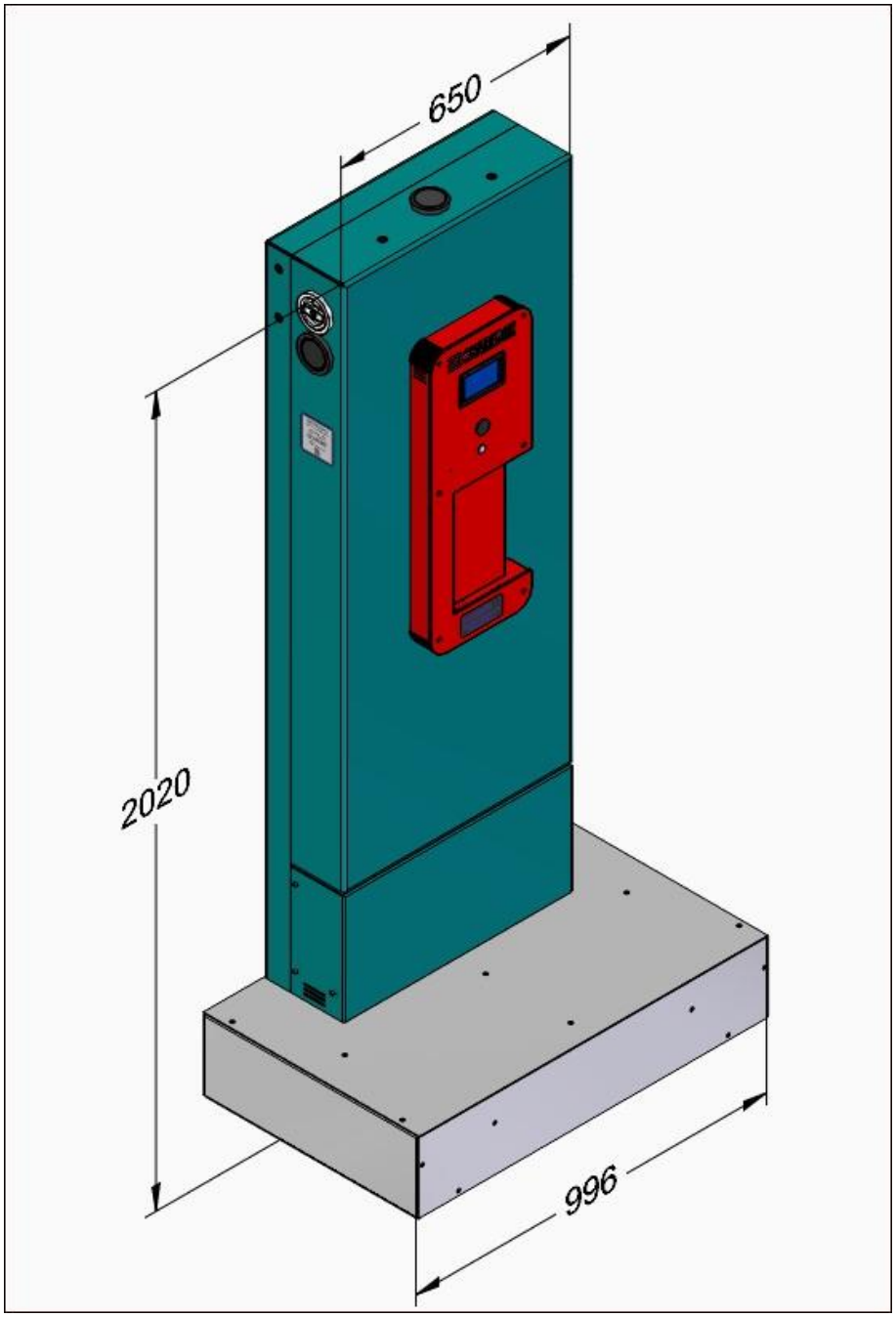
There is a risk of crushing fingers when opening door

There is risk of high voltage if the current is locked-out

NOTE: READ THROUGH THE WHOLE MANUAL PRIOR TO INSTALLATION

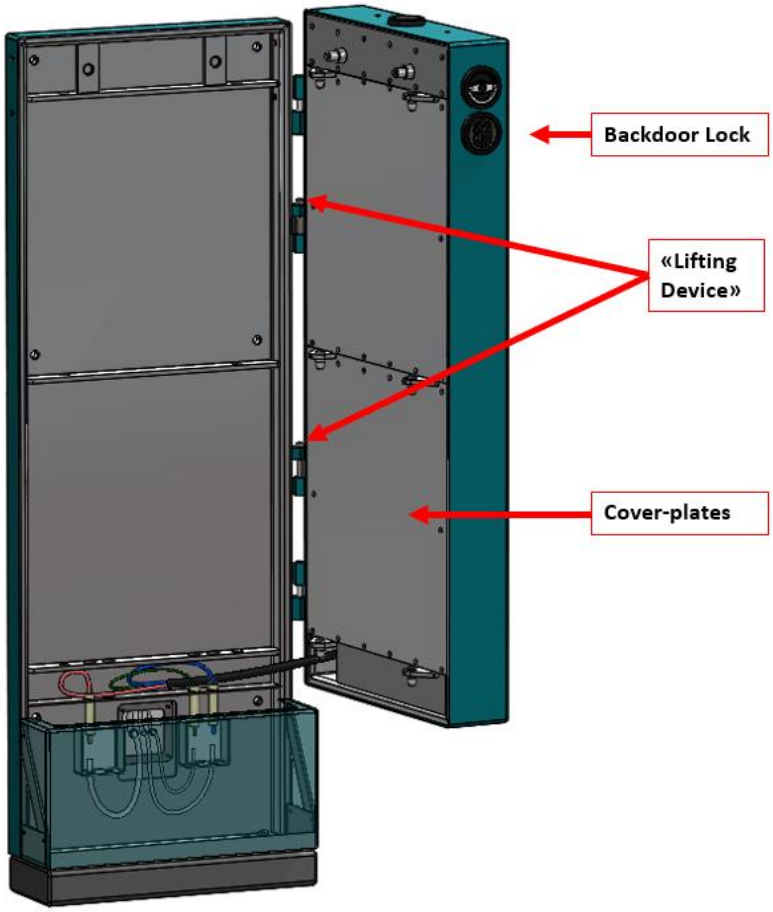
2.3 Size and weight

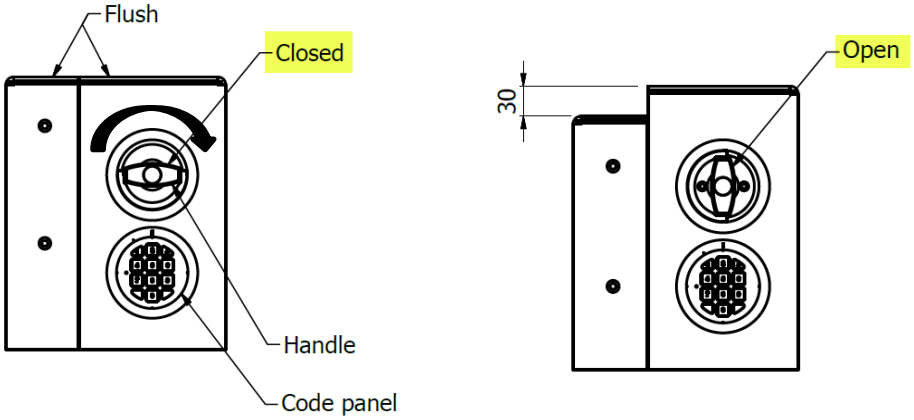
	Outside total	Outside secure cabinet
Height	1915mm	1500mm
Width	700mm	650mm
Depth	302mm	225mm
	All tolerances +/- 5mm	
Weight	320kg	
Weight w/ concrete base	543kg	



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 handle (clockwise to open), which again draws movable lockbolts out of the backframe. 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 unbolted, and the cabinet can be rotated open.





3 Instructions for installation

3.1 Overview and positioning of Sharebox Auto S18 cabinet

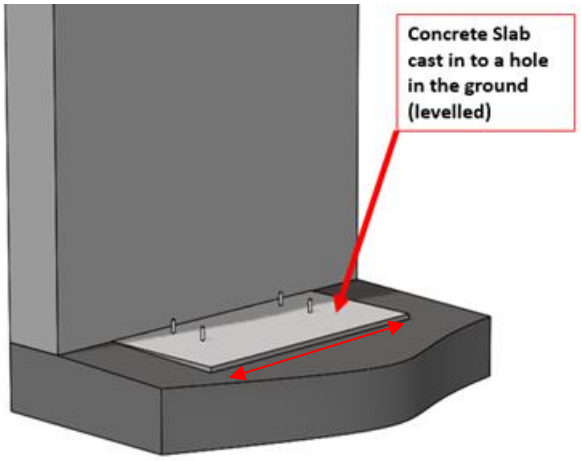
There are three ways of installing the Sharebox Auto S18.

1. **With** the concrete base the cabinet is shipped on (recommended)
2. **Without** using the concrete base the cabinet is shipped on
3. Fixed to a wall

3.2 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.



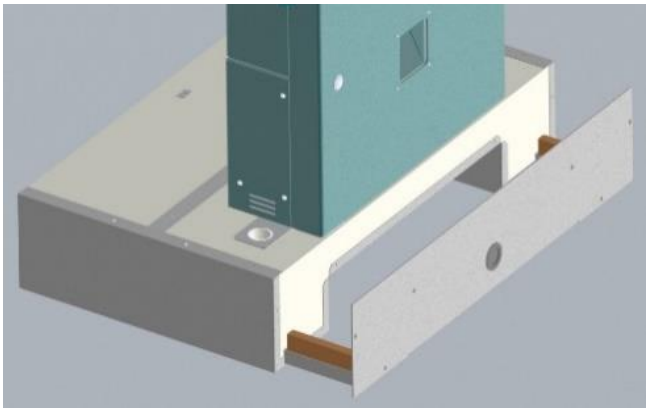
Length of A=1000mm
Length of B= 620mm

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

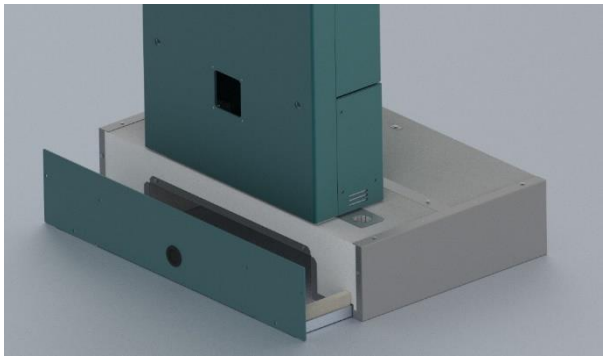
The mounting surface need to be levelled and uncracked concrete of minimum thickness 250mm, and minimum quality C20/25.

3.2.1 Installation with concrete base

The Sharebox Auto S18 is delivered on a concrete base that is easy to install. The cabinet can be lifted directly on to the concrete slab mentioned in section 3.2



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.



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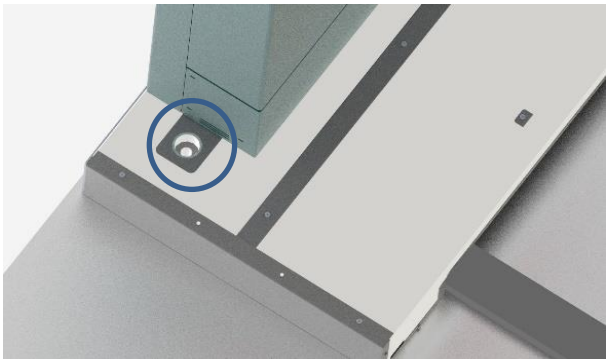
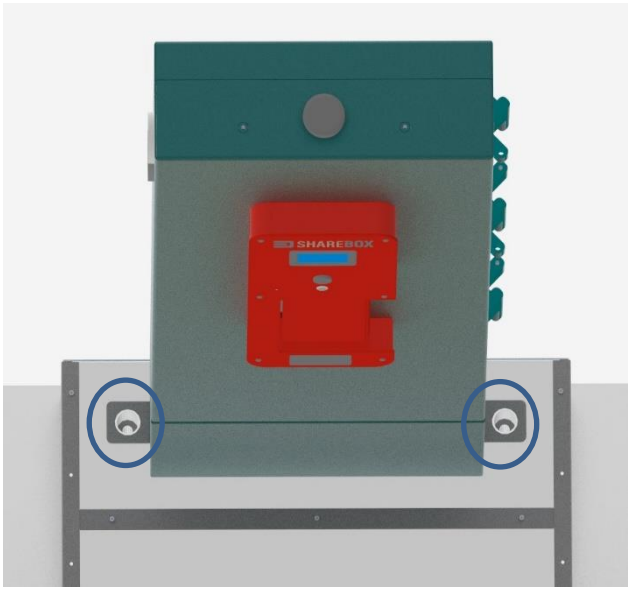
Concrete base in transport position

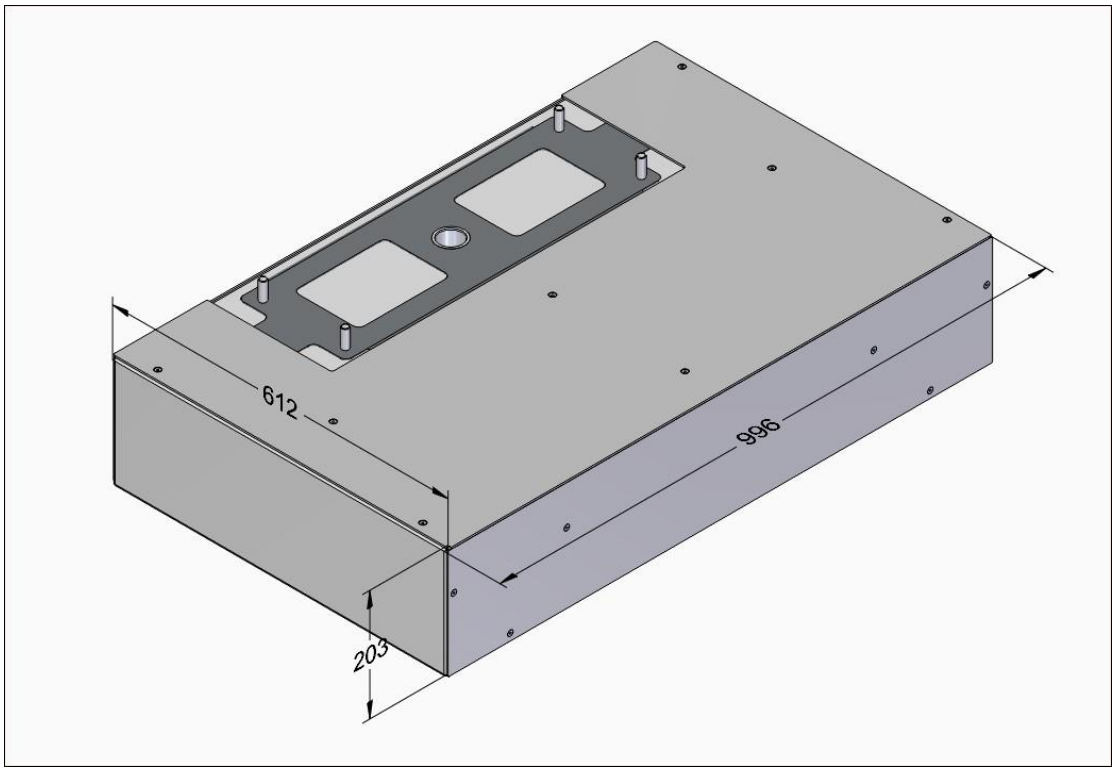
After aligning the Sharebox Auto S18 onto the pre-made concrete slab. The top plate can be taken off. This is done by removing 8 torx srews (T25). The two mounting holes for fixing will be visible. Predrill one hole on each side using the premade holes(marked with blue circle below)
Use proper expanding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



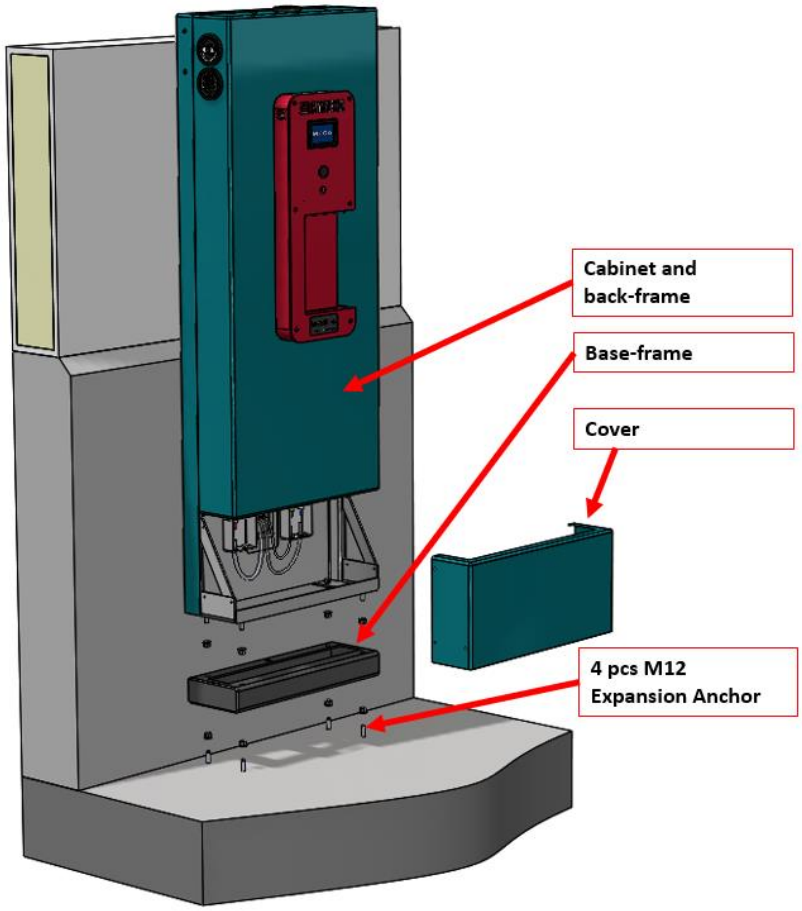


After the Sharebox Auto S18 is properly fixed to the conrete slab. The front plate and top-plate can be put back on and fixed with the torx screws used for removing it.

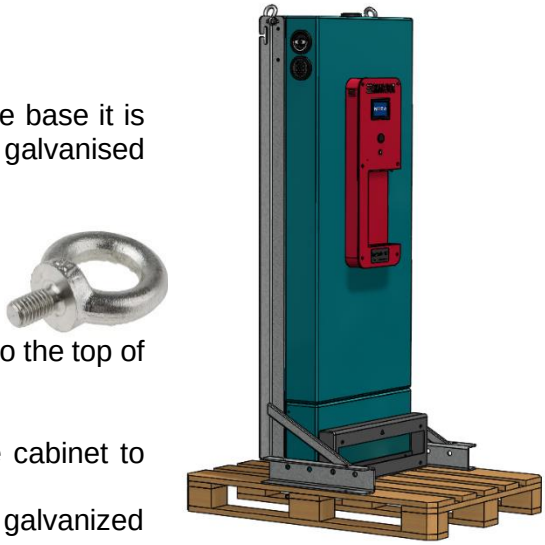
3.2.2 Dimmentions of concrete base (in mm)



3.2.3 Installation with baseframe instead of concrete base



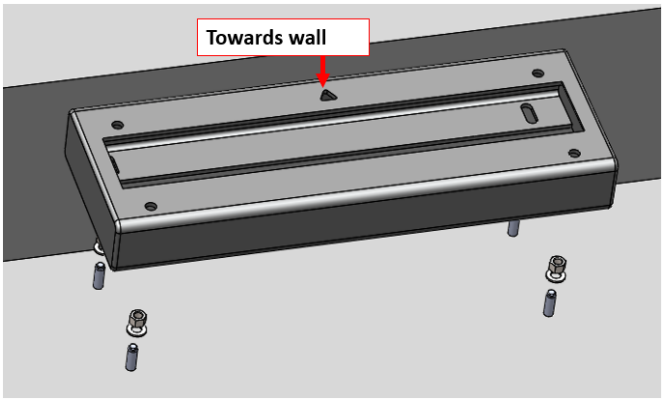
The Sharebox Auto S18 is delivered on a concrete base it is possible to take off the cabinet and only use the galvanised base frame.

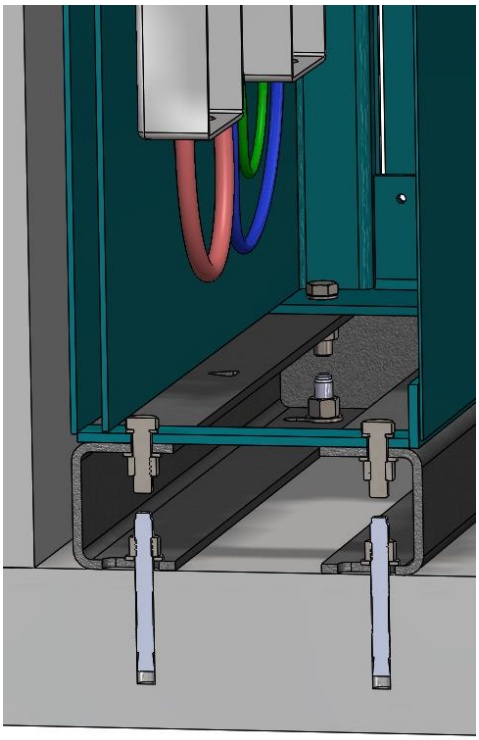


This can be done by the following steps.

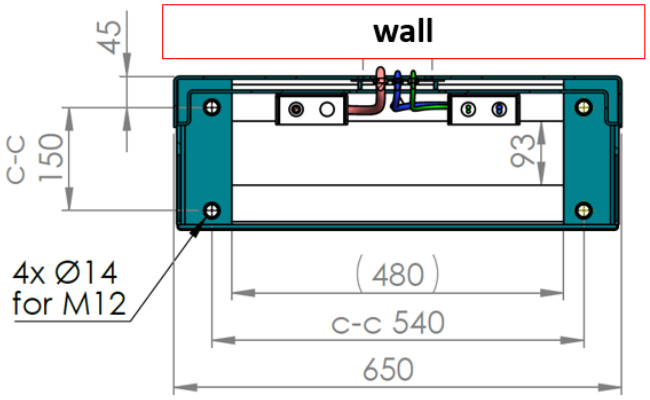
- Hang off the cabinet by attaching eyebolts to the top of cabinet with a lifting device (e.g. forklift)
- Remove cover plate in bottom of cabinet.
- Loose the four nuts that is used to fix the cabinet to concrete base.
- Lift it with a forklift and fix it on top of the galvanized base frame as illustrated on next page.

If possible, place under a roof. Users will be more satisfied!





Picture above also shows the cabinet bolted to the galvanized base-frame.

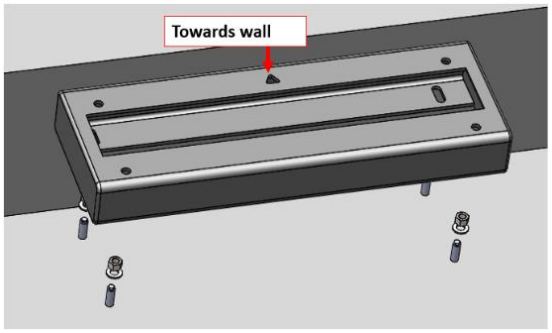


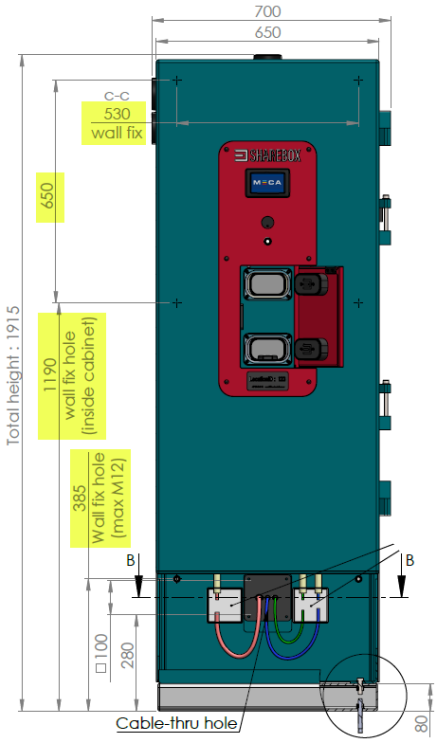
3.2.4 Wall fixing

If ground fixing (recommended) is not possible, wall fixing can be used.

Note position of wall-fixing holes and place cabinet according to structure of wall.

Position and level Base-frame as described above. Fixing it to keep it in place is recommended, even if the bolts cannot hold much load.



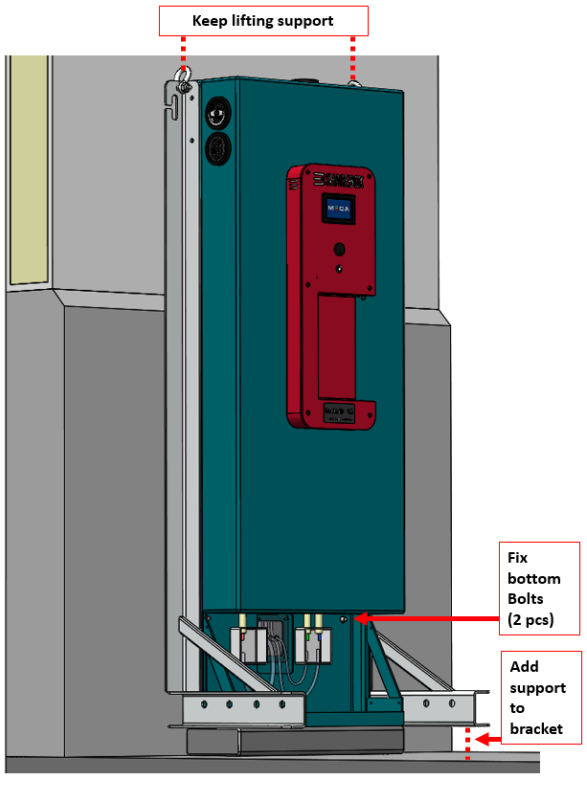


Eyebolts needs to be attached to a lifting device during the entire installation.

Preferably keep the lifting slings/crane etc. connected during the process for safety.
If not possible; support the horizontal legs of the support-brackets to prevent the cabinet from tipping forward.

Fix the lower 2 bolts accessible behind the cover before the cabinet is opened.

Use appropriate “distance-support” between the wall and the Cabinet.

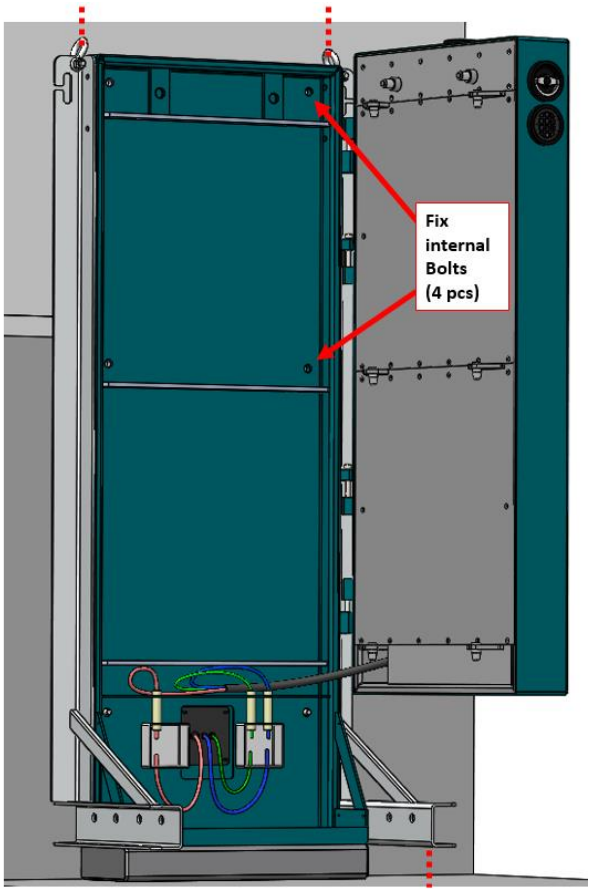


If there is no load-holding capacity in the ground-fixing-bolts, it is necessary to use the fixing-bolts inside the cabinet.

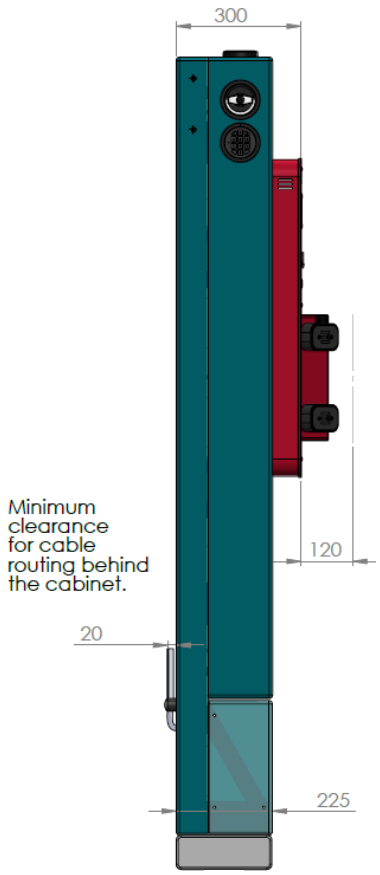
The code is needed to open the cabinet. Contact Sharebox support.

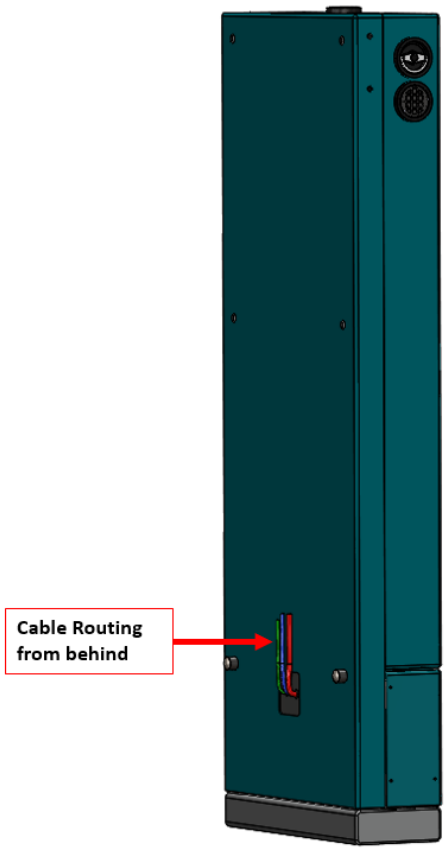
There are 4 holes inside, equal to the bottom-holes (max size bolt M12). Use at least 2 bolts.

Remember “distance-support” between the wall and the Cabinet to keep it in level.



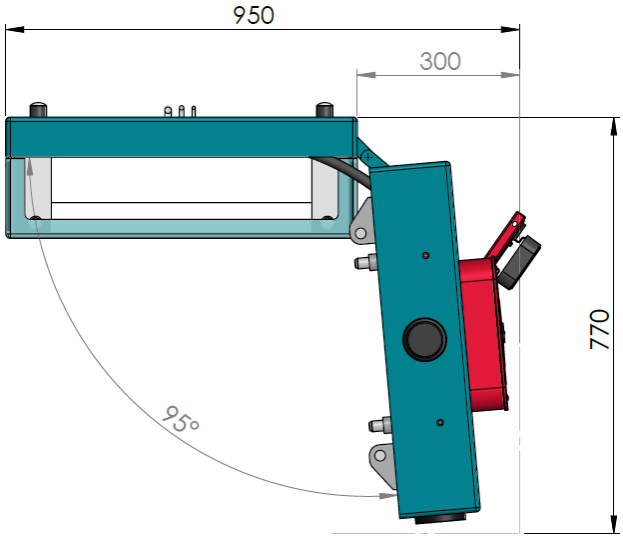
NOTE: If cable-routing is to be done from behind the cabinet, have at least 20mm clearance to the wall.





Note that the Cabinet need to swing open for service, so the area seen below must not have obstacles higher than 350mm.

Minimum clearance for opening of cabinet.

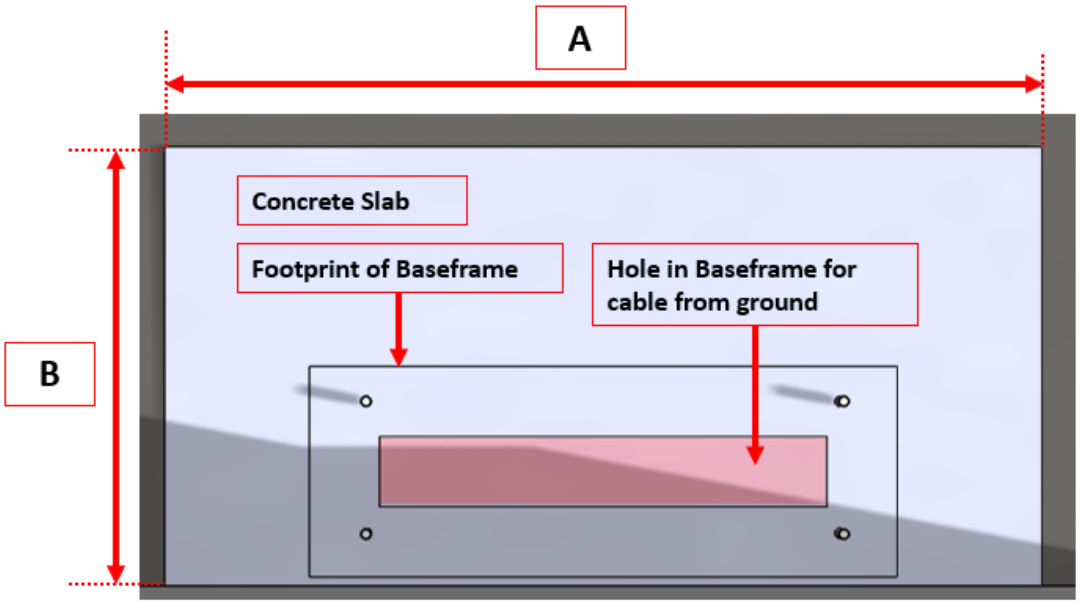


3.3 Ground fixing bolts when not using concrete base

The mounting surface need to be 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.
Note that the arrow on the frame is to point to the back / wall.
Level the Base-frame if needed and fix it to the ground.
The holes are slotted to enable some adjustment of position.

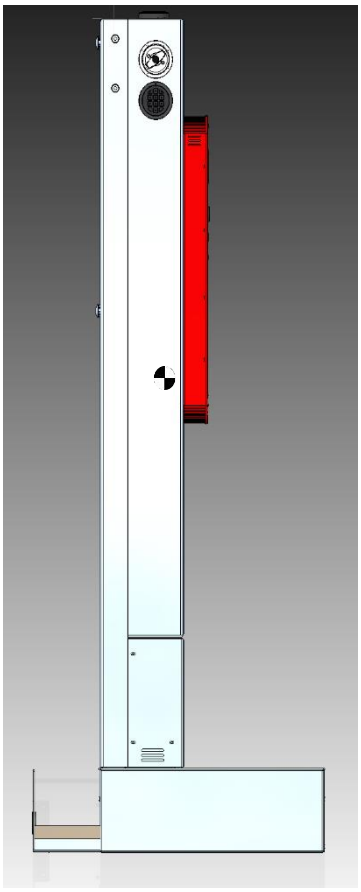


Length of A=1000mm
Length of B= 620mm
Drill hole for 4 psc of Expansion-anchors and fit according to instruction.
NOTE: The area marked red where it is possible to route cables up from the ground and thru the Baseframe.

3.4 Positioning the cabinet

3.4.1 Center of Gravity(CoG)

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

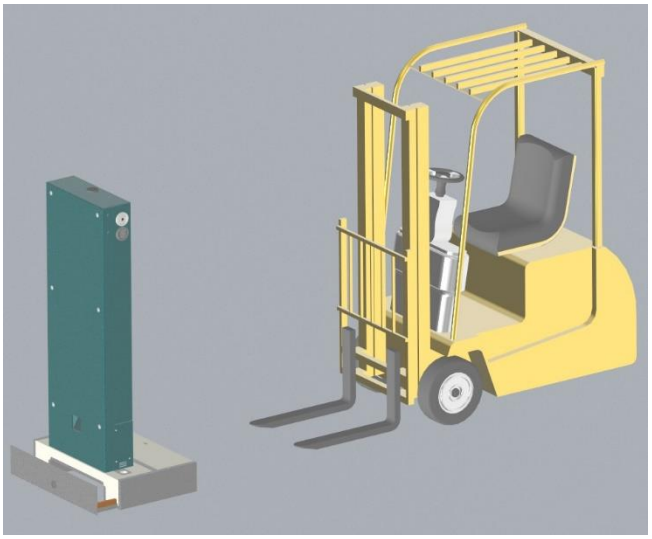


3.4.2 Positioning the cabinet with concrete base

The Sharebox Auto S18 comes with a concrete base with a desinged to be lifted with a forklift or jacktrolley.
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 achor bolts.

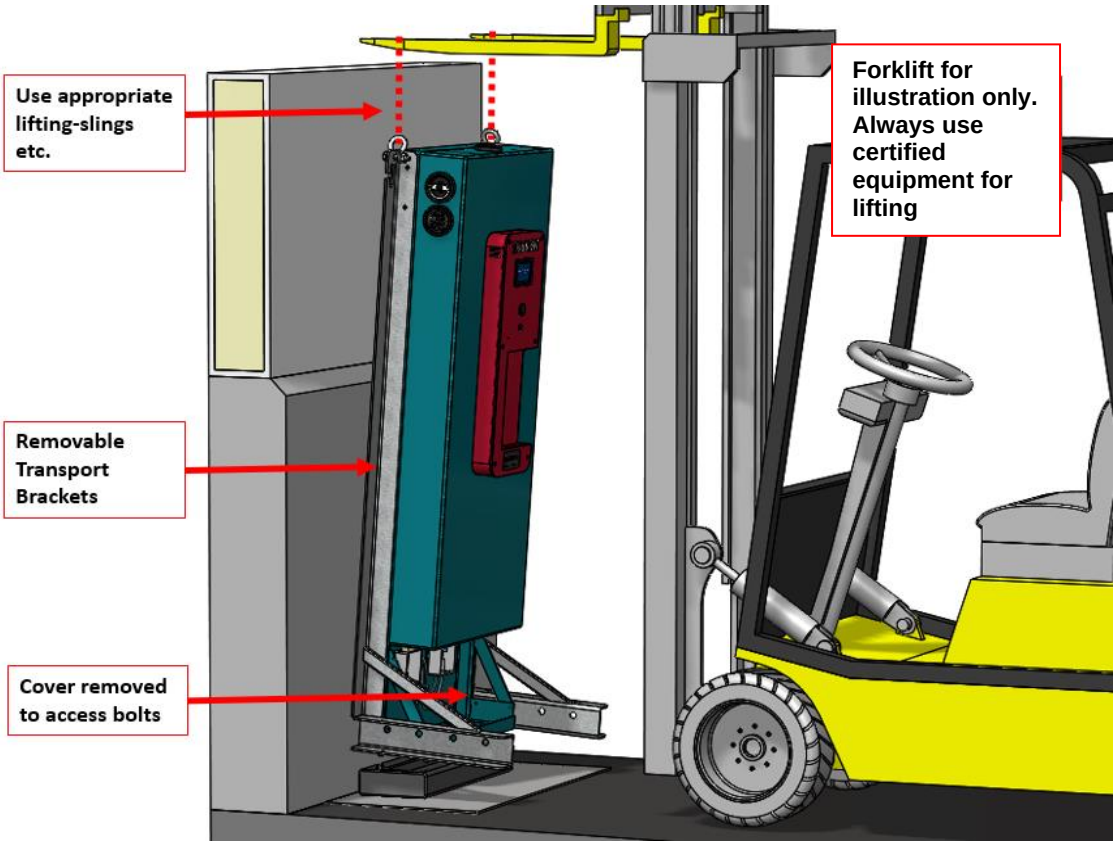
NOTE: Take extra caution when lifting the cabinet with a forklift or jack trolley as it can fall backwards.



3.4.3 Lifting the cabinet whithout concrete base

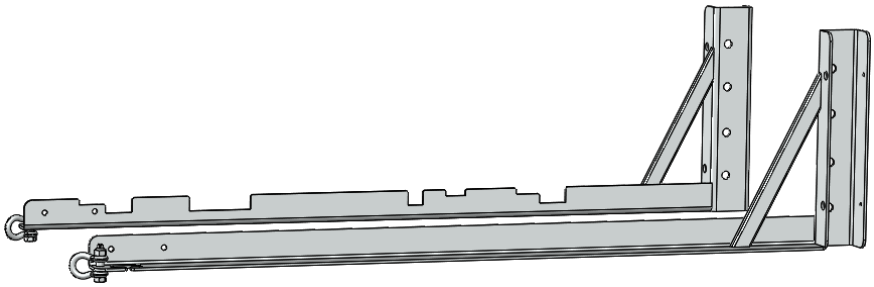
Use appropriate slings etc. and connect to the eyebolts fixed on top of the cabinet. Weight of the cabinet is approximately 320 kg.

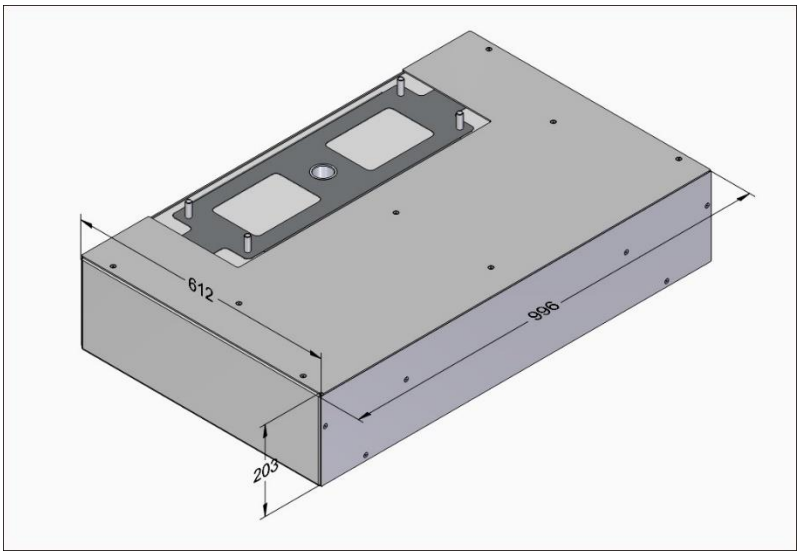
Lift the cabinet on to the Base-frame and align with the 4 holes.
Bolt the cabinet to the Base-frame with 4 pcs of M12 bolts, nuts and washers.
Keep the lifting-slings attached for safety until the 4 bolts are tightened to the base frame.

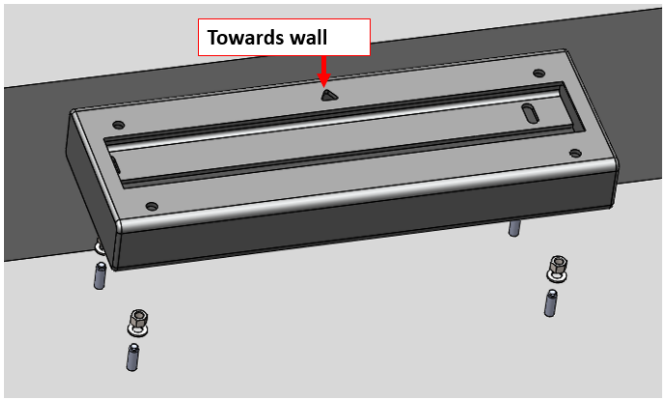


3.5 Return of materials

The Transport-Brackets, concrete bases and galvanized base frame are reusable items. Please contact Sharebox for return arrangement.
The products listed above are fully able to be used again. Sharebox will be highly appreciated if the products can be reused.



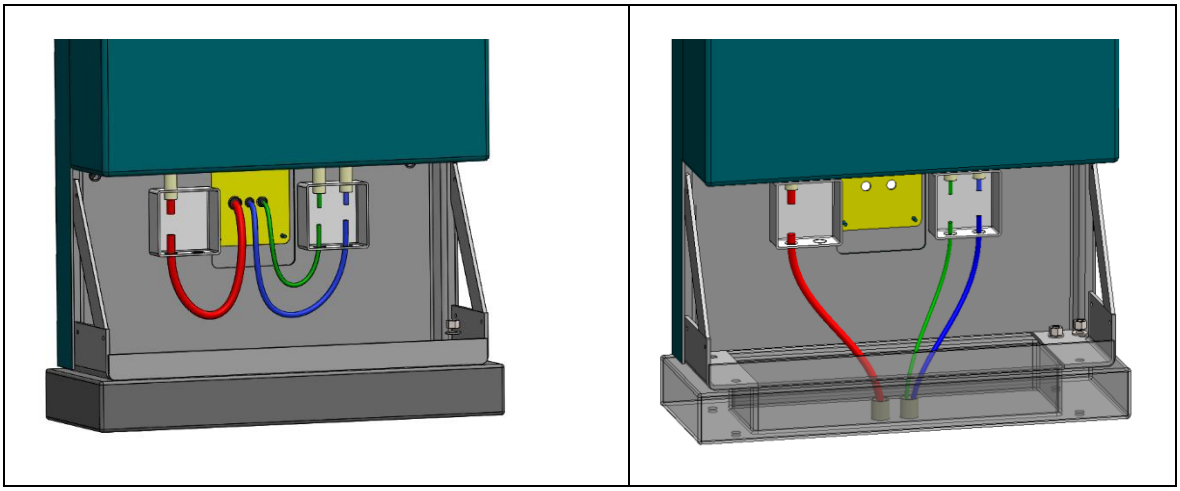




3.6 Connecting Cables

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.

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.

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)

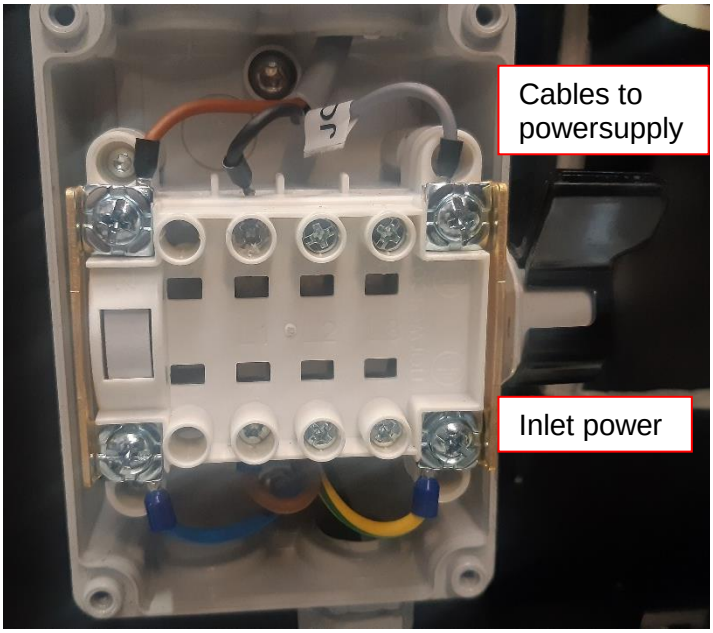
The cabinet always uses ethernet communication if available. Otherwise an onboard 2G modem will be used to establish connection to Sharebox server.

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

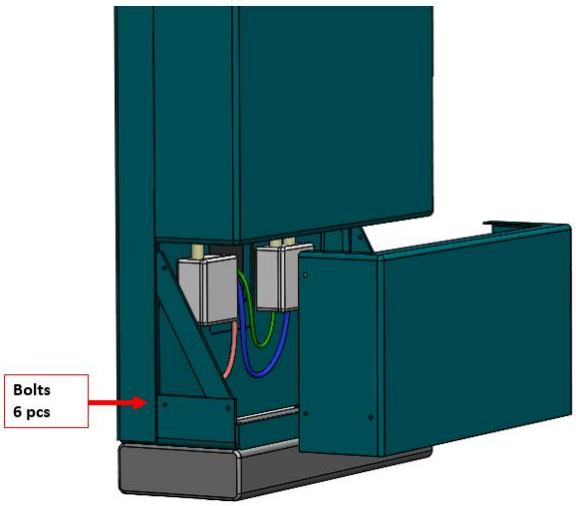
RemoteIt:
Outbound connection: ports 443 TCP and 80 TCP, UDP from port 5959 to 5970 Destination IP addresses: *.remot3.it, *.rt3.io

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.



3.7 Fit Cover

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



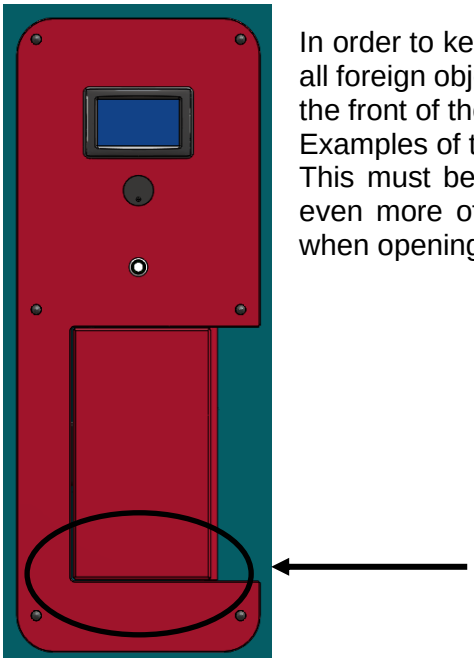
3.8 Confirm function and connection

The product is basically 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.

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

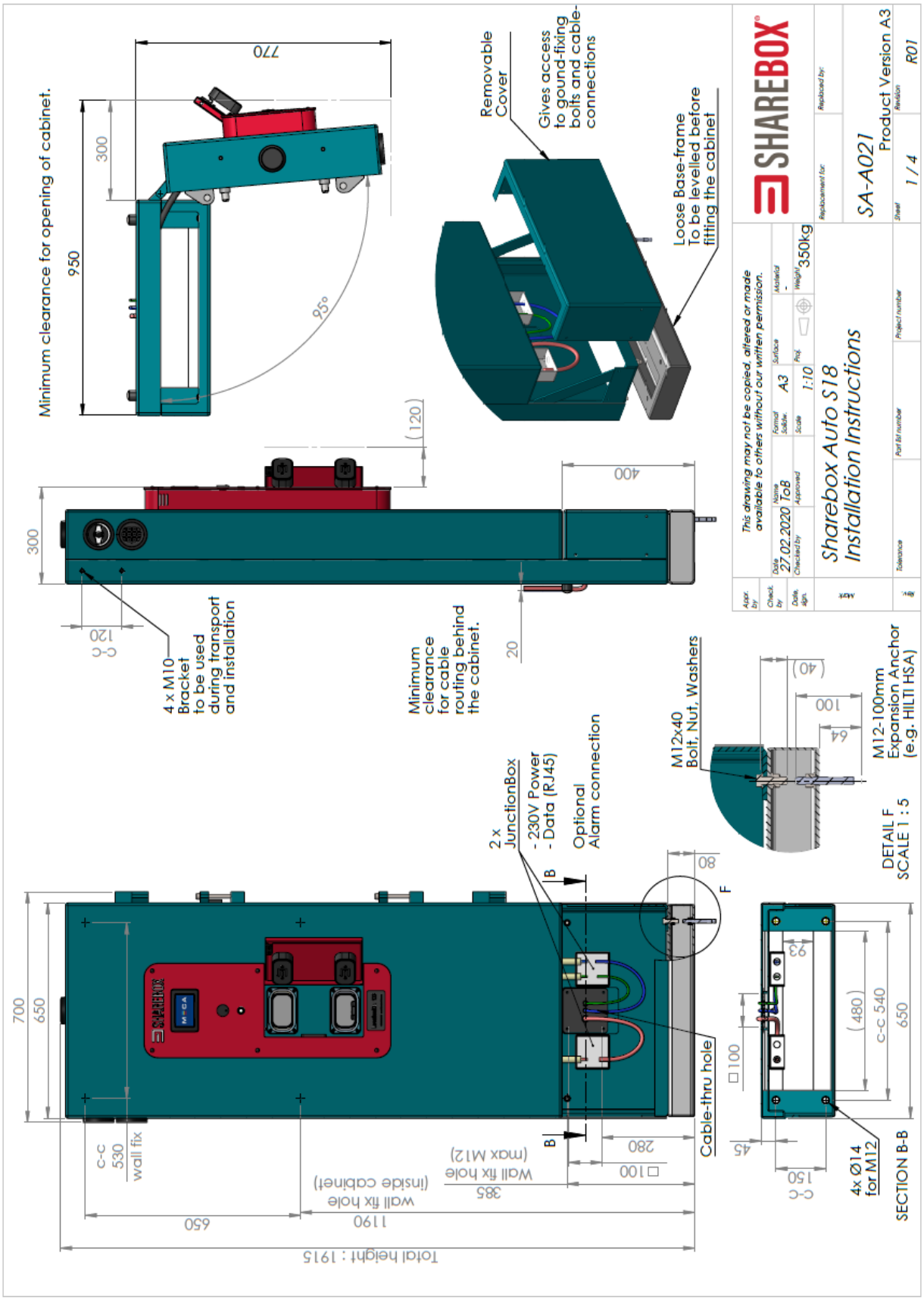
As the temperature changes between summer to winter and winter to summer. The climate presents like on car, challenges. But with the correct maintenance small defects and irregularities can quickly be fixed.

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

Drawings, attachments

5.1 SA-A021 Installation Instructions


Minimum clearance for opening of cabinet.
770
300
950
95°
Removable Cover
Gives access to gound-fixing bolts and cable-connections
Loose Base-frame To be levelled before fitting the cabinet
(120)
400
300
120
c-c
4 x M10 Bracket to be used during transport and installation
Minimum clearance for cable routing behind the cabinet.
20
SHAREBOX
This drawing may not be copied, altered or made available to others without our written permission.
Sharebox Auto S18
Installation Instructions
SA-A021
Product Version A3
1 / 4
R01
350kg
M12x40 Bolt, Nut, Washers
M12-100mm Expansion Anchor (e.g. HILTI HSA)
(40)
100
64
DETAIL F
SCALE 1 : 5
2 x JunctionBox
- 230V Power
- Data (RJ45)
Optional Alarm connection
B
F
80
700
650
c-c 530 wall fix
650
1190
wall fix hole (inside cabinet)
385
wall fix hole (max M12)
280
□100
Cable-thru hole
Total height : 1915
□100
93
(480)
c-c 540
650
45
150
c-c
4x Ø14 for M12
SECTION B-B