












Table of contents

1. INTENDED PURPOSE		5
1.1 Intended use		5
1.2 Warranty		5
2. FEATURES		5
2.1 Technical specifications		5
2.2 Measurements		6
2.3 Versions		7
2.4 Scope of delivery		7
3. SAFETY INSTRUCTIONS		7
3.1 Icons		7
3.2 Further information		7
4. TRANSPORT, INSTALLATION & COMMISSIONING		8
4.1 General information		8
4.2 Transport		8
4.3 Storage and environmental conditions		9
4.4 Installation		9
4.4.1 General information		9
4.4.2 Line-up options (height x width) (optional)		9
4.4.3 Line-up vertically (optional)		10
4.4.3.1 Screw connections between the QUBE® safety case		10
4.4.3.2 Back wall mounting / anti-tilt (optional)		11
4.4.4 Line-up horizontally (optional)		12
4.4.4.1 Screw connections between the QUBE® safety case		12
4.5 Electrical installations (optional)		14
4.5.1 Connection of the potential-free signaling contact (optional)		14
4.5.2 Connection of the Wiegand interface (Premium / optional)		14
4.6 System commissioning of extinguishing system		15
5. SETTINGS		17
5.1 Card reader with keyboard (QUBE® Premium)		17
5.1.1 Set Administrator Password (QUBE® Premium)		17
5.1.2 Set authentication mode (QUBE® Premium)		17
5.1.3 Add / change /delete user (QUBE® Premium)		18
5.1.4 Opening the closure unit (QUBE® Premium)		19
5.1.5 Set unlock duration (QUBE® Premium)		19
5.1.6 Define reactions to incorrect operation (QUBE® Premium)		19

6. MAINTENANCE & SERVICING		19
6.1 General information		19
6.2 Maintenance schedule		19
6.3 Visual inspection		20
6.4 Extinguishing medium tank		20
6.4.1 General notes		20
6.4.2 Preparation for maintenance instructions / Important information for maintenance service		20
6.5 Smoke detector (optional)		22
6.5.1 Functional test (optional)		22
6.5.2 Resetting the smoke detector (optional)		22
6.5.3 Replacing the smoke detector (optional)		23
6.6 Replacement of connecting house		23
6.7 Functional check of extinguishing system		23
7. POSSIBLE ERRORS		23
7.1 General indications		23
7.2 Optical and acoustic signals (QUBE® Premium)		23
7.2.1 QUBE® LED indicator lights (QUBE® Premium)		23
7.2.2 Card reader with keyboard (QUBE® Premium)		24
7.3 Leaks		24
7.3.1 Liquid leakage at the lower door rebate		24
7.3.2 Leakage on the extinguishing medium tank / connecting house		24
7.4 Action recommendation when the extinguishing system is triggered		24
7.4.1 Functional principle in case of an event		24
7.4.2 Characteristics		24
7.4.3 Incident		25
7.4.4 Measures after deletion process		25
7.5 No voltage on the socket (charger doesn't charge) / Card reader without function (QUBE® Premium) / LED-indicator lights without funktion (QUBE® Premium)		25
8. MANUFACTURING DECLARATION		26
9. DISCLAIMER OF LIABILITY		26
10. CUSTOMER RESPONSIBILITY		26
11. APPENDIX		27
11.1 Visual inspection checklist		27

1. Intended Purpose

1.1 Intended use

The QUBE[®] safety case is a tested fire protection housing with a fire resistance duration of at least 90 minutes, tested in accordance with DIN EN 1363-1 in the sense of EI90 (<->io), designed for the passive and active storage of primary and secondary batteries with lithium compounds (hereinafter referred to as batteries).

For safety and approval reasons (CE), the unauthorized conversion and/or modification of the product is not permitted. Any use other than that described above is not permitted and may result in damage to the product. In addition, this is associated with hazards such as short circuit, electric shock, fire, etc.

Consider the following information when using the QUBE[®] safety case:

- the safety instructions in this manual
- the chapter "Properties" in this manual (see point 2)
- a careful and professional commissioning and maintenance of the assembly (see points 4 & 6)
- Proper handling of the batteries in accordance with the manufacturer's instructions and the local regulations

1.2 Warranty

The warranty for this product is based on the contractual agreements, our offers, as well as in addition to our General Terms and Conditions.

We do not assume any liability for material and personal damage caused by improper use or non-compliance with the safety instructions. The warranty/guarantee shall be void in such cases.

Please note that operating and/or connection errors are beyond our control. We also assume no liability for any resulting damage.

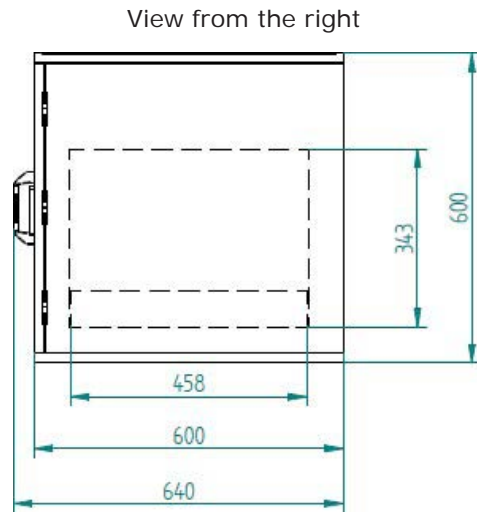
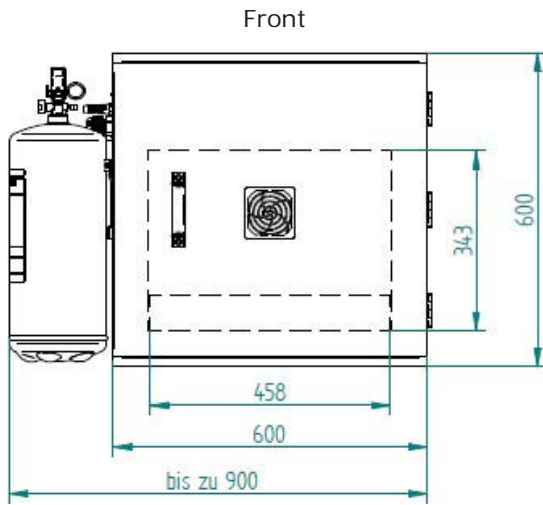
2. Features

2.1 Technical specifications

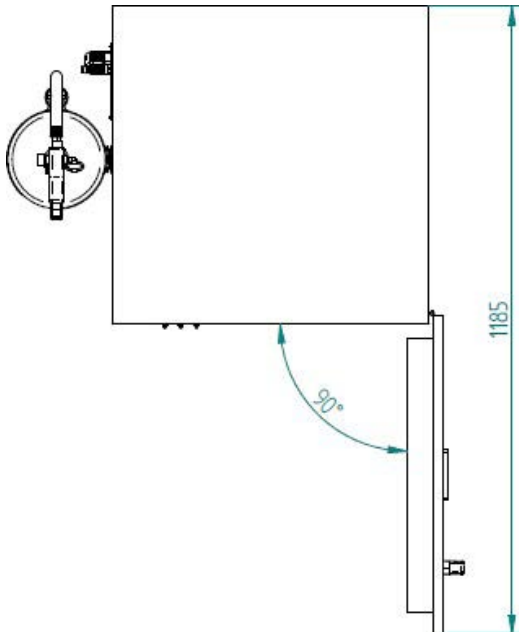
Technical specifications	
Input voltage	110-240 V / 50-60 Hz
Current consumption max. (without load)	250 mA / 230 V/AC 350 mA / 115 V/AC
Number of protective contact sockets	3
Connected load max.	3450 W
Fluse	15 A
Stored battery energy	max. 625 W/h per Lithium-ion-battery (plastic housing)
Signaling contact (potential-free) <i>optional</i>	1 changeover contact
Signaling contact rating max. (resistive load) <i>optional</i>	30 W, 50 VA (2 A, 60 V/DC, 120 V/AC)
Wiegand interface <i>Premium / optional</i>	Wiegand 26 Bit
Number of users per card reader <i>Premium</i>	Up to 2000
Protection class	Class I
IP-Code	
IK-Code	
Fire test	DIN EN 1363 i<->o
Fire resistance	90 min
Operating temperature	10 °C to 40 °C
External dimensions (HxWxD)	600 x 600*x 640 mm
Internal dimensions (HxWxD)	343 x 458 x 458 mm
Weight	approx. 98 Kg*

* without extinguishing medium tank

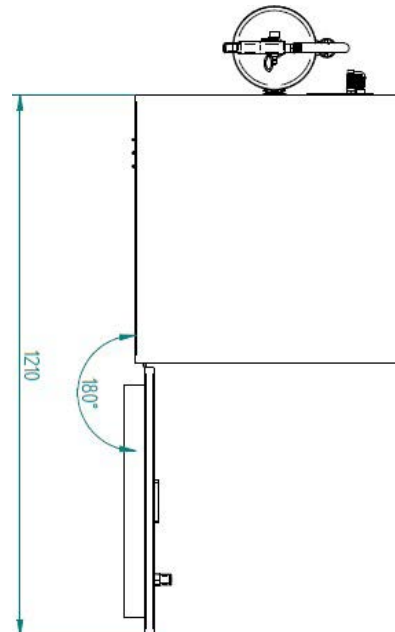
2.2 Measurements



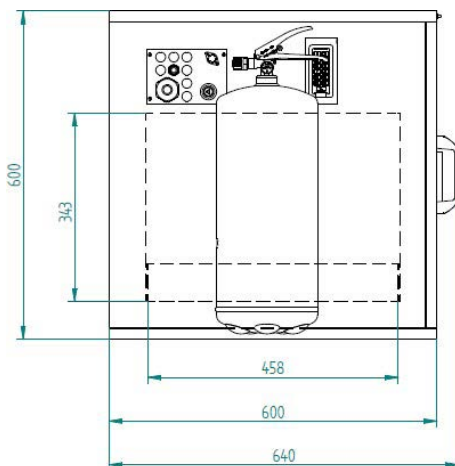
View from above – Door opening angle 90°



View from above – Door opening angle 180°



View from the left
Example: QUBE® Premium



If the door opening angle exceeds 180°, the product can be damaged!

2.3 Versions

features	versions			
	Basic Plus	Premium		
automated extinguishing system incl. pottom pan	•	•		
extinguishing medium tank	•	•		
triple socket	•	•		
ventilation system in the charging area	•	•		
closure with protection from external access	cylinder lock	electromechanical shutter		
authentication of the closure	key		RFID card / PIN 2-factor authentication possible	
	keyed alike (standard)	keyed differ (option)	MF 13,56 MHz (standard)	EM 125 kHz (option)
LED indicator lights	°	•		
automatic door locking in case of fire	°	•		
potential-free signal contact	°/•	°/•		
tablet holder incl. charging stations	°/•	°/•		
thermal runaway protection (in case of external fire)	°/•	°/•		
EN 54-7 smoke detector	°/•	°/•		
Wiegand 26 interface	°	°/•		

• included in the scope of delivery | ° not included in the scope of delivery | °/• optional

2.4 Scope of delivery

- 1 QUBE® safety case
- 1 Bottom pan
- 1 Extinguishing medium tank
- 2 Plug-in seals
- 2 cable ties
- 1 sealing ring
- 1 Hose Adaptor
- 2 Keys (Base Plus) / 2 RFID cards (Premium)

3. Safety Instructions

3.1 Icons



Important information, that must be observed, is marked with the exclamation mark in this operating manual.

3.2 Further information

- Observe the temperature conditions (according to the technical data) at the installation site. Failure to do so may result in damage to the battery and/or unintentional erasure.
- Safe storage of the batteries is only provided by an extinguishing system that has been put into operation, a plugged-in power plug and a closed housing door! Keep the door always closed!
- The fire protection system only meets the requirements of fire resistance and protection against the effects of a thermal runaway when closed.



- The door of the QUBE® safety case may be opened up to a maximum of 180°.
- For the best possible protection, the batteries that are to be stored / charged must be placed as flat as possible in the bottom pan.
- Protect the QUBE® safety case from splashing water with increased pressure or permanent fluid exposure. Fluid exposure with regard to the power plug and the socket strip is to be completely avoided!
- Do not expose to direct UV or sunlight. Do not operate heaters in the immediate vicinity.
- Do not operate the QUBE® safety case in an environment where flammable gases, vapors or dust exist.
- Protect the QUBE® safety case from strong vibrations and other mechanical influences, as it can be damaged by the effects.
- Keep the QUBE® safety case away from children. This is not a toy!
- For installation, operation and maintenance, the applicable occupational safety, accident prevention, DIN/VDE regulations must be observed on their own responsibility.
- Obviously damaged lithium batteries should not be stored inside buildings.
- The operating and instruction manual of the QUBE® safety case must be constantly available at the place of use.
- Do not store any highly inflammable materials / fire loads in the immediate vicinity of the QUBE® safety case
- Do not operate the QUBE® safety case in poorly ventilated rooms (especially not inside poorly ventilated living spaces)
- The maximum energy (in Wh) of the stored batteries must be observed (see 2.1 technical specifications)

4. Transport, Installation & Commissioning

4.1 General information

The QUBE® safety case must be checked immediately upon delivery and any recognisable defects must be immediately noted on the accompanying document / consignment note from the freight forwarder. Defects have to be reported to the seller or the Celsion Brandschutzsysteme GmbH in writing (no later than 5 working days after delivery).

The transfer of risk is upon delivery. Defects that may have arisen as a result of further transport of the systems are excluded from subsequent performance.

In case of doubt, the device is not to be used!

Please note that a switch (e.g. circuit breaker or power switch) must be assigned to this device as a disconnection device. This applies both to an integration into the electrical installation of the building, as well as to the connection with the standard power plug.

Care should be taken to ensure that this switch is properly installed and easily accessible to the user. Any specifications regarding the electrical protection of the regulations applicable on site must be taken into account.

The safety case must not be operated with the aid of a socket strip.

Improper installation can damage both the product and all other connected devices.



4.2 Transport

Improper transport (hard impacts, transport without air suspension, repeated reloading, unilateral loading during installation, etc.) can have an impact on the fire protection function (damage to the fire protection panels or their connections).

If a relocation of the system is necessary, it may only take place uniformly, over the entire surface and with the door closed.

For safety and approval reasons (CE), the safety case may only be transported or moved separately from the extinguishing medium tank. Transport with an attached extinguishing medium tank is not permitted!



4.3 Storage and environmental conditions

In order to enable the full functionality and a long service life of our products, we ask you to observe and adhere to the following points during intermediate storage, installation and assembly:

- Do not store or set up outdoors
- Protect against moisture, rain, splash water and weather conditions
- Do not store/build below 10 °C/above 40 °C
- Do not store / build in rooms with a humidity of more than 50% at 40 °C. Higher humidity values are permitted at lower temperatures.
- Do not expose to frost
- Leave safety case on transport pallet during intermediate storage
- Do not stack (a transport-related stacking can take place in the production plant and does not affect the function of the systems)
- Do not burden (a transport-related stacking takes place in the production plant and does not affect the function of the systems)
- Store and set up only on firm, level ground
- During assembly by authorized employees or partner companies of Celsion Brandschutzsysteme GmbH, it is essential to comply with the instructions and specifications of the installers
- On-site installation conditions must be observed

4.4 Installation

4.4.1 General information

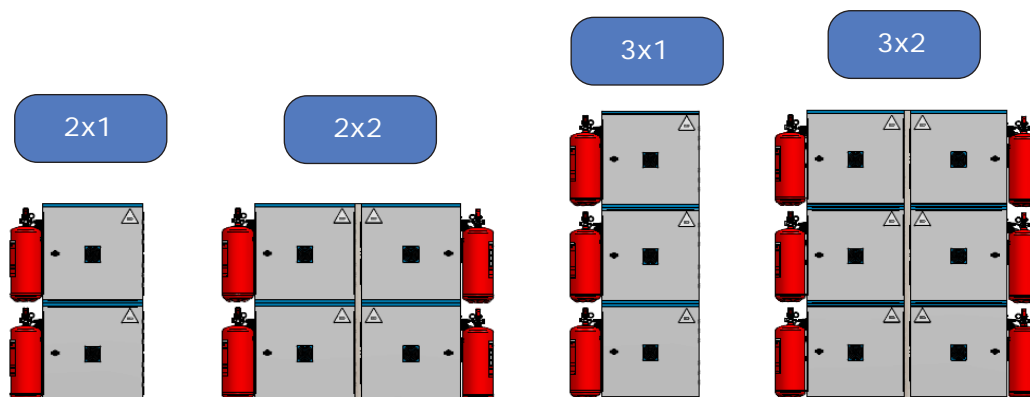
1. The housing must be placed flat on a sufficiently load-bearing surface
2. In case of smooth surfaces, a non-slip mat may need to be laid underneath
3. Check the position of the housing by means of a spirit level and align it if necessary

**The door must not grind on the body when opening and closing.
The gap dimensions between the door and the body must be uniform.**

The version-dependent closure must be able to lock properly.

An impairment of the stability of the system when the doors are open is to be expected if the system has not been screwed to the structure.

4.4.2 Line-up options (height x width)



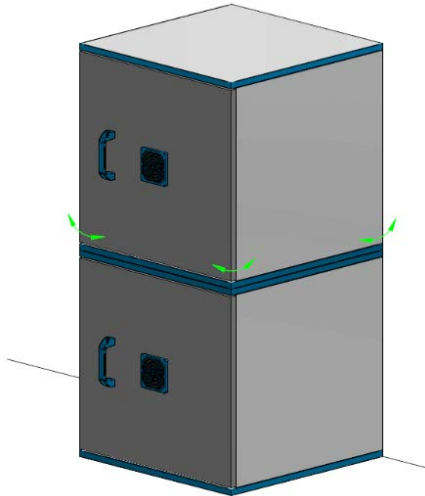
Example: QUBE® Basis Plus

If you require a larger line-up than 3x2, please contact our customer service.

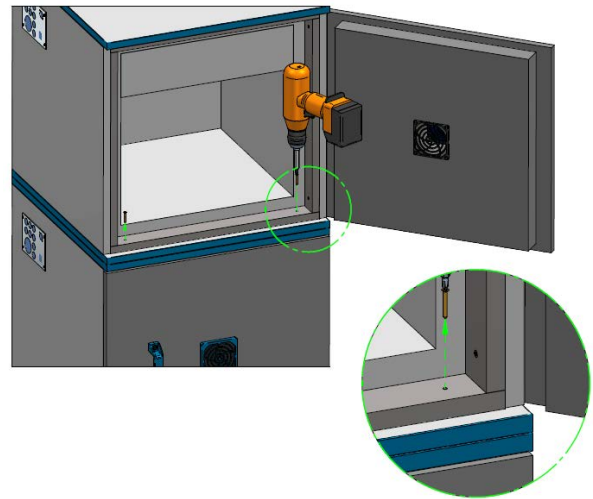
4.4.3 Line-up vertically (optional)

4.4.3.1 Screw connections between the QUBE® safety cases

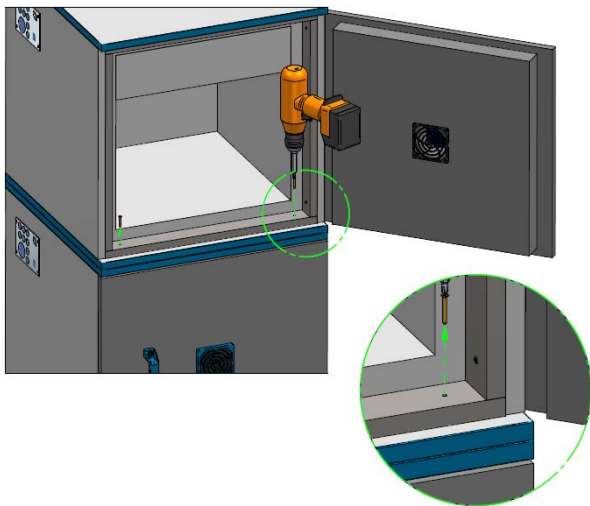
1. Align the QUBE® safety cases flush at the corners



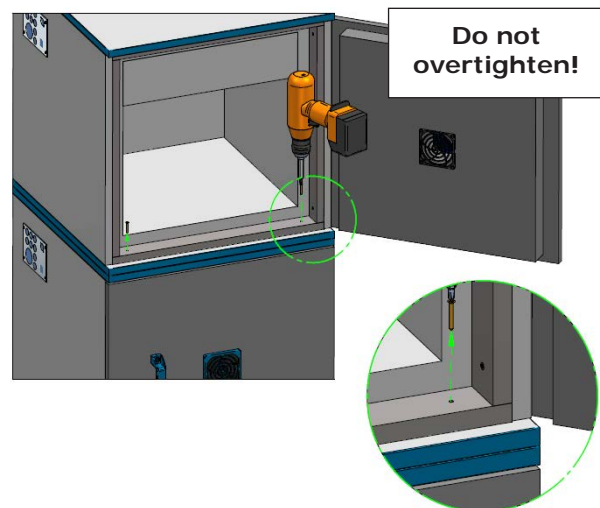
2. Remove each of the right and left screws from the lower strip of the enclosure opening of the upper safety case



3. Pre-drill through the existing screw holes with a 4 mm drill bit, 60 mm deep



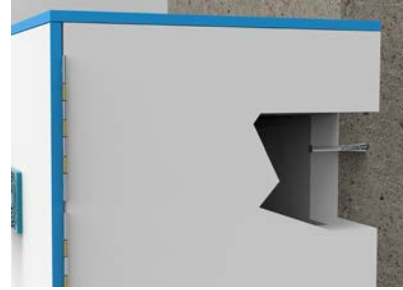
4. Remove the existing drill dust from the hole and screw the new fasteners (2 pieces 4,5 x 60 mm wood construction screws) into the drill holes



Repeat steps 1-4 for another line-up.

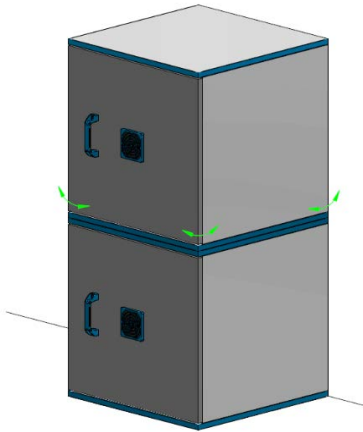
4.4.3.2 Back wall mounting / anti-tilt (optional)

Due to the reduced stability, a tilt protection is **mandatory** for each vertical line-up. The pre-drilled fixing holes in the rear panel must be provided at the manufacturer's work and can only be made subsequently by our authorised service personnel. We therefore recommend specifying this **in advance** in the ordering process.



1. Check the accessories for completeness

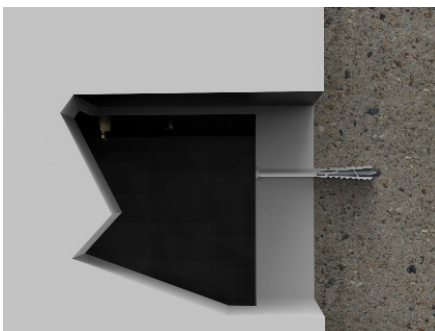
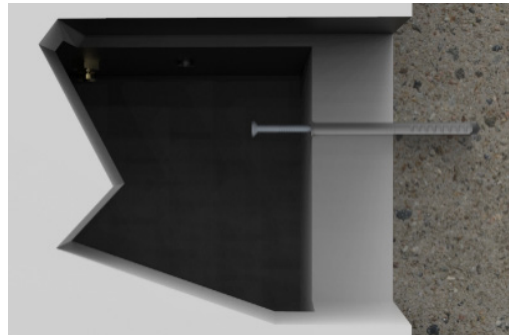
- Pre-drilled fixing holes in the back wall of the enclosure



2. Align the safety case vertically on the wall and drill through the pre-drilled fastening holes in the rear panel. Do not drill into/through the rear panel of the enclosure!
Caution: Danger of breakage!

3. The exact drilling depth depends on the dowel length and is to be determined as follows:

- Required drilling depth =
dowel length (135 mm) - panel thickness (68 mm) + 10 mm
- minimum anchoring depth of the provided dowels: 50 mm
- drilling diameter: 10 mm



4. Remove the drill dust from the drill hole. Hammer in the dowel with the screw up to the drill hole opening (push-through installation), tighten the screw with a suitable wrench/screw driver/cordless screwdriver until the screw head is flush with the dowel that has been driven in.
Do not overtighten!
Do not countersink the screw head into the material!

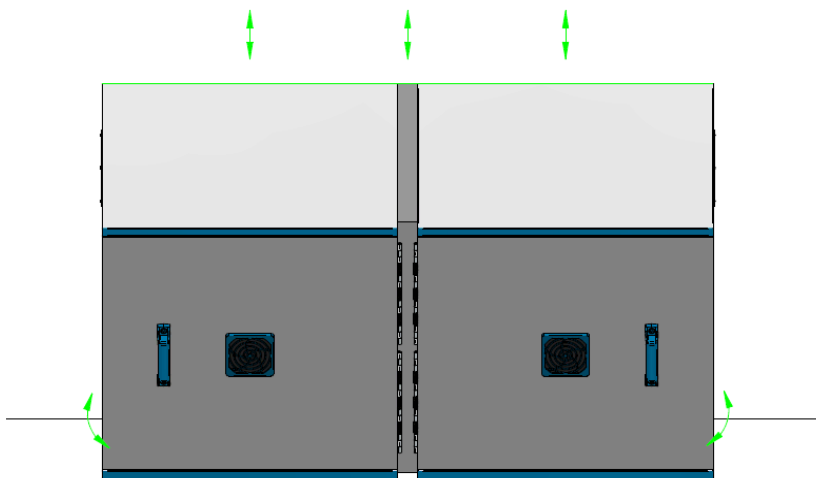
Wall surfaces must be level and plumb. Unevenness on the wall surface (gaps/sinkings/curvatures) of more than 5.0 mm must be evened out with the fire protection putty (Crystal Cel) so that the properties of fire protection are guaranteed.

4.4.4 Line-up horizontally (optional)

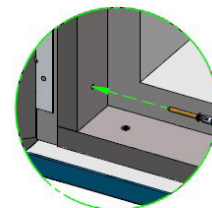
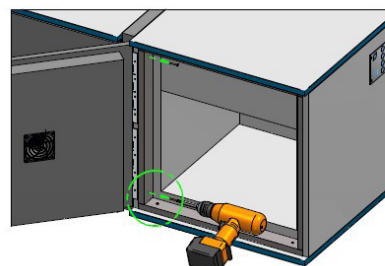
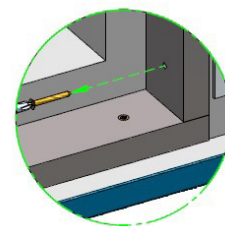
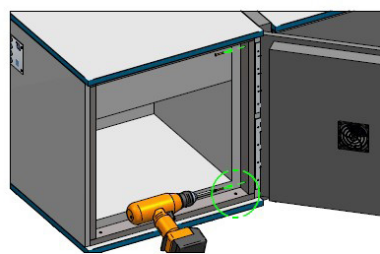
4.4.4.1 Screw connections between the QUBE® safety cases



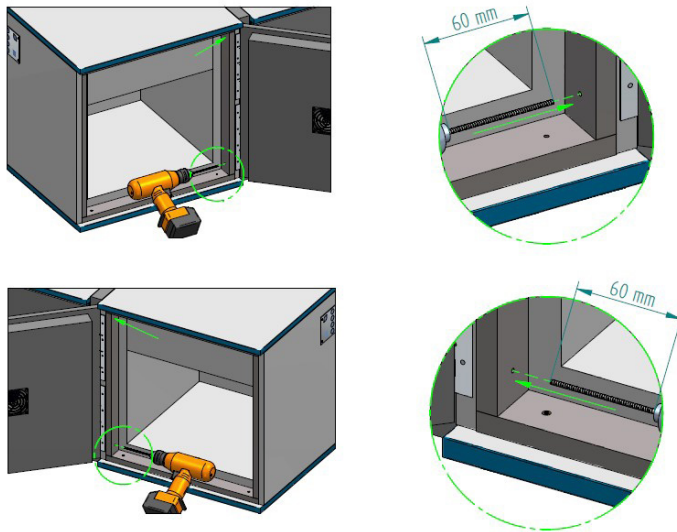
1. Align the two QUBE® safety cases and the 41 mm fire protection panel flush with the rear panel



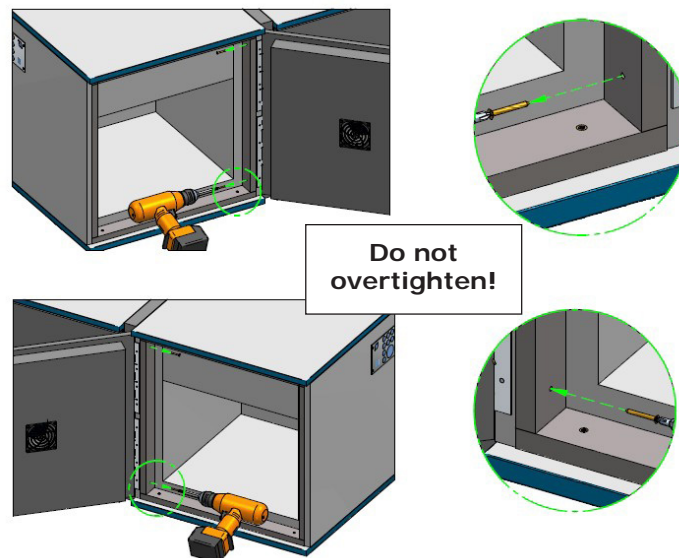
2. Remove the upper and lower screw from the right strip of the left safety case as well as the upper and lower screw from the left strip of the right safety case



3. Pre-drill the existing fixing holes with a 4mm drill bit, 60 mm deep



4. Remove the existing drill dust from the hole and screw the fasteners (2 x 2 pieces 4.5 x 60 mm wood construction screws) into the drilled holes



Since horizontal line-up is usually requested in combination with vertical line-up, point 4.4.3 must also be considered in the next step.

4.5 Electrical installations (optional)

The electrical installation may only be carried out by a qualified specialist with electrotechnical training or further training who is familiar with the corresponding regulations and possible dangers. Improper installation can damage both the product and all other connected devices.



CAUTION! Any work on the safety case must only be carried out in the de-energized state! If the power plug is available - be sure to remove it from the socket! Observe the following five safety rules!

4.5.1 Connection of the potential-free signaling contact (optional)

If the forwarding of an error message to a higher-level control center or fire alarm center is desired, this must already be taken into account in the ordering process. A subsequent installation is only possible by our authorised service personnel.

For the closing contact, please use the labelled wires 1 (Co) & 3 (NO) and for the opening contact, the labelled wires 1 (CO) & 2 (NC) of the control line. The maximum connected load can be found under point 2 "Technical specifications". Please note that you may need to secure this contact with a connected load in order to avoid damage to the relay contact, the sheath line, etc.



The contact that remains unobstructed must be clamped potential-free!

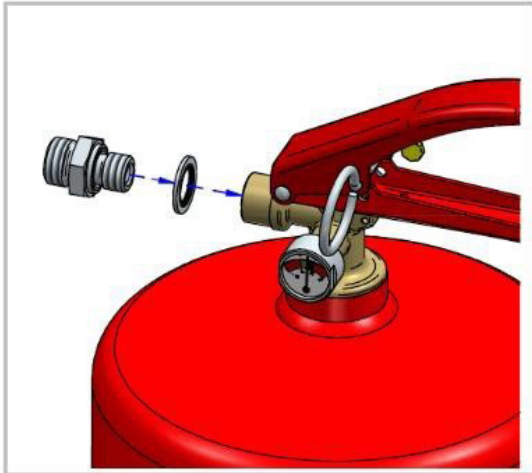
4.5.2 Connection of the Wiegand interface (Premium / optional)

The interface for integration into the building access management system is only possible in combination with the QUBE® Premium variant and must be provided at the factory. A subsequent installation is only possible by our authorised service personnel.

When connecting, it must be ensured that the numbered conductor 1 is provided for the data line 1 (Data1), the conductor 2 is provided for the data line 2 (Data2) and the conductor 3 is provided for the ground line (GND).

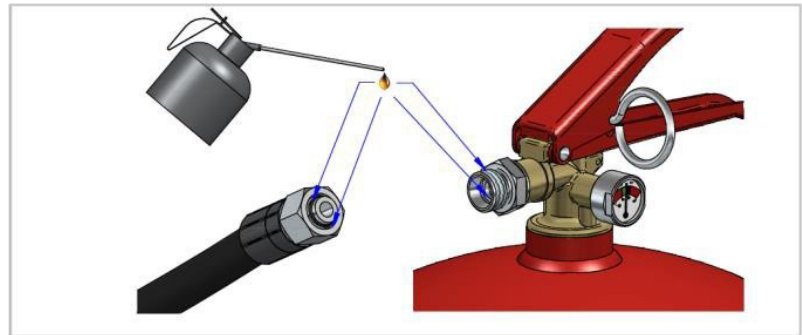
Data1	1
Data2	2
Data3	3

4.6 System commissioning of extinguishing system



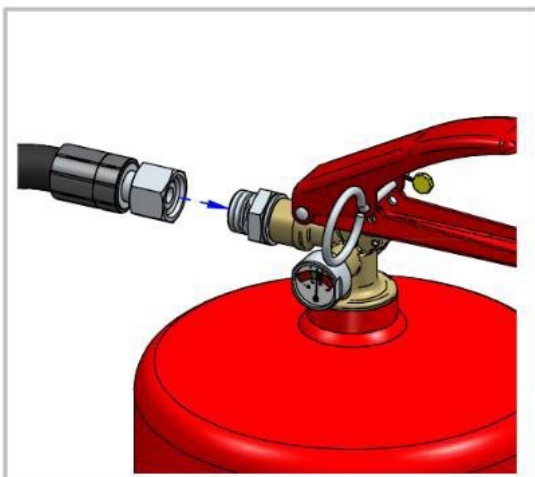
1. Screw hose adapter including sealing ring into extinguishing medium tank and tighten (30 Nm)

2. Lightly oil the thread and cone of the hose adapter, as well as the thread and sealing cone of the connecting hose

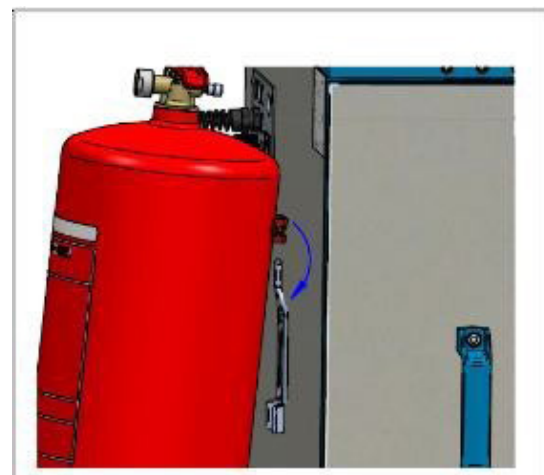


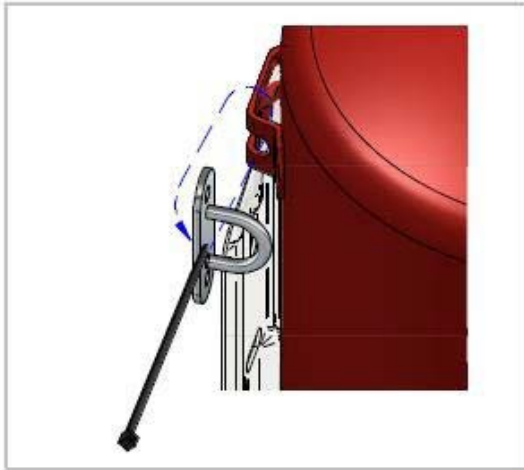
3. Screw the union nut of the connecting hose onto the hose adapter until the force increases noticeably.

Then tighten with a key with max. $\frac{1}{4}$ rotation.



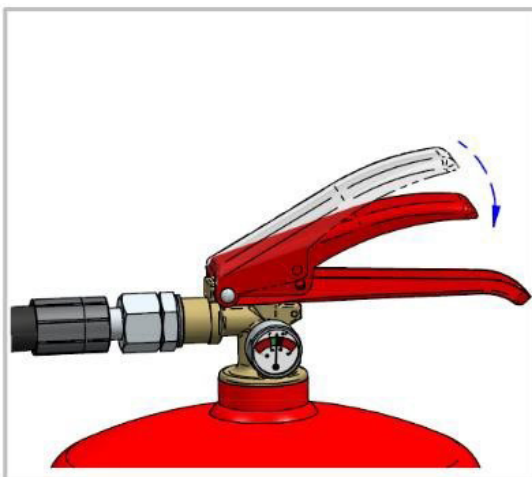
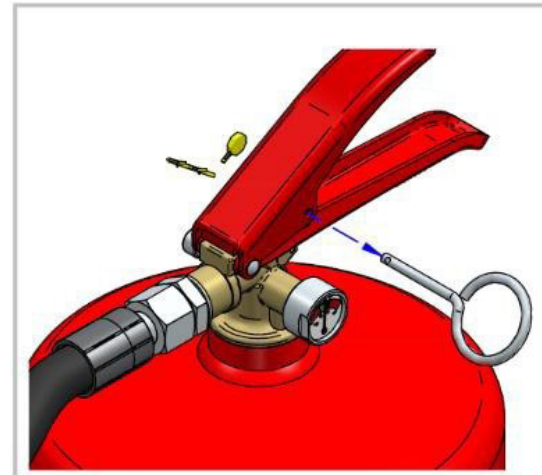
4. Hang extinguishing medium tank in wall bracket



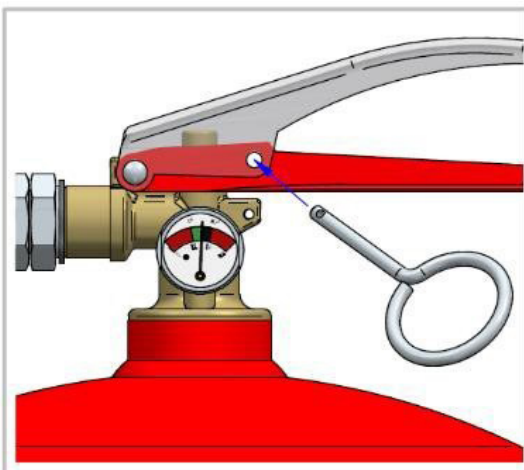


5. Attach the extinguishing medium tank to the intended retaining bracket with a cable tie

6. Pulling the safety pin of the lever fitting

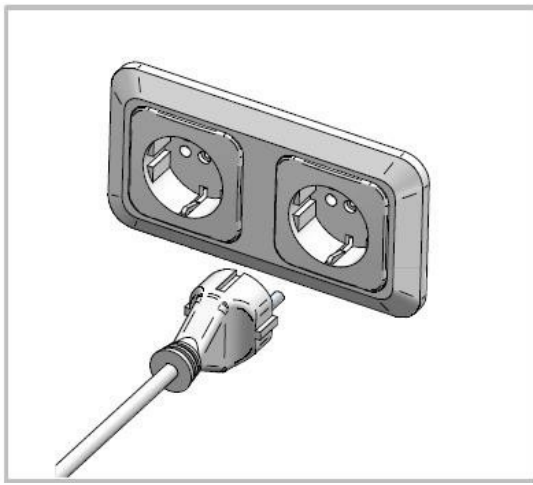
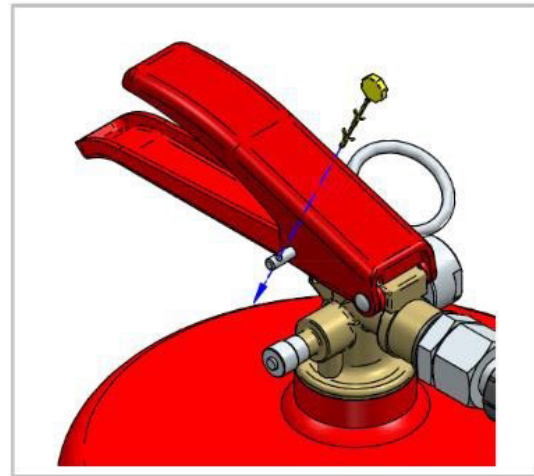


7. Actuate lever armature
---> **Extinguishing system is now under pressure!**



8. Insert the locking pin in the pressurized position of the lever armature

9. Lock the locking pin using the plug-in seal



10. Insert the power plug into the socket

Before use, it is advisable to subject the safety case to a detailed visual inspection. Please use our checklist in Appendix A.

5. Settings

5.1 Card reader with keyboard (QUBE® Premium)

5.1.1 Set Administration Password (QUBE® Premium)

Enable programming mode	* Administrator code # 999999 is the factory administrator code
Exit Programming Mode	*
Changing the administrator codes	0 New code # New code # The administrator code must be 6 to 8 digits

Note:

In order to perform the following programming, the administrator must be logged in using the administrator code.

5.1.2 Set authentication mode (QUBE® Premium)

Setting the operation mode: Cards Cards and PIN Cards or PIN	3 0 # Authentication by card only 3 1 # Authentication by card and PIN 3 2 # Authentication by card or PIN (default)
--	---

5.1.3 Add / change / delete user (QUBE® Premium)

<p>Adding a PIN-user</p>	<p>1 User ID number # PIN # The ID number is any number between 1 and 2000. The PIN is any number between 0000 and 9999 (except 1234). Users can be added continuously without leaving the programming mode.</p>
<p>Deleting a PIN-user</p>	<p>2 User ID number # Users can be added continuously without leaving the programming mode.</p>
<p>Changing the PIN of a PIN-user (This must be implemented outside the programming mode')</p>	<p>* ID number # Old PIN # New PIN # New PIN #</p>
<p>Adding a Card-user (Method 1) This is the fastest way to add cards, user ID numbers are generated automatically.</p>	<p>1 Read card # Cards can be added continuously without leaving the programming mode.</p>
<p>Adding a Card-user (Method 2) This alternative method allows cards to be assigned specific IDs. Only one card can be assigned to a user</p>	<p>1 ID number # Read card # Cards can be added continuously without leaving the programming mode.</p>
<p>Adding a Card-user (Method 3) The card number is the last 8 digits printed on the card. Users can be added continuously without leaving the programming mode.</p>	<p>1 Card number # Users can be added continuously without leaving the programming mode.</p>
<p>Adding a Card-user (Method 4) This alternative method allows cards to be assigned specific IDs. Only one card can be assigned to a user</p>	<p>1 ID Number # Card number # Users can be added continuously without leaving the programming mode.</p>
<p>Deleting a Card-user per card</p>	<p>2 Read card # Users can be deleted continuously without leaving the programming mode</p>
<p>Deleting a Card-user per user ID This option can be used if a user has lost their card</p>	<p>2 User ID #</p>
<p>Deleting a Card-user per card number. This option can be used if the user wants to make a change but the card has been lost</p>	<p>2 Card number # Users can be deleted continuously without leaving the programming mode</p>
<p>Adding a card and a PIN in card- and PIN-mode (3 1 #)</p>	
<p>Adding a Card- and a PIN-user. The PIN is any number between 0000 and 9999 (except 1234)</p>	<p>Add the card the same way as for a Card-user Press * to exit the programming mode. Then assign a PIN to the card as follows: * Read card 1234 # PIN # PIN #</p>
<p>Changing the PIN in card- and PIN-mode (Method 1) Note: done outside of programming mode so that the user can make the change himself</p>	<p>* Read card Old PIN # New PIN # New PIN #</p>
<p>Changing the PIN in card- and PIN-mode (Method 2) Note: done outside of programming mode so that the user can make the change himself</p>	<p>* ID number # Old PIN # New PIN # New PIN #</p>

To delete a card- and PIN-user , only the card needs to be deleted	2 User ID #
Adding a Card-user in map mode (3 0 #)	
Adding and deleting a Card-user	The procedure is the same as in adding and deleting in mode 3 2 #
Delete all users	
Delete all users Attention! Can not be reverted	2 0000 #

5.1.4 Opening the closure unit (QUBE® Premium)

As a PIN-user	PIN #
As a Card-user	Read card
As a Card- and PIN-user	Read card PIN #

5.1.5 Set unlock duration (QUBE® Premium)

Setting the activation duration	* Administrator code # 4 0~99 # * 0-99 for setting the activation time between 0-99 s
---------------------------------	--

5.1.6 Define reactions to incorrect operation (QUBE® Premium)

Response to erroneous operation If 10 unauthorized cards are read within 10 minutes or 10 incorrect PINs are entered, the keypad is deactivated for 10 minutes or the acoustic signal is activated for 10 minutes, depending on the option selected below.	
Normal operation: No deactivation of the keypad	7 0 # (factory setting)
Keyboard panel deactivation	7 1 #
Activate acoustic signal	7 2 #

6. Maintenance & Servicing

6.1 General information

The safety inspections, the small-scale repair services of the fire protection systems and the mandatory biannual visual inspection must be carried out by participants of the Celsion maintenance training or employees of Celsion Fire Protection Systems GmbH on the basis of the required expertise and due diligence requirements.

For external cleaning of the system, common, mild household cleaners can be used.

Only original spare parts may be used for maintenance and repair work.

Remove all chargers and batteries from the QUBE® safety case for the time of maintenance & servicing.

6.2 Maintenance schedule

Maintenance point	Time interval	Performed by
visual inspection using the checklist (Appendix A)	every 6 months	Owner / Celsion authorised customer service
Functional check EN 54-7 smoke detector (if available)	every 12 months	Attendee maintenance training /Celsion authorised customer service
Maintenance of extinguishing medium tank	at least every 2 years *	by Celsion authorised customer service

Replacement of connecting hose and sealing ring	every 6 years	by Celsion authorised customer service
Function control extinguishing system	every 6 years	by Celsion authorised customer service
Replacement of EN 54-7 smoke detector (if available)	every 8 years	Attendee maintenance training /Celsion authorised customer service
Extinguishing medium tank replacement	every 20 years	User

* Depending on the maintenance schedule of the extinguishing medium tank, the legal requirements on site and the maintenance certificate on the extinguishing medium tank.

Additional notes on the maintenance schedule:

In commercial use, an inspection as a transportable or movable electrical equipment is required. With regular and careful maintenance, a operating life of more than 30 years is possible.

6.3 Visual inspection

A regular check is important in order to be able to detect any damage or wear at an early stage and must therefore be carried out at least **twice a year**. Please use our checklist in Appendix A.

6.4 Extinguishing medium tank

6.4.1 General notes

Opening and maintenance measures only by experts (by customer services specifically authorised by Celsion).



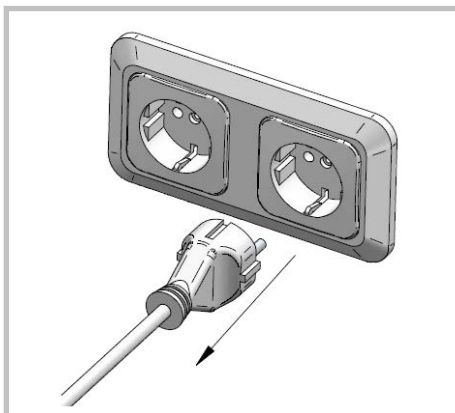
The maintenance instructions of the company Celsion, which are valid in each case, apply to the maintenance.

An exchange of the extinguishing medium tank is only possible in consultation with Celsion Brandschutzsysteme GmbH. The use of unauthorized extinguishing medium tank may result in a malfunction of the safety case!

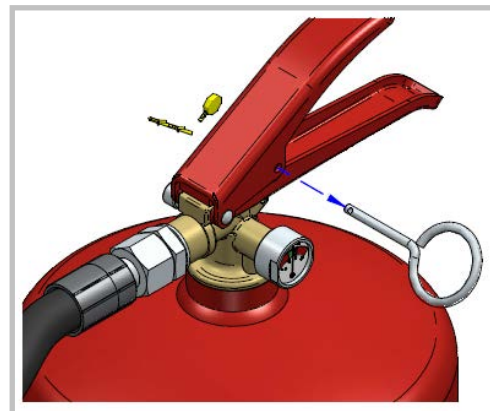
6.4.2 Preparation for maintenance instructions / Important information for the maintenance service

To start with the standardised maintenance measures, proceed as follows:

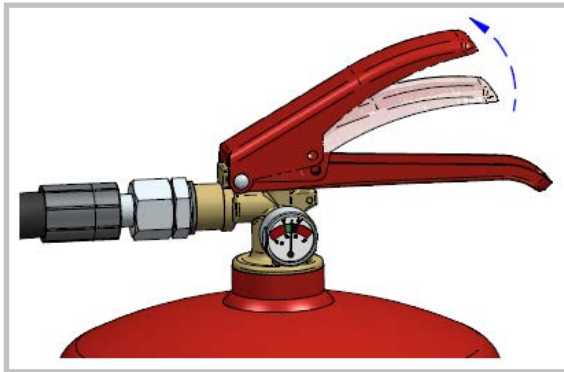
1. Remove the main plug from the QUBE® safety case



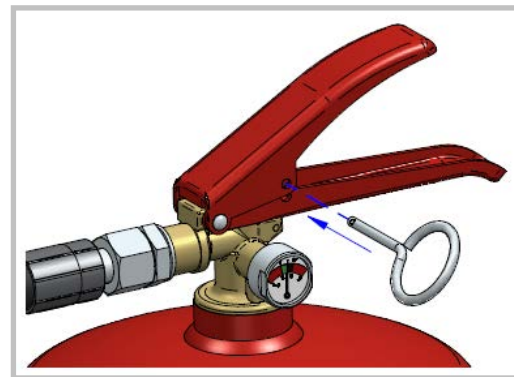
2. Remove the lead seal and pull the securing pin out of the squeeze-grip valve



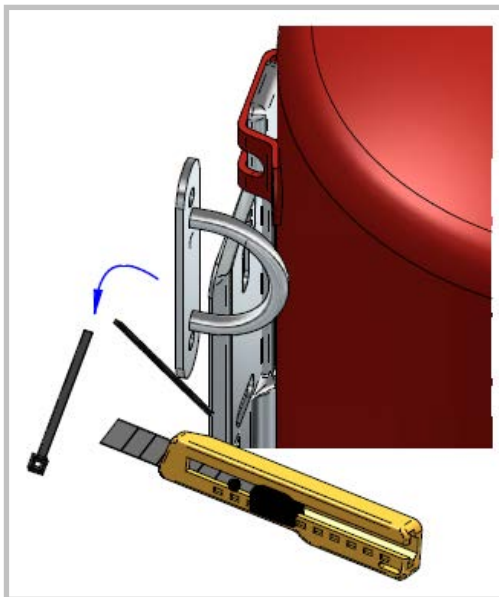
3. Relieve the squeeze-grip valve
---> extinguishing system is now
depressurised



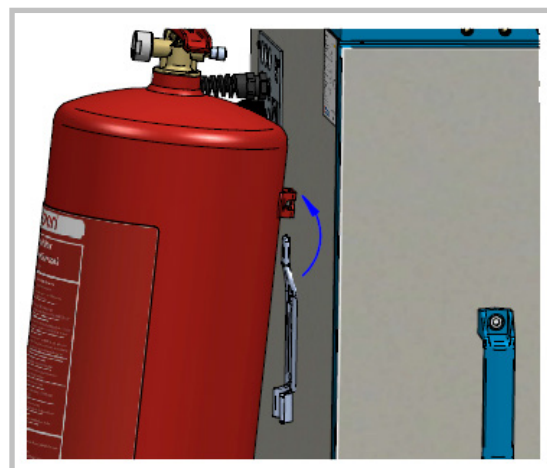
4. With the securing pin lock the
squeeze-grip valve in the
depressurised position



5. Remove the cable tie



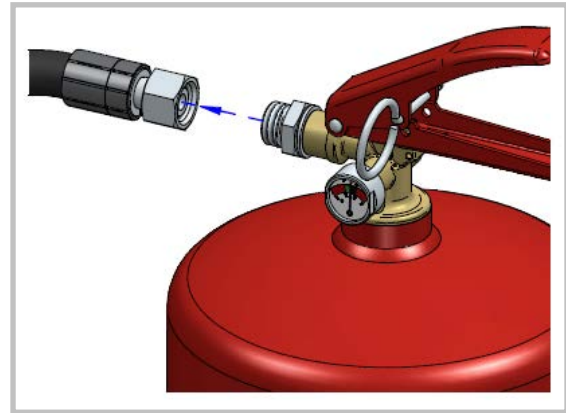
6. Unhook the extinguishing medium
tank from the wall bracket



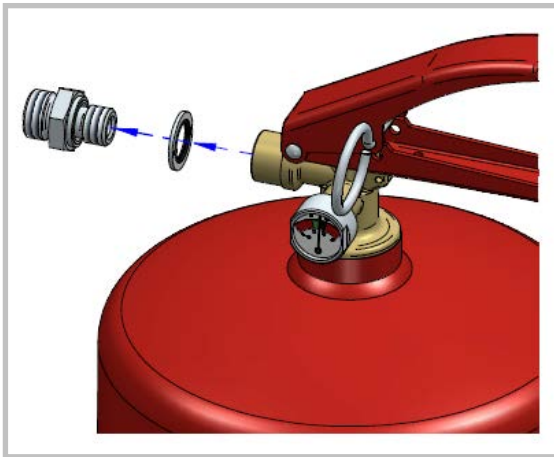
7. Attention! A small amount of liquid will leak out in the next step



8. Unscrew the coupling nut of the connection tube



9. Unscrew the tube adapter and seal ring



10. The scheduled maintenance of the extinguishing medium tank can begin

Ready for
maintenance!

6.5 Smoke detector (optional)

6.5.1 Functional test (optional)

Prior to the functional test of the smoke detector, the extinguishing system must be depressurised!



1. Remove the plug seal and pull the locking pin out of the lever fitting
2. Relieve lever armature → extinguishing system is now depressurised
3. Lock the safety pin of the lever armature in the depressurised position
4. Attention! In the next step, some liquid will leak out of the extinguishing nozzle → please collect accordingly
5. Trigger the smoke detector accordingly to the instructions of the smoke detector test spray
6. If the red LED of the smoke detector (and in case of the QUBE® Premium the red LED in the front) lights up, the functionality is given

6.5.2 Resetting the smoke detector (optional)

1. Turn the smoke detector counterclockwise out of the smoke detector base
2. Wait for about 1 minute
3. Turn the smoke detector clockwise into the base
4. If the LED of the smoke detector is missing, you can carry out the commissioning as described in point 4.6

6.5.3 Replacing the smoke detector (optional)

1. Turn the old smoke detector anti-clockwise out of the base
2. Turn the new smoke detector clockwise into the base
3. Then perform a functional test as described in point 6.5.1 and reset it according to 6.5.2

6.6 Replacement of connecting hose

The connection hose is only available through the authorised customer service. Please contact us in this case.

6.7 Functional check of extinguishing system

The function control of the extinguishing system is only available through the authorised customer service. Please contact us in this case.

7. Possible Errors

7.1 General indications

The instructions for troubleshooting errors refer exclusively to operation after proper assembly/handling. The word error message refers to an acoustic and/or optical evaluation of the error message (for example by an LED, a superordinate control center or a fire alarm center).

Since various operating elements were deliberately omitted during the development of the QUBE® safety case, general user errors are almost impossible. For this reason, it is imperative to consult qualified personnel with electrotechnical training or further training in the event of a malfunction. Use the questions in point 7.5 to narrow down a possible error or to correct it immediately.

CAUTION! Any work on the safety case must only be carried out in the de-energised state! If the power plug is available - be sure to remove it from the socket! Observe the following five safety rules!



7.2 Optical and acoustic signals (QUBE® Premium)

7.2.1 QUBE® LED indicator lights (QUBE® Premium)

Operating status	Green LED	Yellow LED	Red LED
Ready for operation	lights up	-	-
Door opened	-	lights up	-
critical temperature reached -> Deletion active (see point 7.4.3)	-	-	lights up

7.2.2 Card reader with keyboard (QUBE® Premium)

Operating status	Green LED	Yellow LED	Red LED	Beep-tone
Switching on the supply voltage	lights up	-	-	Di
Use of keyboard	-	-	-	Di
Input successful	lights up	-	-	Di
Input failed	-	-	-	Di Di Di
Enable programming mode	-	-	lights up	-
Programming mode is active	-	lights up	-	Di
Exit Programming Mode	-	-	lights up	Di
Door released	lights up	-	-	Di
Alarm	-	-	Quick Flash	Alarm

7.3 Leakes

7.3.1 Liquid leakage at the lower door rebate

→ **Attention! Water leakage at the lower door rebate and a low pressure (display below half) on the pressure gauge of the extinguishing medium tank indicate a triggered extinguishing system. See point 7.4.**



7.3.2 Leakage on the extinguishing medium tank / connecting hose

- Was the hose connection properly connected during the last commissioning?
- Is there a sealing ring between the extinguishing medium tank and the hose adapter?
- Other leakages

→ For all other leaks, please depressurise the system as described in point 6.4.2 and contact our customer service

7.4 Action recommendation when the extinguishing system is triggered

7.4.1 Functional principle in case of an event

▷ The temperature in the safety case rises to over 50 °C

We guarantee the earliest possible detection only in conjunction with a smoke detector according to EN54-7, which detects even the smallest smoke particles of a fire. (optional)

▷ Deletion system is activated

- o Signaling via red LED (QUBE® Premium)
- o Opening in case of an incident is prevented by the locked closure system (QUBE® Premium)
- o The socket strip is de-energised
- o Existing flames are extinguished and reactive battery cells are cooled down
- o Forwarding to a higher-level control center or a fire alarm center (optional)

▷ Ventilation system is automatically closed

7.4.2 Characteristics

- ▷ Pop and hiss sounds from the safety case
- ▷ Unusual or combustion-typical odors
- ▷ Liquid leakage at the lower door rebate

- ▷ Decreasing or low pressure display on the pressure gauge of the extinguishing medium tank, insofar as no leaks can be detected on the hose/pressure container
- ▷ Red LED lights up (QUBE® Premium)
- ▷ Superior position detects heat and/or smoke development in the housing (optional)

7.4.3 Incident

- ▷ Upon arrival of one or more of the mentioned features in point 7.4.12 please inform the fire department/control center immediately
 - For the fastest possible intervention of trained rescue workers, we recommend the use of the potential-free signaling contact

- ▷ **Unprotected persons and persons not required for security purposes must leave the danger zone**



- ▷ If possible, provide fresh air, people should leave the room as soon as possible and close the door

7.4.4 Measures after deletion process

- ▷ **No measures should be taken that are associated with the personal risk of self-hazard or that have not been sufficiently practiced**



- ▷ **The enclosure is only opened by authorised specialist or the fire brigade**

- ▷ The following equipment is required for opening:

- o Key (QUBE® Basis Plus), fire brigade triangular key (QUBE® Premium) and, if necessary, a lifting iron
- o Protective equipment (protective clothing, respirator, etc.)
- o Thermal imaging camera
- o Water fire extinguisher or water extinguishing device

- ▷ Before opening the housing, wait about 30 minutes after the extinguishing process

- ▷ In case of renewed banging and hissing noises, the time is extended by another 30 minutes

- ▷ Disconnect the safety case from the power supply

- ▷ **The stored contents must be permanently checked for fire, smoke, and above all, temperature during opening**

- ▷ **A permanent cooling of the stored contents is to be ensured**

7.5 No voltage on the socket (charger does not charge) / Card reader without function (QUBE® Premium) / LED indicator lights without function (QUBE® Premium)

- Is the power plug of the safety case in the socket that is provided for this purpose?

→ If not, please plug in the power plug

- Is the power cord of the safety case possibly damaged?

→ If yes, contact customer service

- Has the circuit breaker of the Schuko socket triggered?
 - Before switching on again, the search for a possible reason for triggering by a specialist with electrotechnical training or further training is absolutely necessary. Please also use the enclosed user instructions of the circuit breaker. In addition, make a visual inspection for damage to all components of the safety case. Proceed as described in Appendix A.
 - Battery charger defective?
- If all previous points can be excluded, a device fuse may have triggered
 - Please contact customer service

8. Manufacturing Declaration

The data used in this manual can be changed at any time by the manufacturer (Celsion Brandschutzsysteme GmbH) without prior notice or mentioning of reasons. This manual has been prepared with great care, the content has been prepared to the best of our knowledge. Errors cannot be ruled out and improvements are possible.

We assume no liability for the conformity of the content with the applicable legal regulations.

The copyright to this operating manual as well as all rights in the event of a patent grant or utility model registration remain with the manufacturer.

9. Disclaimer of Liability

From the date of publication of this manual, all previous editions will become invalid. This user manual and the descriptions contained therein as well as technical notes and explanations have been compiled by us with great care. Nevertheless, we cannot accept liability for typographical and printing errors, technical changes to the products or our ability to deliver during the term of this manual. Illustrations and descriptions do not under any circumstances represent guaranteed properties. All listed measurements are nominal dimensions. Size deviations can be in the tolerance range of + / - 3mm.

10. Customer Responsibility

The customer is responsible for the technically correct use according to the regulations of his own products. Important information can also be found in the available technical documentation. Furthermore, project-related expert opinions may be required in certain models. In case of doubt, we are happy to advise you.

Celsion Brandschutzsysteme GmbH
Dresdener Straße 51
D-02625 Bautzen
Germany

Phone: +49 (0) 3591 - 270 78 - 0
Fax: +49 (0) 3591 - 270 78 - 19
Email: office@celsion.de
Webseite: www.celsion.de

Current information and notes as well as the general terms and conditions can be found on our website: www.celsion.de

Printing errors and mistakes cannot be ruled out. If in doubt, please get in touch with us.



If you have any problems, please contact our customer service at +49 (0) 3591 / 270 78 - 0

You can reach us from Monday – Thursday 8:00 a.m. – 4:30 p.m and Friday 08:00 a.m. – 02:00 p.m.

11. Appendix

11.1 Visual inspection checklist

In general		
1	Is the installation site chosen in such a way that the fire protection requirements can be met?	
2	Is there an opening agent? (Basic Plus/Premium)	
3	Temperature in the installation room ≤ 40 °C?	
4	Temp. in fire protection housing approx. 2/3 height during charging ≤ 40 °C?	
5	Is the user manual still available?	
6	Is the nameplate affixed?	
Corpus		
1	Are the building boards undamaged? Is there no visible corrosion damage?	
2	Are all screws set?	
3	Is the handle firmly mounted?	
4	Are no gap dimensions ≥ 1 mm between the building boards visible?	
5	Are the gap dimensions between the door and the corpus even?	
6	Door not dragging on the corpus?	
7	Does the lock/locking system close and lock? → The hinges of the door can be lubricated with graphite.	
8	Is the holder of the extinguishing medium tank still firmly mounted and does not show any damage?	
9	Can no signs of moisture be detected on the inner and outer corpus?	

10	Does the smoke detector, if available, show any damage?	
11	Is the smoke detector, if available, still firmly attached to the build plate?	
Seals		
1	Is the door closed tightly?	
2	Is the door closed tightly enough to keep dirt out?	
3	Is the all-round silver tape on the door undamaged?	
4	Is the flexible seal around the door in perfect condition? Function check! If necessary, fix or replace.	
Ventilation system		
1	Is the automatically closing ventilation opening open and undamaged?	
2	Is the black filter mat still functional?	
Cable partition, hose and conduction		
1	Is the cable partition in perfect condition?	
2	Are there no deformations or discolourations on the power plug?	
3	Is the kink protection of the cable still intact?	
4	Are there no leaks on the hose?	
5	Are there no deformations or damage to the hose and the hose connection?	
6	Is the press fitting firmly seated on the hose?	
7	Are the hose/conduction firmly attached to the fittings?	
8	Can no mechanical damage to the rubber sheath of the hose/conduction be seen or felt?	
9	Are there no signs of ageing (brittle, flaking) on the rubber sheath of the hose/conduction?	
10	Are there no permanent deformations (e.g. due to a kink) in the hose/in the conduction?	
11	Is the pressure indicator of the extinguishing medium tank still in the green range (12-18 bar)?	
Bottom pan		
→ For assessment, the bottom pan must be removed from the housing and checked from all sides!		
1	Does the bottom pan have any damage/defects, such as rust, deformations, leakage holes?	
2	Is there liquid in the bottom pan?	

Notes

Notes

User manual

Version: 09 / 2023

Current notes due to the adjustment of the MBO partially taken into account



Brandschutzsysteme GmbH

Dresden - headquarters

Cäcilienstraße 5
D-01219 Dresden
T: +49 (0) 351 / 272046 – 0
F: +49 (0) 351 / 272046 – 29
Email: dresden@celsion.de

Bautzen - administration (Visitor and delivery address)

Dresdener Straße 51
D-02625 Bautzen
T: +49 (0) 3591 / 27078 – 0
F: +49 (0) 3591 / 27078 – 19
Email: office@celsion.de

Mainz - technical office

Am Weinkastell 16
D-55270 Klein-Winternheim
T: +49 (0) 3591 / 27078 – 0
F: +49 (0) 3591 / 27078 – 19
Email: vertrieb@celsion.de

Berlin - technical office

Brunnenstraße 156
D-10115 Berlin
T: +49 (0) 3591 / 27078 – 0
F: +49 (0) 3591 / 27078 – 19
Email: vertrieb@celsion.de

Munich - technical office

Ohmstraße 3, 2. OG
D-85716 Unterschleißheim
T: +49 (0) 89 / 720577 – 20
F: +49 (0) 89 / 720577 – 22
Email: muenchen@celsion.de

www.celsion.de

