

**CHEMISAFE®**  
SAFETY STORAGE CABINETS

# LITHIUMSAFE

Safety storage cabinet for  
LITHIUM BATTERIES



## CERTIFIED QUALITY

### FIRE RESISTANCE

EN14470 (Type 90) & EN16121

## ACTIVE STORAGE

### Li-ion BATTERIES RECHARGING

Standard E F G

## SAFETY DOORS

### AUTHOMATIC CLOSING

at temperature of 47°

# DEARCUS TO MERDEARCUS



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# DEAR CUSTOMER,

We are pleased to present our new catalogue of safety cabinets for the storage of chemicals in industries, laboratories or communities. We hope that this tool will facilitate your search and the suitable choice of our products.

CHEMISAFE products comply with the highest European standards and they guarantee you quality and safety without compromise:

- **EN14470-1** for storage cabinets of inflammable liquids and lithium batteries
- **EN14470-2** for storage cabinets of gas cylinders
- **NFX 15-211** for chemical hoods and recirculation filtering cabinets
- **EN16121** for all our cabinet program
- **EN61010** for storage safety cabinets of chemicals

Our factory, located near Venice in Italy, has obtained ISO 9001:2008 certification by Bureau Veritas. A continuous quality control of our production is ensured by a recognized and independent institute.

The marketing of CHEMISAFE products is ensured by a network of skilled and local partner distributors, which is always at your disposal. Our permanent technical and commercial support assesses your needs and recommends optimal solutions.

For your safety, choose quality!

**CHEMISAFE** is:

- The certainty of having an experienced manufacturer with you
- The assurance of a dedicated and professional team who will give you the best advice

Yours sincerely,  
CHEMISAFE

“  
FOR YOUR  
**SAFETY**  
CHOOSE  
**QUALITY**  
”



PROUDLY MADE IN ITALY

02

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# MAIN CHARACTERISTICS

- Made entirely of 1/1.5 mm thick cold-pressed sheet steel painted with anti-acid epoxy powder and then placed in a heat tunnel at 200 °C
- Special insulation consisting of high density fibre panels (ceramic fibre-free) for high temperatures (800 °C) and calcium sulphate panels
- Internal melamine laminate faced panels with high resistance to vapours, even aggressive ones
- Certified to new standard EN 14470-1 TYPE 90
- Height-adjustable feet



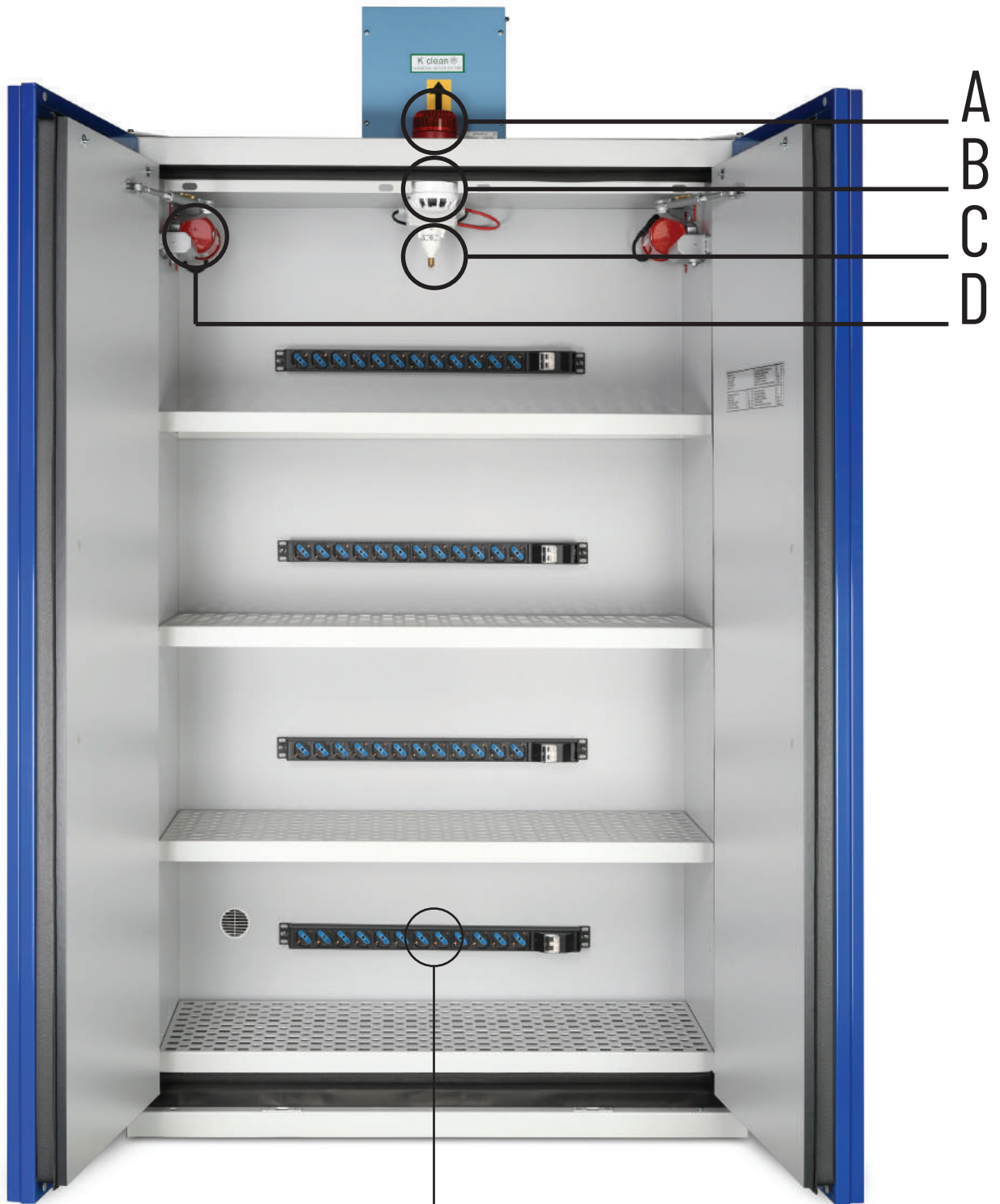


- 90 minute certified automatic closing valves (70 °C) for air inlet and outlet pipes, located on top and bottom of cabinet
- 100 mm dia. ventilation hole on roof of cabinet
- Anti-spark hinge which guarantees excellent door stability
- 3 cm thermo-expanding seal (DIN 4102)
- 3 perforated shelves, 1094 x 420 x 39 (H) mm
- Bottom sump (as requested in the standard EN14470)
- Earth terminal to prevent electrostatic discharge
- Paletized plinth for easy moving



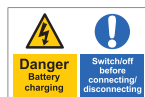
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# ACCESSORIES



Battery charging station. Available with 6/12 sockets with thermal protection. 220V/380V 16A or 32A (TYPE E, F, G)

06







A

**EXHAUST FAN  
FOR LI-ION  
BATTERIES VAPOURS.**



B

**SMOKE/FIRE DETECTOR  
ALARM WITH SMS  
CALL EMAIL**



C

**FIRE DETECTOR  
CONNECTED  
TO EXTINGUISHER.**



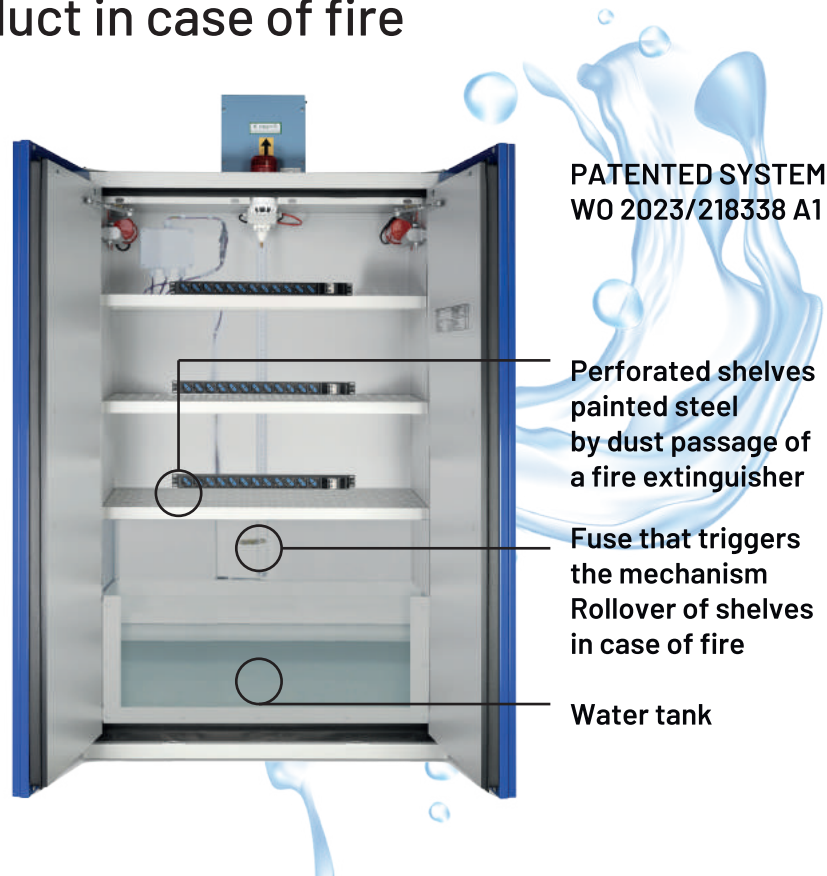
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**AUTHOMATIC FIRE  
EXTINGUISHER  
FOR LITHIUM**

07

# LITHIUMSAFE QUARANTINE

Safety cabinet patented for the storage of LITHIUM BATTERIES which quarantines the product in case of fire



PATENTED SYSTEM  
WO 2023/218338 A1

Perforated shelves  
painted steel  
by dust passage of  
a fire extinguisher

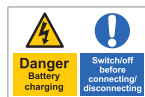
Fuse that triggers  
the mechanism  
Rollover of shelves  
in case of fire

Water tank

## WHAT HAPPENS IF THE FIRE IS INSIDE THE CABINET?

If the batteries catch fire, extinguishing the fire would be very difficult due to the chemical components inside that fuel the flames. Once the fire is extinguished, it could reignite autonomously. To overcome this obvious difficulty, we have developed and patented an automatic shelving system that holds the batteries stored in the cabinet, which will cause them to slide, in case of fire, into a tank placed at the base of the same. The stored batteries, which can be connected to charging docks, will also disconnect the main power outlet by falling due to gravity, completely cutting off the current. Inside the water tank, the batteries will be placed in a sort of quarantine that will not only definitively extinguish the fire but also exclude the possibility of new self-combustion.

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# NEW PATENTED QUARANTINE FIRE PROTECTION SYSTEM

The need to create this system arises from the great problem caused by the fire that lithium batteries can cause.

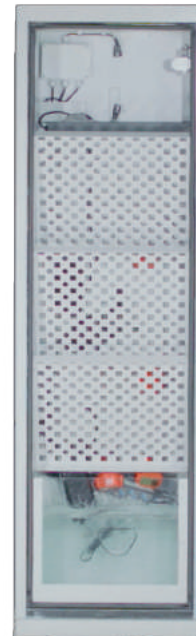
Our cabinets are certified according to the strictest European norms in terms of safety, in fact, in the event of a fire inside a building, they are fire resistant for 90 minutes (Type 90); the reference standard and EN14470-1.



01



02



03

01. In case of fire inside the safety cabinet.
02. Our patented system of automatic folding of the shelves that hold the batteries stored in the cabinet, will make them slide, in case of fire, inside a tank placed at the base of the same.
03. Inside the water tank the batteries will be put in a kind of quarantine that will not only extinguish the fire but also to exclude the possibility of new self combustion.

**WATCH THE VIDEO  
TO FIND OUT MORE.**



\*Patented security system applicable to cabinets with one or two doors.  
Possibility of having the cabinet open (without hinged doors).\*

09

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## 4GSENSOR



The LITHIUMSAFE 4G SENSOR is a smoke detector with communicating by 4G LPWAN (Low Power Wide Area Network).

The fire alarm is signaled by sound, flashing visual indicator and by sending an alarm to SMS, EMAIL, CALL with text to speech and MyFleet Web based platform. The device has a built-in temperature and humidity sensors. It is designed to be placed on a ceiling in a confined space, under normal conditions (no smoke, dust, condensed water vapor).

Stand-alone, Easy to use, Long life battery, Internal siren, SMS, MAIL, CALL text to speech for the alerts.

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## FBN

The automatic fire extinguishing system combines fire detection and controlled release of extinguishing agent to promptly respond to fires, reducing damages. Detection occurs through an integrated system that activates a condensed aerosol generator upon detecting a temperature increase (72°).

This generator releases a fine mist that rapidly depletes oxygen, interrupting combustion and limiting fire spread. This approach minimizes collateral damages, providing an efficient response to fires.



# CEGSM

## Power supply

- From 10.5V to 30V
- Internal backup lithium battery 1070 mAh

## Inputs

- Six input lines from 10.5V to 30V
- Polarity configurable via graphic interface

## Outputs

- Four relay output lines
- Interface programmable operating mode
- Polarity configurable via jumpers

## GSM / GPRS

- Dual band GSM900 / DCS1800Mhz
- GPRS Class 10
- Sensitivity -108dB
- Display
- 2.8 " TFT
- Resistive touch screen

## Dimensions of the plastic body without cable gland

- Height: 90 mm
- Width (closed): 147 mm
- Depth (closed): 36 mm

## Overall dimensions

- Height with antenna connector (not removable): 99 mm
- Height with supplied antenna (removable / replaceable): 143 mm
- Width when fully folded out (180 °): 288 mm
- Width when opened at 90 ° (minimum to be able to operate on the device): 164 mm



The CEGSM combinator is a device dedicated to the FIRE/SAFETY sector and remote automation. It is possible to create customized profiles for each of the entered numbers based on various needs. Thanks to a 2.8-inch LCD Touch-Screen display, it offers a graphical interface that simplifies and speeds up the installation procedure and makes it much easier to use even for the end user. The icons are similar to those of a common cell phone, allowing data entry in an intuitive and extremely simple way. The Report icon allows for exhaustive control of programmed settings. Furthermore, internet connection, achievable through a security procedure, makes the CEGSM fully manageable remotely, thus allowing the programming of the device from a distance, having the event log, or activating the outputs. The CEGSM constantly checks its operating status (signal level, power supply, correct internal operation) and is able to restart itself in fault situations without any external intervention. This guarantees a higher level of security. In the event of a lack of GSM signal, it is possible to program one of the outputs so that this inconvenience is reported.





# LITHIUM CABINETS

Safety storage cabinets lithium-ion batteries  
Certified EN14470-1 Type90 and EN16121.

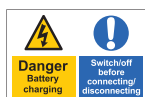
CODE	DESCRIPTION	DIMENSION	WEIGHT
CSF239BMY23D/L.Z	Safety cabinet for lithium batteries 1 right door	595x600x2050	210kg
CSF239BMY23S/L.Z	Safety cabinet for lithium batteries 1 left door	595x600x2050	210kg
CSF240BMY23D/L.Z	Safety cabinet for lithium batteries 1 right door	895x600x2050	280kg
CSF240BMY23S/L.Z	Safety cabinet for lithium batteries left door	895x600x2050	280kg
CSF232BMY23/L.Z	Safety cabinet for lithium batteries 2 doors	1200x600x2050	350kg
CSF706DMY23/L	Safety cabinet for lithium batteries 1 right door UNDER BENCH	590x520x720	80kg
CSF706SMY23/L	Safety cabinet for lithium batteries 1 right door UNDER BENCH	590x520x720	80kg
CSF711MY23/L	Safety cabinet for lithium batteries 2 doors UNDER BENCH	1090x520x720	135kg
CSF239BMY23D/L.Z Q60	Safety cabinet for lithium batteries 1 right door QUARANTINE SYSTEM	595x600x2050	210kg
CSF239BMY23S/L.Z Q60	Safety cabinet for lithium batteries 1 left door QUARANTINE SYSTEM	595x600x2050	210kg
CSF240BMY23D/L.Z Q90	Safety cabinet for lithium batteries 1 right door QUARANTINE SYSTEM	895x600x2050	280kg
CSF240BMY23S/L.Z Q90	Safety cabinet for lithium batteries 1 left door QUARANTINE SYSTEM	895x600x2050	280kg
CSF232BMY23/L.Z Q120	Safety cabinet for lithium batteries 2 doors QUARANTINE SYSTEM	1200x600x2050	350kg



# OPTIONAL

Essential accessories to equip cabinets and increase internal safety performance.

CODE	DESCRIPTION	DIMENSION
4GSENSOR	Smoke/fire detector alarm va sms call email	-
FBN	Authomatic fire extinguisher for lithium	-
FPC	Automatic extinguisher with control panel smoke temperature sensor rotating light for 60 90 120 lithium cabinets	-
LSSA	Automatic extinguisher for 60 90 120 lithium cabinets EN 15276:2019, ISO15779:2011, NFPA 2010 and Cistec	-
CEGSM	Gsm phone dialler for fire safety	-
RIP60LS	Perforated shelf for lithium 60	490x420x39
RIP90LS	Perforated shelf for lithium 90	695x420x39
RIP120LS	Perforated shelf for lithium 120	1090x420x39
RIPF60VL	Perforated shelf for lithium 60 ub	480x320x39
RIPF110VL	Perforated shelf for per lithium 110 ub	975x320x39
LS100	Pump to empty tank 600l/h 10w	-
LS101T	Algicideal additive for water	-



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**Zetalab.it**

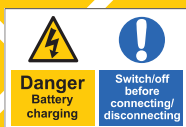
Distribuito da: **Zetalab s.r.l.**



[www.chemisafe.it](http://www.chemisafe.it)

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SAFETY STORAGE CABINETS

MADE IN ITALY



Febbraio 2024 - Ci riserviamo la facoltà di apportare modifiche tecniche senza preavviso, secondo l'evoluzione delle norme e della tecnologia.