EN 14470-1 Safety cabinets – Type 30 min for flammable products – Range 3030



Operating instructions

Summary

1. Presentation. Description / use Conformity Advantages Passive security Active security Options	Page 3
2. Installation Installation Settlement Ventilation Inner fittings	Page 5
3. Use Storage in the cabinet Decommissioning after a fire	Page 10
4. Maintenance Spare parts Checking for the user	Page 13
5. Technical data	Page 15

1. Présentation

Description / use:

Anti-fire safety cabinet for flammable products storage in laboratories, industries, schools, universities... in closed cans.

Conformity:

- Tested and approved according to EN 14470-1 (04/2004) and EN 1363-1 (06/2000).
- Large warning labels in compliance with ISO 3864, NF X08.003 and EN 14470-1 norms and the European directive 92/58/CEE.
- In compliance with the public health regulation articles R.5132-66 and R.5132-68 and with the National Institute of Research and Safety at work recommandations.

Advantages :

- In conformity with the strictest existing norm for safety cabinets: EN 14470-1.
- 30 minutes fire resistance according to the normalized heating curve ISO 834.
- Tested and approved by an independant European laboratory.
- Able to store all types of chemicals commonly used in laboratories and industries.
- Possibility to separate the dangerous products types in accordance with public health regulations and National Institute of Research and safety at work recommandations.
- Pedestal area under-driveable by a forlift by removing panel.

Passive security:

- Built with insulating panels that offer high resistance to chemicals.
- Light grey color RAL 7035.
- Markings by normalized labels.
- Earthing link.
- Adjustable retention shelves in height.
- Removable retention tank.

Active security:

- Air inlet and outlet diameter 100mm, with self-closing device in case of fire. Possibility to connect to an existing exhausting system or filtration boxes.
- Thermo expanding seals on the doors.
- Self closing system of the doors with automatic closing and key-lock.
- Possibility to let the doors open with self-closing system adjusted at 50°C.

Options :

- Additional retention shelf.
- ▲ Perforated cover plate for base trough (use to add a storage level).
- ▲ Extractable drawer.

2. Installation

Installation:

Please use jackscrew foot located under the cabinet to wedge it. To adjust it, remove the retention tank at the bottom, unstuck round stickers to reach holes allowing the regulation. Foot can be regulate with a square shank screwdriver. After regulation, please place again round stickers to hide holes.

Settlement:

The cabinet must be located, operated and maintained in order that the users are protected against fire and explosion risks in particular.

Doors:

Note: It is necessary to maintain the doors closed (§ 3.5. of EN 14470-1 norms)

The double doors can be opened by pulling the handle. The self closing system allows the doors to close automatically after each use, when the door fixing system is not clipped into position.

Door closing device:

The door closing device is settled in our factory to function correctly at room temperature according to the norm. The closing behaviour of the door closing device may be altered under extreme temperature variations.

If the safety cabinet is delivered in winter or summer, it may take up to 12 hours to reach room temperature.

Door arresting device:

The door arresting device allows the safety cabinet door(s) to be kept open as long as required. This will ensure that the cabinet can be safely loaded and emptied.

If the ambient temperature rises till +50°C, the door arresting device will release the opened door(s) which will then automatically close.

It is strictly forbidden to use any other system of door arresting device. If you don't use the cabinet during a long time, it is highly recommended to keep the door(s) closed.

Ventilation

Before to use cabinet, remove the red plug on inlet and outlet connecting pieces.

Connection to an exhausting system:

The inlet and outlet connections are located on the roof of this safety cabinet except for the

underbench cabinet where they are on the upper part of the back.

In order to discharge the fumes, it is necessary to connect the outlet located on the right when you are in front of the cabinet. The outlet is labelled with a green arrow mentioning the word "OUT". Opposite, the inlet is labelled with a red arrow indicating "IN".

Do not hesitate to contact our technical department for any information you could need concerning the connection of an exhausting system of ventilation.

Operation without a ventilation system::

The cabinet itself and 2,5metres in the perimeter (Zone 2), is considered as an possible explosion area. In this zone, no spark producing tool may be used and the use of naked flames and smoking are prohibited.

If you store corrosive products, it is imperative that you vent your cabinet.

Inner fittings

Standard inner fittings:

Reference	Retention shelf in steel	Base trough in steel	Perforated cover plate for base trough in steel	Retention shelf in PVC	Base trough in PVC
3031E		1	1		Ontion
M3031E	-	I	I	-	Option
3031U		1	1		Ontion
M3031U	-	I	I	-	Option
3032E		1	1		Ontion
M3032E	-	I	I	-	Option
3032U		1	4		Option
M3032U	-	I	1	-	Option
3032-900E		1	1		Ontion
M3032-900E	-	I	I	-	Option
3033E	2	1	Ontion	Ontion	Ontion
M3033E	Ζ	I	Option	Option	Option
3033U	1	1	Option	Ontion	Option
M3033U			Option	Option	Option
3033-900E	2	1	Option	Ontion	Ontion
M3033-900E			Option	Option	Option
3034E	3	1	Option	Option	Option

M3034E					
3034U	0		Oratian	Ontion	Ontion
M3034U	3	1	Option	Option	Option
3035E	0	1	Ontion	Ontion	Ontion
M3035E	3	l	Option	Option	Option
3035U	2	1	Option	Option	Option
M3035U	۷	I	Option	Option	Option
3035-900E	3	1	Option	Option	Option
M3035-900E	5	I	Option	Option	Option
3036U	2	1	Option	Option	Ontion
M3036U	۷	I	Option	Option	Option
3037U	2	1	Option	Option	Option
M3037U	۷	I	Option	Option	Option
3038E	2	1	Option	Option	Option
M3038E	۷	I	Option	Option	Option
3038U	2	1	Option	Option	Option
M3038U		l	Option	Option	Option
3041E		1	1	_	Option
M3041E	_	1	1	-	Орион
3041L483E	_	1	1	_	Option
M3041L483E	_	I	I	-	Option
3041L788E	_	1	1	_	Option
M3041L788E					Option
3041P550E		1	1	_	Option
M3041P550E		•			Option
3042E		1	1	_	Option
M3042E				_	Option
3042-900E		1	1	_	Option
M3042-900E					Option
3042P550E	_	1	1	_	Option
M3042P550E	_	1	1	_	
3043E	2	1	Option	Option	Option
M3043E	2		Option	Option	Option
3043-900E	2	1	Option	Option	Option
M3043-900E		I			Οριιοπ

3044E	3	1	Option	Option	Ontion
M3044E	3	I	Option	Option	Option
3045E	3	1	Option	Option	Option
M3045E	5	I	Option	Option	Option
3045-900E	3	1	Option	Option	Option
M3045-900E					
3048E	2	1	Ontion	Ontion	Ontion
M3048E	2	I	Option	Option	Option

Retention shelves:

Your cabinet is delivered with retention shelf(ves) depending on your order. The shelf(ves) must be fixed at the appropriate height with the shelf supports in the side panels. Place the shelf(ves) on the shelf supports and use the screws provided to attach them to the side panels to ensure that they do not tilt and cannot be pulled out.

Each shelf must be laid on 4 shelf supports.

Attention: Do not overload the maximum shelf load (refer to technical characteristics chapter).

Base trough:

Your cabinet is delivered with a base trough (depending on your order).

It must be located on the bottom of the cabinet. It should not be used as an additional storage place for containers and cans. Should you wish to use it for storage, you must add a perforated cover plate for the base trough and dispatch the containers on it.

Concerning the volume of retention of the base trough, please have a look at the technical characteristics chapter. Before removing the base trough, any leak of liquids contained in the base trough must be removed and disposed of in a proper manner.

The base trough of the safety cabinet must be able to accommodate at least 10% of the total stored volume, or 110% of the contents of the largest containers stored. Please refer to the label stuck on the door.

Perforated cover plate:

Your cabinet is delivered with a perforated plate (depending on your order).

It must be inserted on the bottom of the cabinet inside the base trough. Once inside the base trough, you may store any containers or cans.

The maximum perforated plate load is identical to the maximum shelf load. Please, do not overload.

Be aware that a perforated plate inserted inside a base trough decreases the volume of

retention of your base trough, as folowing:

- 6 litres less for the two doors cabinets.
- 3 litres less for the one door cabinets.

3. Use

Storage in the cabinet:

Reference		I ADDES	BASES		
3031E	×				
M3031E		-	-	-	
3031U	х				
M3031U	^	-	-	-	
3032E	x				
M3032E	^	-	-	-	
3032U	х				
M3032U	~	-	-	-	
3032-900E	х				
M3032-900E	^	-	-	-	
3033E	х				
M3033E	~	-	-	-	
3033U	v				
M3033U	X	-	-	-	
3033-900E	х				
M3033-900E	~	-	-	-	
3034E	х	-	-		
M3034E	^			-	
3034U	х				
M3034U	^	-	-	-	
3035E	х				
M3035E	^	-	-	-	
3035U	х		_		
M3035U	^	-	-	-	
3035-900E	х				
M3035-900E	^	-	-	-	
3036U	х				
M3036U	^	-	-	-	
3037U	Х				
M3037U	^	-	-	-	

3038E	×				
M3038E	X	-	-	-	
3038U	N/				
M3038U	X	-	-	-	
3041E	X				
M3041E		-	-	-	
3041L483E	X				
M3041L483E		-	-	-	
3041L788E	X				
M3041L788E	^	-	-	-	
3041P550E	X				
M3041P550E		-	-	-	
3042E	v				
M3042E	X	-	-	-	
3042-900E	X				
M3042-900E		-	-	-	
3042P550E	X	V			
M3042P550E	^	-	-	-	
3043E	X				
M3043E		-	-	-	
3043-900E	X				
M3043-900E		-	-	-	
3044E	v				
M3044E	X	-	-	-	
3045E	X				
M3045E	^	-	-	-	
3045-900E	X				
M3045-900E	X	•	-	-	
3048E	X				
M3048E	^	_	-	_	

We would like to remind you that storage of corrosive products may cause damage in good functioning of the safety equipments. Besides, we would like to remind you that any damages due to corrosion are not covered by the manufacturer warranty.

Decommissioning after a fire:

Depending on the duration and intensity of the fire, an explosive gas-air mixture can occur in a safety cabinet.

Therefore, before opening the cabinet, please note that:

- All sources of ignition, naked flame, etc... must be removed from a distance of 10m around the safety cabinet.
- Inform the fire department about the contents of the cabinets.
- Wait approximately a period of 6 times the duration of the fire, and 24 hours after the end of the fire.
- Check whether the cabinet housing is cold. If it still feels warm, extend the waiting period.
- Do not use of any spark-producing cutting and burning tools.
- Have a suitable fire-extinguishing device available when you open the cabinet.

4. Maintenance

Spare parts

Elements:

- Seals
- Door handle
- Shelf supports
- Safety stickers
- Door arresting device
- Complete mechanism of door

Checking list for the user

	Oui	non
Check the closing mechanism		
- the door(s) open correctly		
- whether the door closer is working properly		
- the door locking device		
- check the door arresting device: Does it works properly?		
Check the exhausting system: Does it works properly?		
Are the seals in a good state?		
Check that all labelling are complete?		
If the hinges have been oiled or greased: Do they work properly?		
Has the lock been oiled: Does it work properly?		
Have the shelf(ves), base trough and perforated plate been cleaned?		
Check whether the inlet and outlet valve have been cleaned?		
Done on		
by		
Signature		

5. Technical data

Reference	External dimensions (approx.) H x W x D (mm)	Empty weight (kg)	Usable volume inside (m3)	Base trough capacity (I)	Maximum shelf load uniformly distributed (kg)
3031E	635x605x630	64	0,08	20	30
M3031E	03370037030	63	0,00	20	
3031U	559x432x512	64	0,02	9	30
M3031U	00074027012	63	0,02	5	
3032E	635x115x630	108	0,15	41	50
M3032E	03371137030	106	0,10	41	
3032U	610x1092x537	108	0,11	31	50
M3032U	010010920337	106	0,11	51	
3032-900E	635x900x630	108	0,12	32	50
M3032-900E	033X900X030	106	0,12	32	50
3033E	1380x1115x630	170	0,41	41	50
M3033E	1300711132030	168	0,41	41	
3033U	1198x1092x537	170	0,25	31	50
M3033U	1190/1092/007	168	0,20	51	
3033-900E	1380x900x630	170 0,32		32	50
M3033-900E	1300,300,030	168	0,32	52	
3034E	1980x605x550	0 117 0,32 20	0.22 2	20	30
M3034E	1900/003/000	116	0,32	20	
3034U	- 1731x591x457	117	0,21	15	30
M3034U	173123912437	116	0,21	15	
3035E	1980x1115x550	210	0,66	41	50
M3035E	1980211132330	208	0,00 41		
3035U	1731x1092x457	210	0,42	31	50
M3035U	1731210922437	208	0,42	51	50
3035-900E	1980x900x550	210	0.52	32	50
M3035-900E	190029002000	208	0,52	32	50
3036U	1731x864x864	210	0.72	54	50
M3036U	173120042004	208	0,73	04	50
3037U	1731x1092x864	305	0,95	71	50

M3037U		303				
3038E		124				
M3038E	1380x605x550	122	0,2	20	30	
3038U		124				
M3038U	889x591x457	122	0,1	15	30	
3041E		64				
M3041E	670x635x695	63	0,1	25	30	
3041L483E		64				
M3041L483E	670x483x695	63	0,07	17	30	
3041L788E		64	0.40			
M3041L788E	670x788x695	63	0,13	32	30	
3041P550E	070 005 000	64	0.00	04	00	
M3041P550E	670x635x630	63	0,09	21	30	
3042E		108	40	50		
M3042E	670x1135x695	106	0,2	49	50	
3042-900E	670,000,000	108	0.15	20	50	
M3042-900E	670x900x695	106	0,15	38	50	
3042P550E	670x1135x630	0.17	40	50		
M3042P550E	070211332030	106	0,17	42	50	
3043E	1160x1135x695	170	0.28	0.20 40	0,38 49 5	50
M3043E	1100x1133x093	168	0,30	49	50	
3043-900E	1160x900x695	170	0,29	38	50	
M3043-900E	1100,300,033	168	0,29		50	
3044E	1960x635x615	117	<u>117</u> 0,39 25	30		
M3044E	1900/035/015	115	0,33	20		
3045E	1960x1135x615 210	x615 210 0,77 49	0.77 40	49	50	
M3045E	1000011000010	208	0,11	ک ت		
3045-900E	1960x900x615	210	0,59	210 0.59	38	50
M3045-900E	1000,000,010	208		00	50	
3048E	1160X635X695	124	0,19	0.19 25	0,19 25	30
M3048E	1100/000/000	122	0,10			