NFX 15-211 CLASS 1















DUCTLESS FUME HOODS labopur NF X 15-211 MAY 2009 - CLASS 1 & 2



▲ H184G+2CH + BB18 + 8 x (CORG201) + 4 x (SH200 + HEP200)

WHY SHALL WE USE AN ECLOSURE DUCTLESS FUME HOOD?

When you handle chemicals, your health is at risk because of the emission of harmful or even toxic vapors or powders. In order to protect yourself and your direct surrounding, you should handle your products in a ductless fume hood (formerly a filtered air recirculating toxic cabinet or FACC) equipped with either a molecular filter (or active charcoal filter), a particle filter (or HEPA filter), or a molecular filter and a particle filter.

WHY SHALL WE CHOOSE A labopur® DUCTLESS FUME HOOD?

ECOSAFE has 50 years' experience in the field of safety cabinets for the storage of hazardous products and puts all its know-how and technique in the manufacturing of its **labopur®** fume hoods.

Manufactured in France, **labopur®** fume hoods are manufactured based on processes and procedures defined according to the ISO 9001 version 2008 quality standard.

Moreover, our know-how has been successfully tested by independent French laboratories and control bodies according to the NF X 15-211 standard in its May 2009 version.

CERTIFICATION

The performances of Labopur® filtration hoods have been evaluated according to the NF X 15-211 - MAY 2009 standard by French laboratories and control bodies for:

- · Filtration tests.
- · Containment tests.
- Leakage and integrity tests of the absolute filter (HEPA filter).

Labopur® filtration fume hoods are manufactured according to quality processes and procedures defined in according to the international standard ISO 9001 version 2008, at the end of the production line and before shipment, in order to guarantee the user perfect operation and efficiency.













STANDARD

Standard NF X 15-211 - May 2009:

The NF X 15-211 standard is the most demanding regulation currently in force. It guarantees the user enhanced safety, allowing him to concentrate on his work.

Toxic enclosures with filtered air recirculation are classified according to 2 safety levels:

Class 1: enclosure with safety reserve (2 active charcoal filters per filtration column)

Class 2: enclosure without safety reserve, the most commonly used enclosure (only 1 active charcoal filter per filtration column)

The NF X 15-211 standard also distinguishes 3 classifications according to the type of filtration, depending on the chemical agents filtered:

- · Type P: for the filtration of particles (only for class 2).
- Type V: for the filtration of vapors (available for classes 1 and 2).
- PV type: for particle and vapor filtration
- (available for classes 1 and 2).

Lapopur® ductless fume hoods are filtration chambers.

Depending on the model, class 1 can be equipped with one particle filter and two active charcoal filters, or with only two active charcoal filters per filter column.

Class 2 can be equipped with one particle filter or one active charcoal filter, depending on the model, or with one particle filter and one active charcoal filter per filter column.

Labopur® fume hoods can be equipped with 1 to 4 filtration columns depending on the model.

In order to comply with this standard, Labopur® filtration fume hoods must meet various criteria (summary):

- the fume hood must be equipped with a ventilation device (continuous monitoring of the system) in order to maintain the air speed at a value between 0.4 m/s and 0.6 m/s (class 1 and class 2).
- the filtration system of the enclosure must not exceed a release concentration, downstream of the filter(s), of 50% of the OEL (Occupational Exposure Limit Value) of the toxic substance handled in the enclosure, and this for the duration of the detection operation
- the fume hoods must have been tested by an approved and independent laboratory.
- Class 2 fume hoods must have an audible or visual alarm triggered by a clock every 60 hours of operation and a sampling device
- Class 1 fume hoods shall be equipped with an automatic monitoring and saturation detection device for the main active charcoal filter and a second active charcoal filter in reserve.
- Class 1 fume hoods must not discharge more than 1% of the TLV of the product handled downstream of the active charcoal filter during the detection operating time.
- Class 2 fume hoods must not discharge more than 50% of the TLV of the product handled downstream of the filter during the detection operating time.



▲ H092D+ + BV09 + 2 x CORG201



▲ H092Z+H2C + BV09 + 2 x (SH200 + HEP200) + 4 x (CORG201)

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Containment

and Multirisk

File cabinets Anti-fire equipments

Showers and firstaid equipments

CLASS









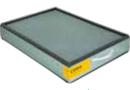


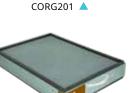


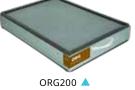


ACTIVE CHARCOAL AND PARTICLE FILTERS

ACTIVE CHARCOAL FILTERS







AMM200 A



Active charcoal is a black powder with a porous structure that adsorbs the molecules emanating from the vapors of dangerous products through its micro pores of less than 2 μ m.

Depending on the chemicals to be filtered, the active charcoal can be impregnated to improve its adsorption capacity. Impregnation for one chemical will lead to excellent adsorption for that chemical, but poor adsorption for another type of chemical.

Our filters are made from the best active charcoals. In order to offer the best guarantees, the adsorption quality of the filters has been checked and approved by an independent testing laboratory. Each filter is equipped with a double dust filter to ensure optimal filtration quality.

Several types of filters are available as standard:

- · For corrosive and organic vapors type CORG
- For organic vapors type ORG
- For ammonia vapors type AMM
- For formaldehyde vapors type FOR

The CORG multipurpose active charcoal filters can adsorb the vast majority of products commonly used: corrosive products, organic compounds or solvents. This filter can therefore be used in most cases. We can also offer you specialised filters, impregnated, for example, for the handling of more specific chemicals. Contact us for all your special special requirements.

HEPA H14 FILTERS AND HEPA FILTER HOLDERS



SH200 + HEP200 A





A HEPA (High Efficiency Particulate Air) filter, also known as a THE (Very High Efficiency) filter, is a very high efficiency particulate air filter.

The filtration efficiency of HEPA filters is governed by the NF EN 1822 standard which defines 5 efficiency classes. A HEPA H14 filter, with the highest filtration efficiency, will stop 99.97% of particles with a diameter greater than or equal to 0.3 µm.

When handling powders, a HEPA filter should be used. We offer HEPA filters of class H14 in accordance to the NF EN 1822 standard and with the highest filtration efficiency. In order to receive a HEPA filter, your fume hood must be equipped with a filter holder type SH.

Your HEPA filter can be complemented with an active charcoal filter for maximum safety and filtration

If you wish to use your fume hood only for powder filtration, you should buy a «Connection kit for use without active charcoal filter» type CAR.

N.B.: A fume hood can only be delivered to you if it has an active charcoal filter and/or a HEPA filter with a «Connection kit for use without active charcoal filter» type CAR if necessary.









EQUIPMENTS

STANDARD EQUIPMENT



PROTECTIVE CAPS

Each hood is equipped with four protective caps to easily insert your electrical or gas cables, for example.



TRANSPARENT WALLS

Our hoods are supplied with robust transparent walls on all sides, giving you a bright working area. Practical for demonstrations.



SOCKET FOR SAMPLING

A sampling port on the front of the fume hood allows you to quickly and reliably check the saturation of your active charcoal filter using the pump and reagent tubes



FILTRALARME 5 TOUCHSCREEN INTERFACE

- The filtralarme 5 controller uses an electronic circuit to measure the air flow speed (0.4- 0.6 m/s) and thus to detect and warn you of filter clogging or any air flow anomaly by means of an audible and luminous signal in accordance to the NF X 15-211 standard.
- The automatic airflow regulator (0.4-0.6 m/s) analyses the airflow speed in real time and checks that the hood is working at low pressure, guaranteeing that the vapors are confined to the work area and that the vapors pass through the filter.
- Hour counter (60 hours): an audible and luminous signal invites you to check the saturation of the active charcoal filter.
- New intuitive touchscreen interface with full functionality to make daily use of the hood easier.

MANDATORY EQUIPMENT



CHEMICAL SENSOR (CLASS 1)

Automatic E-detect active charcoal filter saturation detector (mandatory and only available for class 1), to be selected from the following compounds: ammonia vapors, corrosive+organic vapors, formaldehyde vapors or organic vapors. Ref. SATAMM, SATCORG, SATFOR, SATORG.



ACTIVE CHARCOAL FILTERS AND HEPA H14 FILTERS

Your Labopur NFX15-211 fume hood must be equipped with one (class 2) or two identical (class 1) active charcoal molecular filters per filtration column. It can also be equipped with an Hepa H14 filter. For use with Hepa filter only: choose a class 2 fume hood.

OPTIONAL EQUIPMENT



MELAMINE WORKTOP

Made of high density melamine, it offers excellent resistance to chemical attack. A glass worktop is also available if acids are used.



GLASS WORKTOP

Made of high density tempered glass, it offers excellent resistance to chemical attack. A glass worktop is also available if acids are used.



LIGHTING

We propose to integrate an LED light in the enclosure so that it does not hinder your visibility. IP65 - 10W - 4200K - 710Im



CONTAINMENT SUMP

Under each work surface there is a containment sump that fits under the hood. In the event of a leak or spillage, the liquids handled are collected in this way. To clean the containment sump, simply lift and remove the worktop and use a suitable absorbent. This tray is supplied with the worktop of your choice.



MANUAL PUMP AND REACTIVE TUBES

Think about your health. Check the saturation of your active charcoal filter with a pump and reagent tubes (required for class 2 only). We can offer you a wide range of reagent tubes according to your products, just ask us!

incurring obligations. 09/2021

designs at any time without

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PRESENTATION OF THE RANGE (CLASS 1)

ADVANTAGES

Optimal protection for the user:

- Fume hoods approved to NF X 15-211 May 2009 by French laboratories and control bodies.
- · CE certification.
- Containment of vapors and powders in the handling enclosure, then elimination of these when they pass through the molecular filter or the HEPA particulate filter.
- Automatic filter saturation detector (several choices of detectable molecules must be ordered with the fume hood).
- Main active charcoal filter + safety reserve active charcoal filter (several choices of detectable molecule, must be ordered with the fume hood).
- FILTRALARME 5 interface with touch screen for ergonomic operational management of the fume hood.
- 5 languages available: French English German Spanish -Italian.
- · Automatic air flow regulation.
- · Air flow and hour meter displayed simultaneously.
- The date of installation of the filters and their types is indicated and visible during the operation of the fume hood.
- · Main switch with overvoltage fuse.
- Quiet electric fans (excluding airflow) that meet CE specifications.
- Control window on the front of the fume hood showing immediately the presence and quality of the filter used.

Time and energy savings:

- Fume hoods delivered ready to use (no assembly), to be connected only to the electrical network.
- No connection or evacuation required, no civil engineering solution (as the hood is equipped with a filter).
- No need to heat or cool the air in the room as the air is recirculated.

Comfortable to use:

- Reinforced transparent walls on all sides provide optimal lighting
 of the work surface and immediate visualization of the products
 handled
- Ergonomically designed working opening for safe and easy handling in the enclosure (3 possible choices depending on the size of the hoods)
- Covers allowing the introduction of the equipment's fluid supply
 cables
- Very low noise level of the fans (excluding air flow), thus allowing increased concentration during work.
- Easy replacement of the active charcoal filter, only a few minutes are required.

TECHNICAL CHARACTERISTICS

- Construction in 15/10th steel.
- Epoxy paint, white RAL 9010, blue 5015, highly resistant to chemicals
- · Reinforced glass walls in 6 mm thick PMMA.
- Average air speed at the front of the unit: 0.5 m/s
- · Voltage: 220-240 volts

- Electrical power: 35 W per ventilation column
- · Intensity: 0.35 A
- Fan noise level (excluding air flow): 60 dB(A)
- Flow rate: 180 m3/h

STANDARD EQUIPMENT

- · Touch screen.
- 4 covers for supply and fluid passages (removable, it is recommended to leave them in place and to make notches in them in order to pass the cables through).
- · Automatic air flow control and maintenance (touch screen).
- · Hour meter (touch screen).
- · Manual sampling available.
- · 4 transparent reinforced walls.
- Filter viewing window.
- FILTRALARME 5 interface with touch screen for ergonomic and operational management of the hood.
- · Automatic air flow regulation.
- 5 languages available: French English German Spanish Italian
- · Airflow and hour meter displayed simultaneously
- Indicators of the date of installation of the filters and their types.

These hoods must be equipped with at least two active charcoal filters.

MANDATORY OPTION

 Automatic E-detect active charcoal filter saturation detector (mandatory for class 1): to be selected from the following compounds: corrosive vapors ref. SATCOR, organic vapors ref. SATORG, formaldehyde vapors ref. SATFOR or ammonia vapors ref. SATAMM.

OPTIONS

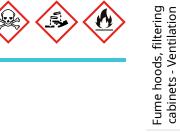
- Removable containment sump with the worktop to collect liquids in case of accidental spills + melamine or laminated glass worktop (highly recommended for use with acids).
- LED lighting positioned so as not to impede your visibility IP65 -10W - 4200K - 710lm ref. LUMI
- Manual pump to determine the saturation of the filters: ref. PMAF.
- · Reagent tubes:
- Ref. TROR: Set of 10 «organic» reagent tubes
- Ref. TRAC: Set of 10 «corrosive» reagent tubes
- Ref. TROA: Set of 5 «organic» and 5 «corrosive» reagent tubes.





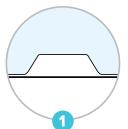
cabinets

Flammable cabinets





▲ H092Z+H2C + BV09 + 2x (SH200 + HEP200) + 4 x (CORG201)



Trapeze working opening

Filter holder and HEPA filter (otpion)



Easy to replace filters



Melamine or glass worktop laminated



Removable containment sump



Touch screen Hour meter Air flow controller



Automatic E-detect active charcoal filter saturation detector

Containment and cans

Anti-fire equipments File cabinets

NFX 15-211











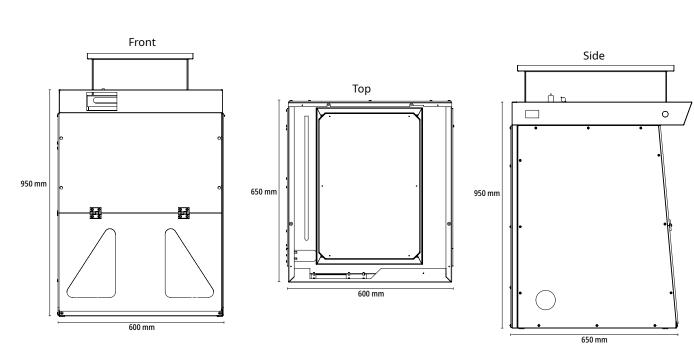






▲ H061D+2C + BV06 + CORG201

















cabinets

Flammable cabinets

Corrosive

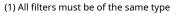
Toxic cabinets and Multirisk

Containment and cans

Anti-fire equipments File cabinets

Showers and firstaid equipments

	H061D+2C			
P/N & Working opening type				
a norming opening type	H061Z+2C			
	Trapeze L: 400mm, H: 150mm			
External dimensions (W x D x H)	600 x 650 x950			
Internal dimensions (W x D x H)	545 x 505 x 735			
Weight (kg)	23			
Number of engines	1			
For liquid use only, to be chosen (mandatory) (1):	<u>&</u>			
Active charcoal filter(s) for organic vapors	2 x ORG200 (22 kg) E-DETECT: SATORG			
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG201 (24 kg) E-DETECT: SATCORG			
Active charcoal filter(s) for formaldehyde vapors	2 x FOR200 (24 kg) E-DETECT: SATFOR			
Active charcoal filter(s) for ammonia vapors	2 x AMM 200 (24 kg) E-DETECT: SATAMM			
Additional accessories				
Containment sump + HPL work-top	BB06 (10 kg)			
Containment sump + Tempered glass work-top	BV06 (15 kg)			
Integrated outdoor light	LUMI (1 kg)			
Tubular table on 4 feet	TTF06 (9 kg)			
Tubular roller table (on castors)	TTR06 (10 kg)			
Monobloc rolling table with storage shelf	TR06 (28 kg)			
Table / trolley cabinet	TA06 (32 kg)			





Active charcoal filter AAAAAAAAA HEPA filter



CAR200 box



















▲ H092D+H2C + BV09 + 4 x CORG201 + 2 x (SH200 + HEP200)



H091D+2C



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H092D+2CH













cabinets

Flammable cabinets

Corrosive

	H091D+2C	H092D+2C H092D+H2C H092D+2CH			
P/N & Working opening type					
17/Va Working opening type		H092Z+2C H092Z+H2C H092Z+2CH			
		Trapeze L:400mm, H:180mm			
External dimensions (W x D x H)	900 x 75	0 x 1160			
Internal dimensions (W x D x H)	845 x 700 x 935				
Weight (kg)	3	4			
Number of engines	1	2			
For liquid use only, to be chosen (mandatory) (1):					
Active charcoal filter(s) for organic vapors	2 x ORG200 (22 kg) E-DETECT: SATORG	4 x ORG200 (44 kg) E-DETECT: SATORG			
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG201 (24 kg) E-DETECT: SATCORG	4 x CORG201 (48kg) E-DETECT: SATCORG			
Active charcoal filter(s) for formaldehyde vapors	2 x FOR200 (24 kg) E-DETECT: SATFOR	4 x FOR200 (48 kg) E-DETECT: SATFOR			
Active charcoal filter(s) for ammonia vapors	2 x AMM 200 (24 kg) E-DETECT: SATAMM	4 x AMM 200 (48 kg) E-DETECT: SATAMM			
For powder + liquid use references to be ordered together (2) must be chosen from (1):	\times \times \times				
Active charcoal filter(s) for organic vapors (2)	-	2 x HEP200 (4 kg)			
Hepa filter holder (2)	-	2 x SH200 (8 kg)			
Active charcoal filter(s) for organic vapors	-	4 x ORG200 (44 kg) E-DETECT: SATORG			
Active charcoal filter(s) for corrosive and organic vapors	-	4 x CORG201 (48kg) E-DETECT: SATCORG			
Active charcoal filter(s) for formaldehyde vapors	-	4 x FOR200 (48 kg) E-DETECT: SATFOR			
Active charcoal filter(s) for ammonia vapors	-	4 x AMM 200 (48 kg) E-DETECT: SATAMM			
Additional accessories					
Containment sump + HPL work-top	BB09	(11 kg)			
Containment sump + Tempered glass work-top	BV09 (16 kg)				
Integrated outdoor light	LUMI (1 kg)				
Tubular table on 4 feet	TTF09 (12 kg)				
Tubular roller table (on castors)	TTR09 (13 kg)				
Monobloc rolling table with storage shelf	TR09 (37 kg)				
Table / trolley cabinet	TA09 (43 kg)				



















▲ H122D+H2C + BV12 + 4 x CORG201 + 2 x (SH200 + HEP200)



H121D+2C





H122D+2CH













cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

	H1	21D+2C		H122D+2C	H122D+H2C	H122D+2CH	
P/N & Working opening type							
				H122Z+2C	H122Z+H2C	H122Z+2CH	
				Trapeze		L: 400mm, H: 180mm	
External dimensions (W x D x H)			1200 x 75	50 x 1160			
Internal dimensions (W x D x H)			1145 x 7	00 x 935			
Weight (kg)			4	4			
Number of engines		1			2		
For liquid use only, to be chosen (mandatory) (1):	<u>&</u>			<u>&</u>	X	X	
Active charcoal filter(s) for organic vapors	2 x ORG200 (22 k	(g) E-DETEC	T: SATORG	4 x ORG20	0 (44 kg) E-DETEC	T: SATORG	
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG201 (24 l	kg) E-DETEC	T: SATCORG	4 x CORG201 (48kg) E-DETECT: SATCORG			
Active charcoal filter(s) for formaldehyde vapors	2 x FOR200 (24 l	kg) E-DETEC	T: SATFOR	4 x FOR200 (48 kg) E-DETECT: SATFOR			
Active charcoal filter(s) for ammonia vapors	2 x AMM 200 (24	kg) E-DETE(CT: SATAMM	4 x AMM 200 (48 kg) E-DETECT: SATAMM			
For powder + liquid use references to be ordered together (2) must be chosen from (1):	XXX		X				
Active charcoal filter(s) for organic vapors (2)		-			2 x HEP200 (4 kg)		
Hepa filter holder (2)		-			2 x SH200 (8 kg)		
Active charcoal filter(s) for organic vapors		-		4 x ORG200 (44 kg) E-DETECT: SATORG			
Active charcoal filter(s) for corrosive and organic vapors		-		4 x CORG201 (48kg) E-DETECT: SATCORG			
Active charcoal filter(s) for formaldehyde vapors		-		4 x FOR200 (48 kg) E-DETECT: SATFOR			
Active charcoal filter(s) for ammonia vapors		-		4 x AMM 200 (48 kg) E-DETECT: SATAMM			
Additional accessories							
Containment sump + HPL work-top			BB12 (12 kg)			
Containment sump + Tempered glass work-top	BV12 (17 kg)						
Integrated outdoor light	LUMI (1 kg)						
Tubular table on 4 feet	TTF12 (16 kg)						
Tubular roller table (on castors)	TTR12 (17 kg)						
Monobloc rolling table with storage shelf	TR12 (51 kg)						
Table / trolley cabinet	TA12 (54 kg)						











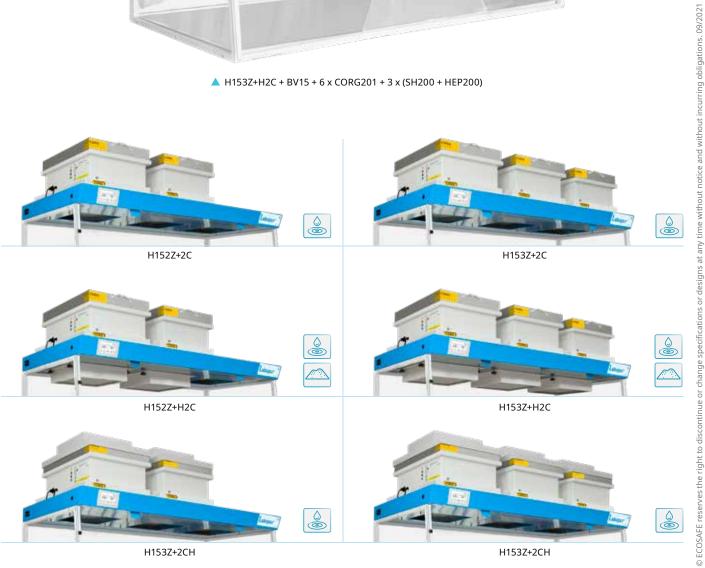








▲ H153Z+H2C + BV15 + 6 x CORG201 + 3 x (SH200 + HEP200)



H153Z+2CH













cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

Containment and cans

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Anti-fire equipments File cabinets

Showers and firstaid equipments

	H152D+2C	H152D+H2C	H152D+2CH	H153D+2C	H153D+H2C	H153D+2CH
P/N & Working opening type	H152Z+2C	H152Z+H2C	H152Z+2CH	H153Z+2C	H153Z+H2C	H153Z+2CH
	Trapeze		L: 400mm, H: 180mm	Trapeze		L: 400mm, H: 180mm
				H153G+2C	H153G+H2C	H153G+2CH
				Large width		L: 850mm, H: 180mm
External dimensions (W x D x H)			1500 x 75	50 x 1160		
Internal dimensions (W x D x H)			1445 x 7	00 x 935		
Weight (kg)			5	4		
Number of engines		2			3	
For liquid use only, to be chosen (mandatory) (1):	<u>(F)</u>	X	X	<u>(F)</u>	X	X
Active charcoal filter(s) for organic vapors	4 x ORG20	0 (44 kg) E-DETE	CT: SATORG	6 x ORG200 (66 kg) E-DETECT: SATORG		
Active charcoal filter(s) for corrosive and organic vapors	4 x CORG20	1 (48kg) E-DETE	T: SATCORG	6 x CORG201 (72 kg) E-DETECT: SATCORG		
Active charcoal filter(s) for formaldehyde vapors	4 x FOR20	0 (48 kg) E-DETE	CT: SATFOR	6x FOR200 (72 kg) E-DETECT: SATFOR		
Active charcoal filter(s) for ammonia vapors	4 x AMM 20	0 (48 kg) E-DETE	CT: SATAMM	6 x AMM 200 (72 kg) E-DETECT: SATAMM		
For powder + liquid use references to be ordered together (2) must be chosen from (1):	X		(WWWWWW)	X		(VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV
Active charcoal filter(s) for organic vapors (2)		2 x HEP200 (4 kg)		3 x HEP200 (6 kg)	
Hepa filter holder (2)		2 x SH200 (8 kg)			3 x SH200 (12 kg)	
Active charcoal filter(s) for organic vapors	4 x ORG20	0 (44 kg) E-DETE	CT: SATORG	6 x ORG200 (66 kg) E-DETECT: SATORG		
Active charcoal filter(s) for corrosive and organic vapors	4 x CORG20	1 (48kg) E-DETE	T: SATCORG	6 x CORG20	1 (72 kg) E-DETEC	T: SATCORG
Active charcoal filter(s) for formaldehyde vapors	4 x FOR20	0 (48 kg) E-DETE	CT: SATFOR	6x FOR200 (72 kg) E-DETECT: SATFOR		
Active charcoal filter(s) for ammonia vapors	4 x AMM 20	0 (48 kg) E-DETE	CT: SATAMM	6 x AMM 20	0 (72 kg) E-DETE	CT: SATAMM
Additional accessories						
Containment sump + HPL work-top			BB15 (13 kg)		
Containment sump + Tempered glass work-top			BV15 (18 kg)		
Integrated outdoor light			2 x LUM	I (2 kg)		
Tubular table on 4 feet			TTF15 ((22 kg)		
Tubular roller table (on castors)			TTR15	(23 kg)		
Monobloc rolling table with storage shelf	TR15 (65 kg)					
Table / trolley cabinet	TA15 (61 kg)					

Ventilation



















▲ H184G+H2C + BB18 + 8 x CORG201 + 4 x (SH200 + HEP200)



H183G+2CH













cabinets

Flammable cabinets

Corrosive

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	H183G+2C	H183G+H2C	H183G+2CH	H184G+2C	H184G+H2C	H184G+2CH	
P/N & Working opening type	Large width L : 1150mm, H : 180mm						
External dimensions (W x D x H)			1800x 75	50 x 1240			
Internal dimensions (W x D x H)			1745 x 7	00 x 935			
Weight (kg)		70					
Number of engines		3			4		
For liquid use only, to be chosen (mandatory) (1):	8	X	X	8	X	X	
Active charcoal filter(s) for organic vapors	6 x ORG20	00 (66 kg) E-DETE	T: SATORG	8 x ORG20	0 (88 kg) E-DETE	CT: SATORG	
Active charcoal filter(s) for corrosive and organic vapors	6 x CORG20)1 (72 kg) E-DETE	CT: SATCORG	8 x CORG20	1 (96 kg) E-DETE	CT: SATCORG	
Active charcoal filter(s) for formaldehyde vapors	6x FOR20	0 (72 kg) E-DETE(T: SATFOR	8 x FOR200 (96 kg) E-DETECT: SATFOR			
Active charcoal filter(s) for ammonia vapors	6 x AMM 20	00 (72 kg) E-DETE	CT: SATAMM	8 x AMM 200 (96 kg) E-DETECT: SATAMM			
For powder + liquid use references to be ordered together (2) must be chosen from (1):	X		(VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV	X			
Active charcoal filter(s) for organic vapors (2)		3 x HEP200 (6 kg)		4 x HEP200 (8 kg))	
Hepa filter holder ⁽²⁾		3 x SH200 (12 kg			4 x SH200 (16 kg)		
Active charcoal filter(s) for organic vapors	6 x ORG20	00 (66 kg) E-DETE	CT: SATORG	8 x ORG20	0 (88 kg) E-DETE	CT: SATORG	
Active charcoal filter(s) for corrosive and organic vapors	6 x CORG20)1 (72 kg) E-DETE	CT: SATCORG	8 x CORG20	1 (96 kg) E-DETE	CT: SATCORG	
Active charcoal filter(s) for formaldehyde vapors	6x FOR20	0 (72 kg) E-DETE	T: SATFOR	8 x FOR20	0 (96 kg) E-DETE	CT: SATFOR	
Active charcoal filter(s) for ammonia vapors	6 x AMM 20	00 (72 kg) E-DETE	CT: SATAMM	8 x AMM 20	00 (96 kg) E-DETE	CT: SATAMM	
Additional accessories							
Containment sump + HPL work-top			BB018	(15 kg)			
Containment sump + Tempered glass work-top			BV18 (20 kg)			
Integrated outdoor light			3 x LUN	II (3 kg)			
Tubular table on 4 feet	TTF18 (24kg)						
Tubular roller table (on castors)	TTR18 (25kg)						
Monobloc rolling table with storage shelf	TR18 (78 kg)						
Table / trolley cabinet			TA18 (98 kg)			

CAR200 box

















PRESENTATION OF THE RANGE (CLASS 2)

ADVANTAGES

Optimal protection of the user:

- Fume hoods approved to NF X 15-211 MAY 2009 by French laboratories and control bodies.
- · CE certification.
- Containment of vapors and powders in the handling enclosure and their elimination when they pass through the molecular filter or the HEPA filter.
- Front panel sampling port for quick and reliable control of filter saturation.
- Front indicator light to assure the user that the fume hood ventilation/filtration system is working properly.
- Quiet electric fans that meet CE specifications.
- Control window on the front of the unit shows immediately whether the filter is present and suitable for the job.

Time and energy savings:

- · Fume hoods delivered ready to use (no assembly).
- No connection or evacuation required, no civil engineering solution (if the hood is equipped with a filter).
- No need to heat or cool the air in the room as the air is recirculating.

Comfortable to use:

- Reinforced transparent walls on all sides providing optimal lighting of the work surface and immediate visualization of the products being handled.
- Ergonomically designed working opening for safe and easy handling in the enclosure.
- · Covers for the insertion of the power supply cables.
- Very low noise level of the fans allowing increased concentration during work.
- Easy replacement of the active charcoal filter in just a few minutes.

TECHNICAL CHARACTERISTICS

- Construction in 15/10th steel.
- Epoxy paint, white RAL 9010, blue 5015, highly resistant to chemicals
- · Reinforced glass walls in 6mm thick PMMA.
- Average air speed at the front of the unit: 0.5 m/s
- Voltage: 220-240 volts
- · Electrical power: 35 W per ventilation column
- Intensity: 0.35 A
- Fan noise level (excluding air flow): 60 dB(A)
- Flow rate: 180 m3/h

STANDARD EQUIPMENT

- · Touch screen
- 4 covers to supply fluid passages.
- · Automatic air flow control and maintenance
- Hour meter
- · Sampling port
- · 4 transparent reinforced walls.
- FILTRALARME 5 interface with touch screen for operational management of the hood.
- Automatic air flow regulation
- 5 languages available: French English German Spanish Italian.
- · Airflow and hour meter displayed simultaneously
- · Indicators for filter installation date and type
- Main switch

These hoods must be equipped with an active charcoal filter and/or a particulate filter and its support.

OPTIONS

- Removable containment sump with the worktop to collect liquids in case of accidental spills + melamine or laminated glass worktop (highly recommended for use with acids).
- LED lighting positioned so as not to impede your visibility IP65 -10W - 4200K - 710lm ref. LUMI
- · Manual pump to determine the saturation of the filters: ref. PMAF.
- Reagent tubes :
 - Ref. TROR: Set of 10 «organic» reagent tubes
 - Ref. TRAC: Set of 10 «corrosive» reagent tubes
 - Ref. TROA: Set of 5 «organic» and 5 «corrosive» reagent tubes.











cabinets

Flammable cabinets

Corrosive

Toxic cabinets and Multirisk

Containment and cans

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Anti-fire equipments File cabinets

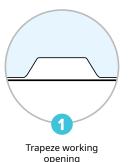
Showers and firstaid equipments







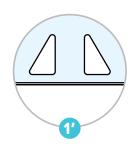
▲ H092D+ BV09 + 2x(CORG201 + SH200 + HEP200)



opening



Filter holder and HEPA filter (otpion)



2 hands working opening



Easy to replace filters



Melamine or glass worktop laminated



Removable containment sump



Touch screen Hour meter Air flow controller



Socket for sampling























H061D+ + BV06 + CORG201



H061D+ + BV06 + SH200 + HEP200 + CAR200



H061D+ + BV06 + CORG201 + SH200 + HEP200













	H061D+	H061Z+			
Working opening type		Trapeze L: 400mm, H: 150mm			
Number of engines		1			
External dimensions (W x D x H)	600 x 6	50 x950			
Internal dimensions (W x D x H)	545 x 50	05 x 735			
Weight (kg)	2	3			
For liquid use only, to be chosen (mandatory) (1):	<u> </u>	8			
Active charcoal filter(s) for organic vapors	ORG200) (11 kg)			
Active charcoal filter(s) for corrosive and organic vapors	CORG20	1 (12 kg)			
Active charcoal filter(s) for formaldehyde vapors	FOR200) (12 kg)			
Active charcoal filter(s) for ammonia vapors	AMM 20	0 (12 kg)			
For powder application only, references to be ordered together:					
H14 Hepa filter(s) for powder handling	HEP200 (2 kg)				
Hepa filter holder	SH200 (4 kg)				
Ventilation element(s) (mandatory)	CAR20	0 (2 kg)			
For powder + liquid use references to be ordered together (2) must be chosen from (1):					
Active charcoal filter(s) for organic vapors (2)	HEP200 (2 kg)				
Hepa filter holder ⁽²⁾	SH200 (4 kg)				
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)				
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)				
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)				
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)				
Additional accessories					
Containment sump + HPL work-top	BB06 (10 kg)				
Containment sump + Tempered glass work-top	BV06 (15 kg)				
Integrated outdoor light	LUMI (1 kg)				
Tubular table on 4 feet	TTF06 (9 kg)				
Tubular roller table (on castors)	TTR06 (10 kg)				
Monobloc rolling table with storage shelf	TR06 (28 kg)				
Table / trolley cabinet	TA06 (32 kg)				

NFX 15-211

















▲ H092D+ + BV09 + 2 x CORG201



H091D+ + BV09 + CORG201



H091D+ + BV09 + SH200 + HEP200 + CAR200



H091D+ + BV09 + CORG201 + SH200 + HEP200



H092D+ + BV09 + 2 x CORG201



H092D+ + BV09 + 2 x(SH200 + HEP200 + CAR200)



H092D+ + BV09 + 2x(CORG201 + SH200 + HEP200)













Lithium-ion cabinets

Flammable cabinets

Corrosive

	H091D+	H092D+	H092Z+		
Working opening type			Trapeze L: 400mm, H: 180mm		
Number of engines	1		2		
External dimensions (W x D x H)		900 x 750 x 1160			
Internal dimensions (W x D x H)		845 x 700 x 935			
Weight (kg)		34			
For liquid use only, to be chosen (mandatory) ⁽¹⁾ :	<u>(S)</u>	<u>&</u>	<u>&</u>		
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG2	00 (22 kg)		
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG	201 (24 kg)		
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR2	00 (24 kg)		
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM	200 (24 kg)		
For powder application only, references to be ordered together :					
H14 Hepa filter(s) for powder handling	HEP200 (2 kg)	2 x HEP2	200 (4 kg)		
Hepa filter holder	SH200 (4 kg)	2 x SH2	00 (8 kg)		
Ventilation element(s) (mandatory)	CAR200 (2 kg)	2 x CAR2	200 (4 kg)		
For powder + liquid use references to be ordered together (2) must be chosen from (1):					
Active charcoal filter(s) for organic vapors (2)	HEP200 (2 kg)	2 x HEP2	200 (4 kg)		
Hepa filter holder (2)	SH200 (4 kg)	2 x SH2	00 (8 kg)		
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG2	00 (22 kg)		
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG	201 (24 kg)		
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR2	00 (24 kg)		
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM :	200 (24 kg)		
Additional accessories :					
Containment sump + HPL work-top		BB09 (11 kg)			
Containment sump + Tempered glass work-top		BV09 (16 kg)			
Integrated outdoor light	LUMI (1 kg)				
Tubular table on 4 feet	TTF09 (12 kg)				
Tubular roller table (on castors)	TTR09 (13 kg)				
Monobloc rolling table with storage shelf		TR09 (37 kg)			
Table / trolley cabinet		TA09 (43 kg)			

CLASS 2







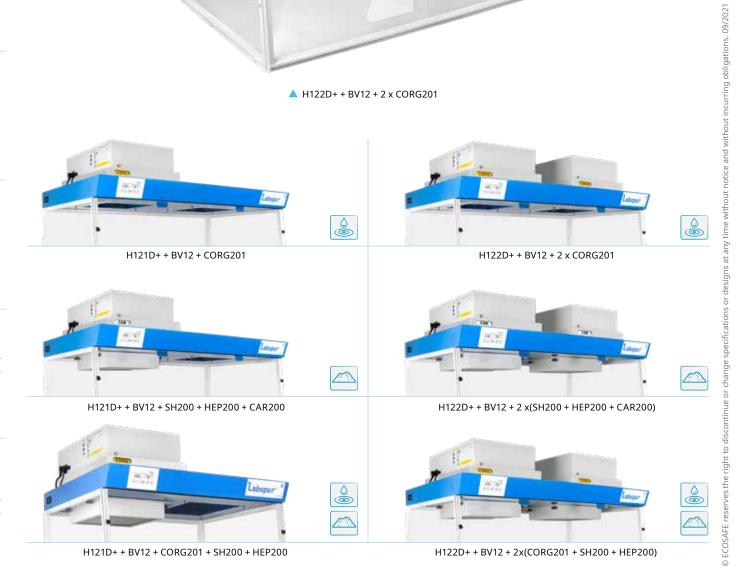








▲ H122D+ + BV12 + 2 x CORG201



H121D+ + BV12 + CORG201 + SH200 + HEP200

H122D+ + BV12 + 2x(CORG201 + SH200 + HEP200)

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NFX 15-211















	H121D+	H122D+	H122Z+			
Working opening type			Trapeze L: 400mm, H: 180mm			
Number of engines	1		2			
External dimensions (W x D x H)	1200 x 750 x 1160					
Internal dimensions (W x D x H)	1145 x 700 x 935					
Weight (kg)		44				
For liquid use only, to be chosen (mandatory) (1):	<u>(S)</u>					
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG2	00 (22 kg)			
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG	201 (24 kg)			
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR2	00 (24 kg)			
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM	200 (24 kg)			
For powder application only, references to be ordered together:						
H14 Hepa filter(s) for powder handling	HEP200 (2 kg)	2 x HEP2	200 (4 kg)			
Hepa filter holder	SH200 (4 kg)	2 x SH2	00 (8 kg)			
Ventilation element(s) (mandatory)	CAR200 (2 kg)	2 x CAR2	200 (4 kg)			
For powder + liquid use references to be ordered together (2) must be chosen from (1):						
Active charcoal filter(s) for organic vapors (2)	HEP200 (2 kg)	2 x HEP2	200 (4 kg)			
Hepa filter holder ⁽²⁾	SH200 (4 kg)	2 x SH2	00 (8 kg)			
Active charcoal filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG2	00 (22 kg)			
Active charcoal filter(s) for corrosive and organic vapors	CORG201 (12 kg)	2 x CORG	201 (24 kg)			
Active charcoal filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR2	00 (24 kg)			
Active charcoal filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM :	200 (24 kg)			
Additional accessories (1) ▼						
Containment sump + HPL work-top		BB12 (12 kg)				
Containment sump + Tempered glass work-top		BV12 (17 kg)				
Integrated outdoor light		LUMI (1 kg)				
Tubular table on 4 feet		TTF12 (16 kg)				
Tubular roller table (on castors)	TTR12 (17 kg)					
Monobloc rolling table with storage shelf	TR12 (51 kg)					
Table / trolley cabinet	TA12 (54 kg)					

CLASS 2

NFX 15-211















▲ H153Z+ + BV15 + 3 x CORG201

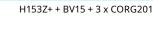




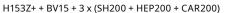














H153Z+ + BV15 + 3 x (CORG201 + SH200 + HEP200)













cabinets

Flammable cabinets

Corrosive cabinets

Toxic cabinets and Multirisk

	H152D+	H152Z+	H153D+	H153Z+	H153G+		
	0 0	Trapeze	0 0	Trapeze	Large width		
Working opening type							
		L: 400mm, H: 180mm		L: 400mm, H: 180mm	L: 850mm, H: 180mm		
Number of engines		2	3				
External dimensions (W x D x H)			1500 x 750 x 1160				
Internal dimensions (W x D x H)	1445 x 700 x 935						
Weight (kg)			54				
For liquid use only, to be chosen (mandatory) (1):	<u> </u>	<u>&</u>	<u>&</u>	<u>&</u>			
Active charcoal filter(s) for organic vapors	2 x ORG2	00 (22 kg)		3 x ORG200 (33 kg)			
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG2	201 (24 kg)		3 x CORG201 (36 kg)			
Active charcoal filter(s) for formaldehyde vapors	2 x FOR2	00 (24 kg)		3 x FOR200 (36 kg)			
Active charcoal filter(s) for ammonia vapors	2 x AMM 2	200 (24 kg)		3 x AMM 200 (36 kg)			
For powder application only, references to be ordered together:					<u> </u>		
H14 Hepa filter(s) for powder handling	2 x HEP2	00 (4 kg)		3 x HEP200 (6 kg)			
Hepa filter holder	2 x SH2	00 (8 kg)	3 x SH200 (12 kg)				
Ventilation element(s) (mandatory)	2 x CAR2	200 (4 kg)	3 x CAR200 (6 kg)				
For powder + liquid use references to be ordered together (2) must be chosen from (1):							
Active charcoal filter(s) for organic vapors (2)	2 x HEP2	00 (4 kg)		3 x HEP200 (6 kg)			
Hepa filter holder (2)	2 x SH2	00 (8 kg)		3 x SH200 (12 kg)			
Active charcoal filter(s) for organic vapors	2 x ORG2	00 (22 kg)		3 x ORG200 (33 kg)			
Active charcoal filter(s) for corrosive and organic vapors	2 x CORG2	201 (24 kg)		3 x CORG201 (36 kg)			
Active charcoal filter(s) for formaldehyde vapors	2 x FOR2	00 (24 kg)		3 x FOR200 (36 kg)			
Active charcoal filter(s) for ammonia vapors	2 x AMM 2	200 (24 kg)		3 x AMM 200 (36 kg)			
Additional accessories							
Containment sump + HPL work-top			BB15 (13 kg)				
Containment sump + Tempered glass work-top			BV15 (18 kg)				
Integrated outdoor light			2 x LUMI (1 kg)				
Tubular table on 4 feet	TTF15 (22 kg)						
Tubular roller table (on castors)	TTR15 (23 kg)						
Monobloc rolling table with storage shelf	TR15 (65 kg)						
Table / trolley cabinet	TA15 (61 kg)						

NFX 15-211

















▲ H184G+ + BB18 + 4 x CORG201



H183G+ + BB18 + 3 x CORG201



H184G+ + BB18 + 4 x CORG201



H183G+ + BB18 + 3 x (SH200 + HEP200 + CAR200)



H183G+ + BB18 + 3 x (CORG201 + SH200 + HEP200)



H184G+ + BB18 + 4 x (SH200 + HEP200 + CAR200)



H184G+ + BB18 + 4 x (CORG201 + SH200 + HEP200)