

NF X 15-211 FUME HOODS LAMINAR FLOW CLEAN BENCHES BIOLOGICAL SAFETY CABINETS FILTERING CABINETS AND VENTILATION



Flammable cabinets

Corrosive cabinets



Toxic cabinets and multirisk

Pesticide range



Fume hoods, filtering cabinets - Ventilation



Containment and Cans



Anti-fire equipments and Files cabinets



Showers and first-aid equipments



DUCTLESS FUME HOODS Labopur®

NF X 15-211 - MAY 2009 - CLASS 2

WHY SHALL WE USE AN ENCLOSURE WITH RECIRCULATING AIR FILTRATION SYSTEM?

When you are using chemicals, your health might be in danger due to the emanation of harmful and toxic vapors. To protect yourself and your close environment, you must manipulate your products in an enclosure using recirculating air filtration (formerly Enclosure for Toxics using Recirculating Air Filtration or ETRAF) equipped with a molecular filter or either particulate filter (HEPA filter) or both filters.

WHY SHALL WE CHOOSE AN ENCLOSURE LABOPUR® WITH RECIRCULATING AIR FILTRATION?

Following its wide experience with safety cabinets and storage of dangerous products, ECOSAFE-leading manufacturer of safety cabinets-uses its entire technical knowledge to design and manufacture its fume hoods LABOPUR®. Made in EU, the ductless fume hoods LABOPUR® stand out by a high manufacturing quality and finition. The entire process being controlled with the European standard ISO 9001 -2008.

Ductless fume hoods LABOPUR® provides the user a secured work space for the repetitive manipulations of small chemicals quantities. The dangerous vapours are confined in the enclosure, then cleaned while entering the active charcoal filter. Finally, dangerous vapors are rejected in the atmosphere without danger for the environment. Thus, the user's health is protected.



▲ H122Z + BB12 + TR12 + 2 x (CORG201 + SH200 + HEP 200)



▲ H061Z + BB06 + CORG201 + SH200 + HEP200

CERTIFICATION

Ductless fume hoods LABOPUR® were approved to the NF X 15-211 - may 2009 norm, by independent laboratories:

- The laboratory has approved the filtration part of the NF X 15-211.
- the containment part of the NF X 15-211 norm.
- the filter tightness and integrity testing (HEPA filter).

LABOPUR® ductless fume hoods are controlled according to quality process and procedures defined by the repository of international quality standard ISO 9001-2008, at the end of the assembly line and before their shipping to the user in order to assure a perfect functioning and efficiency.



NORMS

NF X 15-211 French norm- may 2009:

NF X 15-211 French norm is the most demanding regulation today. It guarantees the use of a full safety allowing him to focus on his manipulations.

Enclosures for toxic LABOPUR® using recirculating air filtration are classified according to 2 security levels :

- class 1: enclosure with safety reserve
- class 2: enclosure without safety reserve, the most common

Enclosures LABOPUR® using recirculating air filtration belongs to the class 2 :

- P type: particle filtration
- V type: vapours
- PV type: particle & vapours filtration

Ductless fume hoods LABOPUR® are recirculating air filtration enclosures from the class 2 which could be fitted, depending on the model, with filter for particles or for vapours or both.

To be in as per this standard, air filtration fume hood LABOPUR® have to meet multiple criteria (summary) :

- the enclosure must be provided with a ventilation device to maintain the air speed with a rate between 0,4 m/s and 0,6 m/s.
- rejection, downstream the filter, of 50% of the VLEP (occupational exposure limit value) of toxics treated in the enclosure in the duration of normal filter use.

• the enclosure must have been tested by an approved and independent laboratory.

• the class 2 enclosure have to be equipped with a sound or visual alarm activated every working 60 hours and also a sampling outlet device.

• the class 2 enclosures must not reject more than 50% of the VME downstream the filter during the detection test.



▲ H092Z + 2(CORG201 + HEP200 + SH200) (Bench not included)



NF X 15-211



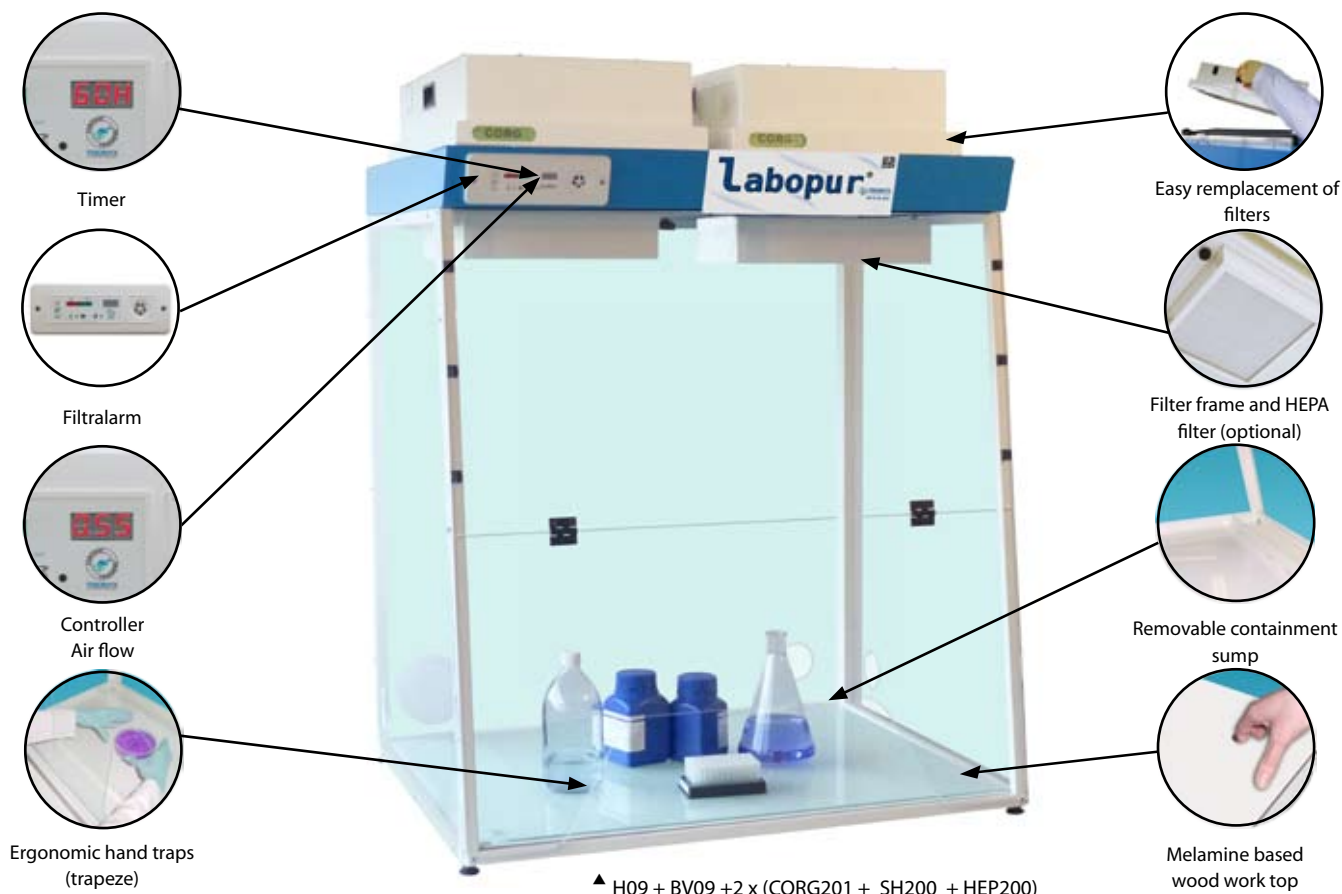
You will also find in this chapter :

Labopur® Ductless Fume Hoods	NF X 15-211 - may 2009	Range H
Labopur® Ductless fume hoods for powders	NF X 15-211 - may 2009	Range H
Labopur® Ductless fume hoods for dangerous powders and vapours	NF X 15-211 - may 2009	Range H
Labopur® Ductless fume hoods with external connection		Range H
Labopur® Ductless Fume Hoods and Storage Cabinets - PMSF	NF X 15-211 - may 2009	Range H
Laminar flow clean benches, vertical	EN 12469 - ISO 14644-1	Range H
Ductless fume hood and storage cabinet with recirculating air: PMSF	EN 12469 - ISO 14644-1	Range H
Labopur® Filtering Ventilation Safety Cabinets	NF X 15-211 - may 2009	Range 12.X
(Active coal filters absorption's capacity and filtration system tested and certified NF X 15-211)		
Labopur® Filtering Ventilation Safety Cabinets	NF X 15-211 - may 2009	Range 14.X
(Active coal filters absorption's capacity and filtration system tested and certified NF X 15-211)		
Ventilation Safety Cabinets		Range 12
Ventilation Safety Cabinets	EN 11470-1	Range 3030.x
Labopur® Recycling Air Box	NF X 15-211 - may 2009	Range H
(Active coal filters absorption's capacity and filtration system tested and certified NF X 15-211)		
Atex ventilation boxes « with filter option »	ATEX Zone II	Range V
Ventilation and filtration boxes	ISO 3744	Range V

RANGE H**NF** X 15-211 class 2

DUCTLESS FUME HOODS Labopur®

NF X 15-211 - MAI 2009 - CLASS 2



▲ H09 + BV09 + 2 x (CORG201 + SH200 + HEP200)

ADVANTAGES

User's optimal protection:

- Our fume hoods have been approved within the standard NF X 5-211 by an independent laboratory.
- Vapors are confined in the manipulation enclosure after being eliminated through the molecular filter.
- A front sampling outlet allows you a fast and reliable control of the filter saturation.
- A warning lamp located in facade informs you of the good functioning of the system of ventilation/filtration.
- Silent electric fan according to E.U specifications.
- A front control window indicates immediately if the filter is in place and well adapted to your work.
- A retention tank integrated under the work-top allows to get back liquids in case of accidental droppings.

Save time and energy :

- Our hoods are delivered ready to use (already mounted). All you have to do is to plug them to a power supply device.
- No connecting evacuation, no civil engineering needed (if the hood is fitted with a filter).
- It is not necessary to heat or cool the air within the workroom.

Confort of use:

- The transparent wall sides of the fume hood offer an optimal lighting of the work-top and a direct sight of the working products.
- The ergonomic hand traps allow secure and easy manipulations in the enclosure.
- Protective caps allow you to insert the power cables of your devices into the fume hoods.

- Silent fan allows you to focus on your work.

- Easy replacement of the active coal-based filter. Few a matter of minutes.

TECHNICAL DATA

- 15/10th steel construction.
- White epoxy painting RAL 9010 and Blue 5015, with high resistance against chemicals.
- Polycarbonate glazed walls.
- Average air speed at the front: 0.5 m / s
- Voltage: 220-240 volts
- Electrical power: 47 W
- Intensity: 0.2 A
- Sound power of fan (excluding airflow): 49 dB (A)
- Flow rate: 202 m³ / h

STANDARD EQUIPMENT:

- 4 covers for feed and fluid go through
- Air Flow Controller
- Timer
- Sampling outlet
- Transparent rear wall

OPTIONAL EQUIPMENT:

- Manual pump to determine saturation of filters: PMAF
- Reactive Tubes
 - TROR: Pack of 10 «organic» reactive tubes
 - TRAC: Pack of 10 «corrosive» reactive tubes
 - TROA: Set of 5 «organic» and 5 corrosive reactive tubes

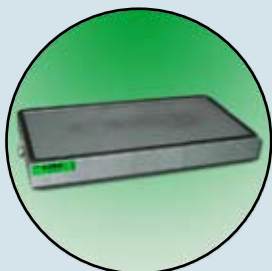


ACTIVE CHARCOAL FILTERS AND HEPA H14 FILTER

ACTIVE CHARCOAL FILTERS



▲ ORG200



▲ CORG201

Activated carbon is an extremely porous black carbon allowing the absorption of molecules from chemicals thanks to the high degree of microporosity (less than 2 µm).

Based on the chemicals you have to filter, activated carbon can be impregnated to improve the adsorption capacity. A specific impregnation could fit for one product and be unadapted for another one.

Our filters are made with the best active charcoal. In order to offer the best guarantees, the quality of filters adsorption was tested and approved by an independent laboratory. Every active charcoal filter is provided with a double anti-dust filter to insure an optimal filtration quality. Your health is protected. We offer 3 types of filters: one dedicated to organic vapors, one «Universal» for corrosive and organic vapors and one for formaldehyde vapors.

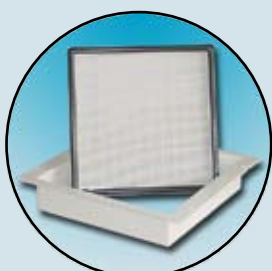
We offer 4 standard filters :

- typ ORG for organic vapors,
- typ CORG for corrosive and organic vapors
- typ FOR for formaldehyde vapors
- typ AMM for ammonia vapors

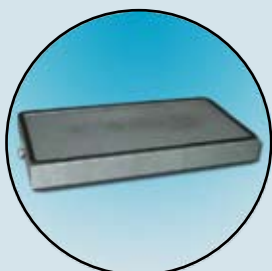
CORG filter adsorb a large majority of commonly used chemicals : organic and inorganic acids, solvents and organics. This filter can be used in most cases.

We also offer **specialized and impregnated filters**, for exemple, for manipulation of specific chemicals. If you need further information please do not hesitate to contact-us.

HEPA H14 FILTER AND HEPA FILTER FRAME



▲ SH200 + HEP200



▲ CAR200

Hepa filter (High Efficiency Particulate Air) is an air filter with a very high efficiency.

The Hepa filtration efficiency is controlled and approved according to the norm NF EN 1822 and divided into 5 efficiency classes. The H14 Hepa filter which is the most efficient will stop 99,97% of the particles with a diameter equal or bigger than 0,3 µm.

When handling chemical powders, you have to use a standard particulate filter called HEPA. To guarantee the highest filtration efficiency, we choose a HEPA filter type H14 approved to the EN 1822 standards. In order to receive a HEPA filter, your ductless fume hood must be fitted with a dedicated frame type SH.

Your powders filter may need to be complemented by an additional active coal filter to provide you the best security and efficiency.

If you want to use your ductless fume hood for powders only, a specific kit should be taken. For further information, please refer to the paragraph «Kit for using ductless fume hood without active charcoal filter».

N.B. : We deliver ductless fume hood only with either an activated carbon filter or a connecting kit for use without activated carbon filter (CAR).



FILTRALARM

From here on available as a standard feature on all Labopur Fumehoods with ventilation / filtration system, the filteralarm allows to measure the airflow in the filter thanks to an electronic chip to detect and warn you of clogging of the filter or any anomaly of the airflow by an visual or tone signal. Furthermore, this controller's new generation can also display the hour counter.



AIR VELOMETER

According to the French standard NF X 15-211, your hood is supplied with an air velometer. It allows you to check permanently the velocity of the air in facade and verify that the fume hood works in depression guaranteeing the flow of vapours through the filter.



TRANSPARENT WALLS

Our fume hoods are delivered with transparent walls on every face offering you a luminous work environment. Suitable for exhibitions.



OPERCULES

Chaque hotte est munie de 4 opercules permettant d'introduire aisément vos câbles d'alimentation électrique ou gaz par exemple.



SAMPLING OUTLET

A front sampling outlet gives you the opportunity to check quickly and in a reliable way the saturation level of your active charcoal filter, thanks to the manual pump and reactive tubes.



TIMER

The standard timer supplied with your hood indicates you, all the time, the total use duration of your hood. After programming, every 60 hours, a sound alarm invites you to check the saturation of the active coal filter



ADSORBED PRODUCTS BOOKLET

Following the standard NF X 15-211, your hood is delivered with a CD-Rom information guide regarding the adsorption capacity of the active coal filter in relation with various chemicals

OPTIONAL EQUIPMENTS



MELAMINE BASED WOOD WORK-TOP

A work-top is supplied with every fume hood. Manufactured in melamine based wood, it offers an excellent resistance to chemicals attacks. A tempered glass work top is optional.



RETENTION TANK

A retention tank is placed under each work-top being part of the fume hood. In case of leak or of accidental reversal, treated liquids are retained. To clean it, you just need to lift the work-top and use an «absorbent».



WORKTOP IN LAMINATED GLASS

Willing to treat extremely aggressive products? Choose a tempered glass work-top instead of a H.P.L. top (in standard within the LABOPUR hoods).



MANUAL PUMP AND REACTIVE TUBES

TAKE CARE OF YOUR HEALTH! Check your active coal filter saturation thanks to the manual pump and reactive tubes. We offer you a wide range of reactive tubes depending on your products used.



ACTIVE COAL FILTERS AND HEPA H14 FILTERS

The fume hoods are delivered without active coal filters and/or HEPA H14 filters. You must select one depending on your chemicals used. Consult our active coal filters selection guide. you in case the filter sealing or any disfunction of the air stream with a sound alarm.



LIGHTING

We offer you a lighting setting within your hood to enlighten your work environment. It's all for your comfort.



▲ H061Z + BB06 + CORG201+ SH200 + HEP200

Fume Hood without bottom to equip, see accessories		H06
External dimensions (H x W x D in mm)		950 x 600 x 650
Internal dimensions (H x W x D in mm)		640 x 545 x 505
Weight (kg)		41
Number of filter module / Motor		1
Handwheel type	2 hands	Trapeze
Référence	H061D	H061Z
For chemical use only		
Activated carbon filter(s) for organic vapors		ORG200 (11 kg)
Activated carbon filter(s) for corrosive vapors		CORG201 (12 kg)
Activated carbon filter(s) for formaldehyde vapors		FOR200 (12 kg)
Activated carbon filter(s) for ammonia vapors		AMM 200 (12 kg)
For powder use only		
H14 Hepa filter(s)		HEP200 (2 kg)
Hepa filter holder		SH200 (4 kg)
Ventilation element(s) (required for use of powder only)		CAR200 (2 kg)
For powder and chemicals use		
H14 Hepa filter(s) for powder handling		HEP200 (2 kg)
Hepa filter holder		SH200 (4 kg)
Activated carbon filter(s) for organic vapors		ORG200 (11 kg)
Activated carbon filter(s) for corrosive vapors		CORG201 (12 kg)
Activated carbon filter(s) for formaldehyde vapors		FOR200 (12 kg)
Activated carbon filter(s) for ammonia vapors		AMM200 (12 kg)
Additional accessories		
Containment sump + Melamine 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)

RANGE H

NF X 15-211 class 2

Labopur® 900 mm



▲ H092Z + BB09 + 2 x (CORG201 + SH200 + HEP200)

Fume Hood without bottom to equip, see accessories	H09		
External dimensions (H x W x D in mm)	950 x 900 x 750		
Internal dimensions (H x W x D in mm)	840 x 845 x 700		
Weight (kg)	67		
Number of filter module / Motor	1	2	
Handwheel type	2 hands	2 hands	Trapeze
Référence	H091D	H092D	H092Z
For chemical use only			
Activated carbon filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)	
Activated carbon filter(s) for corrosive vapors	CORG201 (12 kg)	2 x CORG201 (24 kg)	
Activated carbon filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR200 (24 kg)	
Activated carbon filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM200 (24 kg)	
For powder use only			
H14 Hepa filter(s)	HEP200 (2 kg)	2 x HEP200 (4 kg)	
Hepa filter holder	SH200 (4 kg)	2 x SH200 (8 kg)	
Ventilation element(s) (required for use of powder only)	CAR200 (2 kg)	2 x CAR200 (4 kg)	
For powder and chemicals use			
H14 Hepa filter(s) for powder handling	HEP200 (2 kg)	2 x HEP200 (4 kg)	
Hepa filter holder	SH200 (4 kg)	2 x SH200 (8 kg)	
Activated carbon filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)	
Activated carbon filter(s) for corrosive vapors	CORG201 (12 kg)	2 x CORG201 (24 kg)	
Activated carbon filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR200 (24 kg)	
Activated carbon filter(s) for ammonia vapors	AMM200 (12 kg)	2 x AMM200 (24 kg)	
Additional accessories			
Containment sump + Melamine 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)		



Labopur® 1200 mm



▲ H122Z + BB12 + 2 x (CORG201 + SH200 + HEP 200)

Fume Hood without bottom to equip, see accessories	H12		
External dimensions (H x W x D in mm)	950 x 1200 x 750		
Internal dimensions (H x W x D in mm)	840 x 1145 x 700		
Weight (kg)	85		
Number of filter module / Motor	1	2	
Handwheel type	2 hands	2 hands	Trapeze
Référence	H121D	H122D	H122Z
For chemical use only			
Activated carbon filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)	
Activated carbon filter(s) for corrosive vapors	CORG201 (12 kg)	2 x CORG201 (24 kg)	
Activated carbon filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR200 (24 kg)	
Activated carbon filter(s) for ammonia vapors	AMM 200 (12 kg)	2 x AMM200 (24 kg)	
For powder use only			
H14 Hepa filter(s)	HEP200 (2 kg)	2 x HEP200 (4 kg)	
Hepa filter holder	SH200 (4 kg)	2 x SH200 (8 kg)	
Ventilation element(s) (required for use of powder only)	CAR200 (2 kg)	2 x CAR200 (4 kg)	
For powder and chemicals use			
H14 Hepa filter(s) for powder handling	HEP200 (2 kg)	2 x HEP200 (4 kg)	
Hepa filter holder	SH200 (4 kg)	2 x SH200 (8 kg)	
Activated carbon filter(s) for organic vapors	ORG200 (11 kg)	2 x ORG200 (22 kg)	
Activated carbon filter(s) for corrosive vapors	CORG201 (12 kg)	2 x CORG201 (24 kg)	
Activated carbon filter(s) for formaldehyde vapors	FOR200 (12 kg)	2 x FOR200 (24 kg)	
Activated carbon filter(s) for ammonia vapors	AMM200 (12 kg)	2 x AMM200 (24 kg)	
Additional accessories			
Containment sump + Melamine 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 (22 kg)		
Tubular roller table (on castors)	TTR12 (23 kg)		
Monobloc rolling table with storage shelf	TR12 (51 kg)		
Table / trolley cabinet	TA12 (54 kg)		

RANGE H**NF** X 15-211 classe 2**Labopur® 1500 mm**

▲ H153Z + BB15 + 3 x (CORG201 + SH200 + HEP200)

Fume Hood without bottom to equip, see accessories	H15				
External dimensions (H x W x D in mm)	1150 x 1500 x 750				
Internal dimensions (H x W x D in mm)	840 x 1445 x 700				
Weight (kg)	102				
Number of filter module / Motor	2		3		
Handwheel type	2 hands	Trapeze	2 hands	Trapeze	Large width
Reference	H152D	H152Z	H153D	H153Z	H153G
For chemical use only					
Activated carbon filter(s) for organic vapors	2 x ORG200 (22 kg)		3 x ORG200 (33 kg)		
Activated carbon filter(s) for corrosive vapors	2 x CORG201 (24 kg)		3 x CORG201 (36 kg)		
Activated carbon filter(s) for formaldehyde vapors	2 x FOR200 (24 kg)		3 x FOR200 (36 kg)		
Activated carbon filter(s) for ammonia vapors	2 x AMM200 (24 kg)		3 x AMM200 (36 kg)		
For powder use only					
H14 Hepa filter(s)	2 x HEP200 (4 kg)		3 x HEP200 (6 kg)		
Hepa filter holder	2 x SH200 (8 kg)		3 x SH200 (12 kg)		
Ventilation element(s) (required for use of powder only)	2 x CAR200 (4 kg)		3 x CAR200 (6 kg)		
For powder and chemicals use					
H14 Hepa filter(s) for powder handling	2 x HEP200 (4 kg)		3 x HEP200 (6 kg)		
Hepa filter holder	2 x SH200 (8 kg)		3 x SH200 (12 kg)		
Activated carbon filter(s) for organic vapors	2 x ORG200 (22 kg)		3 x ORG200 (33 kg)		
Activated carbon filter(s) for corrosive vapors	2 x CORG201 (24 kg)		3 x CORG201 (36 kg)		
Activated carbon filter(s) for formaldehyde vapors	2 x FOR200 (24 kg)		3 x FOR200 (36 kg)		
Activated carbon filter(s) for ammonia vapors	2 x AMM200 (24 kg)		3 x AMM200 (36 kg)		
Additional accessories					
Containment sump + Melamine 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	TR15 (65kg)				
Tubular roller table (on castors)	TA15 (61 kg)				



Labopur® TABLE / TROLLEY CABINET

TABLE/TROLLEY CABINET ►

- Made of steel 15/10th; White epoxy paint RAL 9010.
- 1 adjustable shelf.
- 1 removable base trough on the bottom.
- Self closing wing doors with handles and lock.
- Large warning labels.
- 4 swivel table castors (2 with locking).

Reference	Dimensions H ⁽¹⁾ x W x D (mm)	Weight (kg)
TA06	860 x 615 x 660	32
TA09	860 x 915 x 810	43
TA12	860 x 1215 x 810	54
TA15	860 x 1515 x 810	61



TA06

◀ TROLLEY

- Made of steel 15/10th
- White epoxy paint RAL 9010.
- 1 adjustable shelf (the depth of shelf is equal to ¾ of the depth of trolley).
- 4 swivel table castors (2 with locking).

Reference	Dimensions H ⁽¹⁾ x W x D (mm)	Weight (kg)
TR06	860 x 615 x 637	28
TR09	860 x 915 x 787	37
TR12	860 x 1215 x 787	51
TR15	860 x 1515 x 787	65

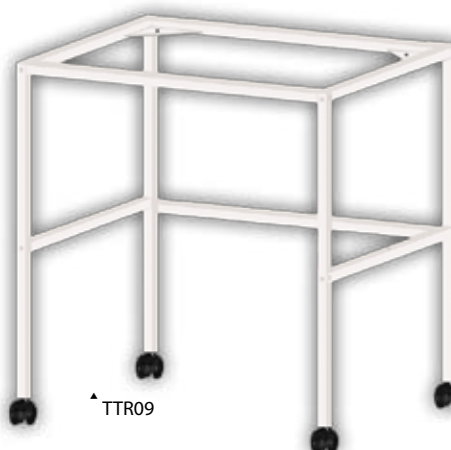


TR09

TUBULAR TABLE/TROLLEY ►

- Made of steel 15/10th; White epoxy paint RAL 9010.
- Available with feet or with 4 swivel table castors (2 with locking).

Reference	Type	Dimensions H ⁽¹⁾ x W x D (mm)	Poids (kg)
TTF06	With feet	860 x 615 x 637	9
TTR06	With castors		10
TTF09	With feet	860 x 915 x 787	12
TTR09	With castors		13
TTF12	With feet	860 x 1215 x 787	22
TTR12	With castors		23



TTR09

⁽¹⁾Height without castors: 800 mm.

RANGE H



FUME HOODS WITH EXTERNAL CONNECTION



↑ BH09D
+ Ventilation Box CDV-A
+ 2 Connecting Kits for Box KRC

↑ BH09D

USE

These Fume Hoods are intended to be connected to an exhausting system (1) for the discharge of toxic and harmful vapors to the outside of the building (use without activated carbon filter). It is imperative to add a ventilation box - model CDV-A (to be completed with 2 connection kits reference KRC or to be connected to an adapted exhausting system).

ADVANTAGES

- Fume Hoods delivered ready to use (no assembly), to be connected only to the electrical network and to an exhausting system.
- Transparent walls on all sides offering optimal illumination on the work top and immediate visualization of the products handled.
- Ergonomic hand traps for safe and easy handling in the enclosure.
- Lids allowing the introduction of cables for power supply of equipment and fluids inside the ductless fume hood

TECHNICAL SPECIFICATIONS

- Steel construction 15 / 10th.
- White epoxy paint RAL 9010, high resistance against chemicals.
- Glass walls made of PMMA.
- 4 caps for power cable
- Transparent rear wall

ADDITIONAL ACCESSORIES

- Ventilation Box
- Connecting Kit KRC
- Melamine work top or Tempered glass work top + choose one containment sump.
- Integrated outdoor light
- Fixed and rolling tables

Fume Hood without bottom to equip, see accessories	BH06		BH09		BH12		BH15		
External dimensions (H x W x D mm)	950 x 600 x 650		950 x 900 x 750		950 x 1200 x 750		1150 x 1500 x 750		
Internal dimensions (H x W x D mm)	640 x 545 x 505		840 x 845 x 700		840 x 1145 x 700		840 x 1445 x 700		
Weight (kg)	41		67		85		102		
Hand traps type	2 hands	Trapeze	2 hands	Trapeze	2 hands	Trapeze	2 hands	Trapeze	Large Width
Reference	BH06D	BH06Z	BH09D	BH09Z	BH12D	BH12Z	BH15D	BH15Z	BH15G
Additional accessories									
Containment sump + Melamine work top	BB06 (10 kg)		BB09 (11 kg)		BB12 (12 kg)		BB13 (13 kg)		
Containment sump + Tempered glass work top	BV06 (15 kg)		BV09 (16 kg)		BV12 (17 kg)		BV15 (18 kg)		
Integrated outdoor light	LUMI (1 kg)						2 x LUMI (2 kg)		
Ventilation Box	CDV-A (8 kg)								
Connecting Kit	2 x KRC (2 kg)								



DUCTLESS FUME HOOD AND STORAGE CABINET WITH RECIRCULATING AIR: PMSF

Use and store your chemicals at the same place

The storage cabinet is connected to the fume hood in order to **extract** and purify the fumes from both items. Thus, **the vapors** of the cabinet and the fume hood are **purified** while being pulled through the active charcoal filter, then **rejected into the atmosphere**.

The PMSF Workstation includes :

1. A DUCTLESS FUME HOOD

Tested and approved by an independent laboratory according to the new NF X 15-211 – may 2009 – Class 2 norm

Depending on the dimensions of the fume hoods, you will find different configurations in terms of number of engines and type of hand traps.

Each reference corresponds to one specific configuration.

2. AN ACTIVE COAL FILTER

To be determined according to the chemicals handled under the hood (mandatory).

- Filter «ORG200» : for organic vapors
- Multi-purpose filter «CORG201» : for organic and corrosive vapors
- Filter «FOR200» : for formaldehyde vapors
- Filter «AMM200» : for ammonia vapors

We remind you that we can offer filters for specific applications. Please contact us for further details. There can be several filters based on the number of fan in the ductless fume hood.

(1 fan = 1 filter).



PMSF: H061Z + TA06 + BB06 + CORG201 + SH200 + HEP200 + KRPMF

3. ADDITIONAL ACCESSORIES

To add to the ductless fume hood

Mandatory: The fume hoods are bottomless, and have to be equipped with Containment sump + Melamine work top or Tempered glass work top.

The reference is determined according to the chosen fume hood and the necessary work top.

Optional: We also offer an external integrated light. Depending on the configuration chosen, there may be 1 or 2 LED lights.

4. A TABLE/TROLLEY STORAGE CABINET

- Built in steel 15/10th.
- White epoxy paint RAL 9010.
- Self closing wing doors with handles and locks.
- Large warning labels in compliance with ISO 3864, NFX 08.003 norms and the European directive 92/58/CEE.
- 1 Height adjustable shelf on rack
- 1 removable retention tank on the bottom.
- 4 swivel castors (2 with locking).
- High and low vents (high outlet connected to the fume hood)
- KRPMF connection kit for connecting the cabinet to the hood.

The table / cabinet reference must be chosen according to the selected hood.



PMSF: H061Z + TA06 + BB06 + CORG201 + SH200 + HEP200 + KRPMF

Lastly, you must have a hood reference + a filter reference + one or more accessory reference (s) + a table / safety cabinet reference + the KRPMF connection kit.

LAMINAR FLOW CLEAN BENCHES, VERTICAL

INTRODUCTION

Laminar flow clean benches are designed to prevent contamination of semiconductor wafers, biological samples, or any particle sensitive device. Air is drawn through a ULPA filter and blown in a very smooth, laminar flow towards the user. Such hoods exist in both horizontal and vertical configurations. Laminar Fumehood are equipped with a germicidal UV lamp to sterilize the workplace when do not work on it. But you must switch off this light while you are working, as it will burn your skin and generate cataracts to your eyes. Nothing can be stored in the fumehood to allow the sterilization.

CONFORMITY

- Cabinet performance : EN 12469 (type-tested for cross contamination and product protection using the microbiological testing methods adapted from this biological safety cabinet standard) and IESTRP-CC002 norms.
- Air Quality: ISO 14644-1 Class 3 norm.
- Filtration: EN 1822 (H14), IEST-RP-CC001, IEST-RP-CC007 and IESTRP- CC034 norms.
- Electrical safety: IEC 61010-1 and EN 61010-1 norms.

ADVANTAGES

- ULPA filters tested to a typical efficiency of >99.999% for 0.1 to 0.3 micron particles are superior to HEPA filters.
- Stainless steel work surface with a curved front edge is designed for maximum operator comfort.
- Lighting provides excellent illumination of the work zone and reduces operator fatigue.
- All surfaces painted with an antimicrobial coating.

TECHNICAL DATA

- Built in galvanized steel with anti-bacteria epoxy paint.
- Work top in 304 stainless steel.
- Anti-UV tempered glass side panels.
- Control system to switch on/off light and to control the airflow.

ADDITIONAL OPTIONS - Contact-us

- Germicidal UV lamp and transparent front cover (LUH/LUV).
- Electrica outlet (PEH/PEV).
- Petcok for air, gas and vaccum (ROH/ROV).
- Tubular table with castors.- Prises électrique (PEH/PEV).



These models are also available in Horizontal Laminar flow. Contact us for more informations.

P/N		FLV900	FLV1200	FLV1500
Outside dimensions	H	1270	1270	1270
	W	1035	1340	1645
	D	784	784	784
Inside dimensions	H	678	678	678
	W	965	1270	1575
	D	739	739	739
Inside volume of enclosure (m³)		0,6	0,8	1
Average velocity (m/s)		0,45	0,45	0,45
Nominal voltage (volts)		220-240	220-240	220-240
Power input (watts)		129	151	199
Amps absorbed (Ampères)		7,3	7,5	7,8
Sound level dB(A) (without air flow)		51,6	52,4	55,6
Flow (m³)		1117	1471	1824
Weight (kg)		135	158	199
Fluorescent lamp intensity (Lux)		980	904	894

Standard equipments

Fluorescent lamp	included	included	included
Control system	included	included	included
ULPA filter	included	included	included

Optionnal equipments

ULPA filter replacement	ULV900	ULV1200	ULV1500
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BIOLOGICAL SAFETY CABINET - CLASS 2

USE AREA

Through the manipulation of micro-organisms or products of pathogens, it should implement a protection of the operator and the environment. Ambient air is drawn directly through perforations located towards the work plan. It does not contaminate the clean room air handling. He then joined the latter contaminated air. These combined air are then returned to about 32% outward job security, to advance through a HEPA filter to protect the operator and 68% to the working chamber also passing through a HEPA filter to protect the elements manipulated. The air inflow and downflow combined and form an effective barrier preventing contaminated air from entering the working chamber but also contaminated air out of the chamber.

CONFORMITY

- Performance security post: EN 12469.
- Air Quality: ISO 14644-1 Class 3.
- Filtration: EN 1822 (H14), IEST-RP-CC034, IEST-RP-CC007 and IEST-RP-CC001 norms.
- Electrical Safety: IEC 61010-1 and EN 61010-1 norms.

ADVANTAGES

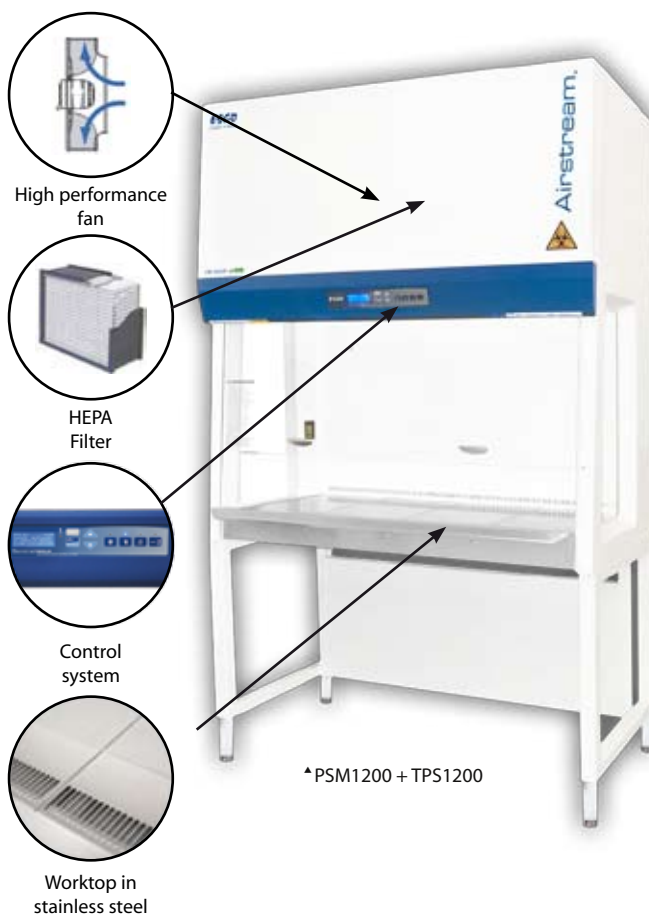
- HEPA filter with a filtration efficiency of 99.999% of particles between 0.1 and 0.3 microns by providing increased protection.
- Plan of multi-piece stainless steel work allows access to simplify the work surface to be decontaminated.
- Large opening of the protective glass improving access to the area of handling without compromising safety.
- UV absorbing tempered glass (5mm), colorless and transparent.

TECHNICAL SPECIFICATIONS

- Built in galvanized steel with antimicrobial epoxy paint.
- Worktop in stainless steel.
- Walls transparent tempered glass.
- Control panel including the speed of air flow.

ADDITIONAL OPTIONS - Contact us

- UV germicidal lamp • Electrical outlets • Faucet small diameter for water, gas or vacuum tube • Tabular table.



^PSM1200 + TPS1200

P/N		PSM900	PSM1200	PSM1500
Outside dimension	H	1400	1400	1400
	W	1035	1340	1645
	D	753	753	753
Inside dimension	H	660	660	660
	W	915	1220	1525
	D	580	580	580
Inside volume of enclosure (m³)		0,35	0,47	0,58
Average velocity (m/s) - inflow / downflow		0,45 / 0,30	0,45 / 0,30	0,45 / 0,30
Nominal voltage (volts)		220-240	220-240	220-240
Power input (watts)		291	289	333
Amps absorbed (Ampères)		2	2	2
Sound level dB(A) (without air flow)		58	59	59
Air flow volume (m³) - Inflow / Downflow / Exhaust		270 / 563 / 270	356 / 741 / 356	440 / 916 / 440
Weight (kg)		125	150	160
Fluorescent lamp intensity (Lux)		1279	1404	1227

Standard equipments

Fluorescent lamp	included	included	included
Control system	included	included	included
HEPA filter	included	included	included

Optionnal equipments

HEPA filter replacement	ULP900	ULP1200	ULP1500
Tubular table (hauteur : 860 mm)	THF900	THF1200	THF1500

The manufacturer reserves the right to discontinue or change specifications or designs at any time without notice and without incurring obligations. 07/2015

Flammable cabinets

Corrosive cabinets

Toxic cabinets and multirisk

Pesticide range

Fume hoods, filtering cabinets - Ventilation

Containment and Cans

Anti-fire equipments and File cabinets

Showers and first-aid equipments



Labopur® - MINI-DUCTLESS FUME HOOD



CONFORMITY

- Active coal filters adsorption's capacity and filtration system are tested and certified NF X 15-211.
- Electric fans are in conformity with european specification CE.

ADVANTAGES

- Labopur's technology.
- To place on a bench or on a workbench.
- Vapours are confined in the manipulation enclosure after being eliminated through the molecular filter.
- Warning light insures a good functioning of the ventilation system.
- Front control window indicates immediately if the filter is inside and well adapted to your needs.
- High efficiency active coal filter specialized and treated following products stored in compliance with NF X 15-211.
- Dust-protecting pre-filter, efficiency 92% for particles > 3 µm.
- Easy replacement of the active coal filter.
- The standard timer supplied with your recycling air box indicates the total use of your box. After programming, every 60 hours, a sound alarm invites you to check the saturation of the active coal filter.
- Integrated base trough at the bottom to get back liquids in case of accidental droppings.
- No connecting evacuation, no civil engineering needed (if the hood is fitted with a filter).
- Our hoods are delivered ready to use (already mounted). All you have to do is plug them to a power supply device.
- Adjustable leveling feet for enhance stability.

TECHNICAL SPECIFICATIONS

- Made of steel 12/10th.
- Epoxy painting : white RAL 9010, blue RAL 5015.
- Soft and silent electrical fan: 220-240 volts - 20 watts, 0,1 A, 43 db (A) (excluding air flow) - Airflow 86 m3/hour - Protection: IP54.
- Wall sides and hand traps made of soft PVC.

OPTIONS

- **Active coal filter :** boxes are provided without active coal filter. You have to select one kind of filter in the boarding bellow, in as per the stored products.

- Kit for using without active carbon filter.

- **Control of filter saturation level by REACTIVE TUBES:** Control port on the front of the box. Easy using of specialized reactive tubes. Using of manual pump for testing. Control of efficiency of the filter by reading color codes of reactive tubes.

We remind you that you can use filter for specific applications.

P/N	Description	Outside dim. H x W x D (mm)	Inside dim. H x L x P (mm)	Weight (kg)
H60	Mini-ductless fume hood (delivered without filter)	605 x 505 x 485	410 x 455 x 445	25
ORG50	Active coal filter for organic vapors	70 x 390 x 390	-	8
CORG51	Polyvalent ⁽¹⁾ active coal filter for corrosive and organic vapors	70 x 390 x 390	-	9
FOR50	Active coal filter for formaldehyde vapors	70 x 390 x 390	-	9
CAR50	Kit to use without filter	70 x 390 x 390	-	2
PMAF	Manual pump	-	-	0,4
TROR	Pack of 10 reactive tubes for organic tests	-	-	0,1
TRAC	Pack of 10 reactive tubes for corrosive tests	-	-	0,1
TROA	Pack of 5 reactive tubes for organic test and 5 reactive tubes for corrosive tests	-	-	0,1

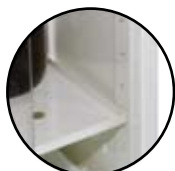
⁽¹⁾ The latest generation «CORG» filter absorbs a large majority of chemicals commonly used in laboratories : organic and inorganic acids, solvents and organics.



FILTERING VENTILATION BENCH OR WALL MOUNTED CABINET



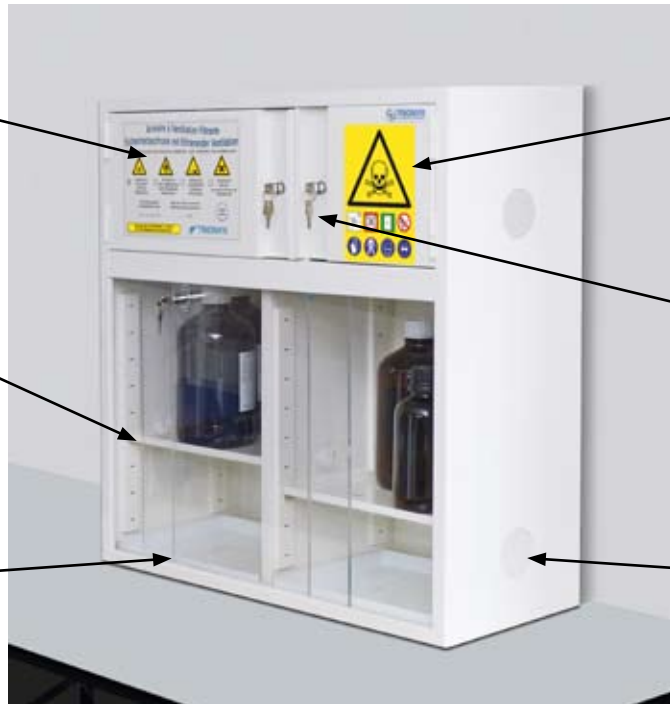
Specialized activated carbon filter



Perforated shelves adjustable in height



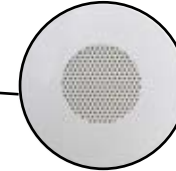
Removable retention trays



Compartment for poisons



Locking of all compartments



Ventilation holes

USE :

This cabinet dedicated to the storage of the dangerous products in laboratory maybe either fixed to the wall in 2 points, or installed on a lab bench or a low piece of furniture.

CONFORMITY

- Capacity of adsorption of the charcoal filters and filtration system tested at the NF X 15-211 norm - May, 2009 (except models AF10-AF11).
- Normalized labels according to ISO 3864, ISO 7010 and NF X08.003 norms, and to 92 / 58 / EEC European directive.
- In conformity with the public health code (articles R5132-66 and R5132-68).
- Electric fans in accordance with CE specifications.

ADVANTAGES

- Possibility to separate hazardous products according to the requirements of the I.N.R.S. and the Public Health code
- Autonomous cabinets for your security
- Disposal of hazardous vapors.
- No connection or evacuation to be planned, solution without civil engineering.
- Immediate visualization of stored products.
- Specialized high efficiency activated carbon filter treated according to the stored products and tested to standard NF X 15-211.
- Great ease of replacement of the activated charcoal cell
- Perforated steel shelves (adjustable in height at each 50 mm step), allowing the flow of liquids in case of accidental spill.
- Removable PVC retention trays for easy cleaning.

TECHNICAL CHARACTERISTICS

- 12/10th Steel construction; White epoxy paint RAL 9010.
- Storage in 3 separate compartments:
- 1 compartment for «poisons»: Swing door; Locking; Standardized pictogram «toxics».
- 2 compartments for «chemical products»: Sliding polycarbonate doors; Locking; 2 perforated shelves adjustable in height on racks; 2 removable retention trays in the lower part.
- «Ventilation / filtration» compartment: Silent fan: 220-240 volts - 50 Hz; Flow rate of 86 m³ / hour; Protection IP 54; 20 watts; 0.1 A; Noise level of 43 dB (A) (excluding airflow); Provided with plug and cable ; key locking

OPTIONS

- Activated carbon filters: The cabinets are delivered without activated carbon filter. You must select one from the table at the bottom of the next page depending on the type of products you are storing.
- Legs.

This cabinet is also available without ventilation / filtration system and without compartment «poisons» and with a single compartment for chemicals (Reference: AF11).



To be connected	Reference			Designation	Dimensions H x W x D (mm)	Number of shelves	Number of retention tanks	Storage capacity in 1L or 2,5L bottles	Acceptable load per shelf ⁽²⁾	Weight (kg)
	Polyvalent ⁽¹⁾	Organic	Formaldehydes							
AF10	AF10 + CDFCORG	AF10 + CDFORG	AF10 + CDFFOR	Cabinet with ventilation system	External 850 x 810 x 325 Internal (2x) 535 x 385 x 275 (1x) 350 x 300 x 305	2	2	41 ou 8	20	50
AF11	-	-	-	Cabinet without ventilation system	Extérieures 550 x 810 x 325 Internal 535 x 790 x 275	1	1	36 ou 8	20	35

⁽¹⁾ The CORG polyvalent activated carbon filter allows to adsorb the majority of commonly used products: inorganic and organic acids, organic compounds and some solvents. ⁽²⁾ Uniformly dispatched.

RANGE 12.X**CE**

FILTERING VENTILATION SAFETY CABINETS



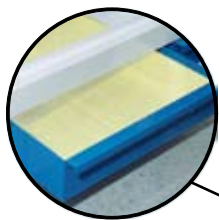
Sampling port test of the filter saturation



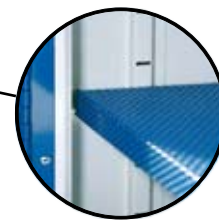
Active charcoal filter



Control window for filter presence



Industrial absorbent mat in retention tank



Perforated shelves adjustable in height

▲ AF43C+ CORG301

CERTIFICATION

- Adsorption capacity in compliance with the NF X 15-211.
- Large warning labels in compliance with ISO 3864 norm and 92/58/CEE european directive.
- Electric fan in compliance with CE specifications

ADVANTAGES

- Cabinet delivered ready to use.
- Independent cabinet ensuring perfect security.
- Elimination of dangerous vapours.
- No need to connect to a central exhaust system. No modification of building structure required.
- Easy sight of the stored products.
- Perforated shelves allowing liquids flow in case of discharge.
- Ventilation system with lighting control.
- Window control for presence of the filter adapted to your needs.
- Specialised high efficiency active charcoal filter, in compliance with the NF X 15-211 norm, treated following chemical products stored.
- Dust pre-filter, 92% efficiency with more than 3 µm particles.
- Easy replacement of the active coal filter.
- Hour meter continuously indicating the total duration of the cabinet's use. After programming, beep will indicate, after 60 hours, that it is necessary to control the saturation of the activated carbon filter.

TECHNICAL CHARACTERISTICS

Storage compartment:

- Built in 15/10th steel. Double doors construction (AF1X : frame in high pressure laminated).
- Large glazed door with framing.
- White epoxy pain (RAL 9010).
- Perforated shelves adjustable in height.
- Ventilation holes

Ventilation/filtration compartment:

- Noiseless fan : 220-240 volts - 50 Hz; flow: 202 m³/h; 0,2 A; 47 watts; sound level 49 dB(A) (without airflow); delivered with cable and plug.

OPTIONS (see also table on the following page)

- Additional shelf

- Active charcoal filters:

- The cabinets are delivered without active charcoal filter. You must select one depending on your chemicals stored.

- Control of filter saturation level by REACTIVE TUBES:

- Control port on the side of the cabinet • Use of a manual pump
- Control of efficiency of active coal filter's saturation level by observing the tubes.

RANGE 12.X



▲AF1C



▲AF2C



▲AF22C



▲AF42C



▲AF43C



▲AF44C

Model compatible with active carbon filter		AF1C	AF2C	AF22C	AF42C	AF43C	AF44C
Model « HEPA H14 ready » compatible with an H14 HEPA filter and / or active carbon filter		AF1C1	AF2C1	-	-	-	-
Outside dimensions (mm)	H	1900	1900	1900	1950	1950	1950
	W	800	800	800	1600	1600	1600
	D	545	545	545	545	545	545
Inside dimensions (mm)	H	1500	1660	1660	1660	1660	1660
	W	760	780	(2x) 380	(2x) 780	(1x) 790 + (2x) 380	(4x) 380
	D	500	500	500	500	500	500
Compartments		1	1	2	2	3	4
Number of shelf		4	4	8 demi	8	4+8 demi	16 demi
Number of containment sump		1	1	2	2	3	4
Storage capacity (L)	with 4 shelves	140	140	120	280	260	240
	with 5 shelves	180	180	150	360	330	360
Maximum load by shelf ⁽¹⁾		60	60	40	60	60 + 40	40
Weight (kg)		115	140	150	280	290	300

Active carbon filter For organic vapours	ORG300 (16 kg)	ORG300 (16 kg)	ORG300 (16 kg)	ORG300 (16 kg)	ORG300 (16 kg)	ORG300 (16 kg)
« Universal » active carbon filter for organic and corrosive vapours	CORG301 (15 kg)	CORG301 (15 kg)	CORG301 (15 kg)	CORG301 (15 kg)	CORG301 (15 kg)	CORG301 (15 kg)
Active carbon filter for formaldehyde vapours	FOR300 (16 kg)	FOR300 (16 kg)	FOR300 (16 kg)	FOR300 (16 kg)	FOR300 (16 kg)	FOR300 (16 kg)
Kit for using without an active carbon filter	CAR300 (3 kg)	CAR300 (3 kg)	CAR300 (3 kg)	CAR300 (3 kg)	CAR300 (3 kg)	CAR300 (3 kg)
H 14 HEPA filter frame	SH300	SH300	-	-	-	-
H14 HEPA filter for powders	HEP300	HEP300	-	-	-	-



Please remember that for each specific application we can provide filters.

Manual pump	PMAF	PMAF	PMAF	PMAF	PMAF	PMAF
Pack of 10 reactive tubes for « organic tests »	TROR	TROR	TROR	TROR	TROR	TROR
Pack of 10 reactive tubes for « corrosive tests »	TRAC	TRAC	TRAC	TRAC	TRAC	TRAC
Pack of 5 reactive tubes for « organic tests » and 5 for « corrosive tests »	TROA	TROA	TROA	TROA	TROA	TROA
Additional shelf (H25 x L780 x P500 mm) for AF1X – AF1XH – AF2X – AF2XH – AF4-2X – AF4-3X	ESAF2X	ESAF2X	-	ESAF2X	ESAF2X	-
Additional half-shelf (H25 x L370 x P500 mm) for AF2-2X – AF4-3X – AF4-4X	-	-	ESAF2-2X	-	ESAF2-2X	ESAF2-2X

⁽¹⁾ Evenly distributed

N.B.: Our ORG300 and CORG301 filters can not be used with AF2, AF2-2, AF4-2, AF4-3, AF4-4 and AF1 cabinets. You can only use these filters with AF2X, AF2-2X, AF4-2X, AF4-3X, AF4-4X and AF1X cabinets. The cabinets are delivered without active charcoal filter and / or without H14 HEPA filter. You must select one depending on the stored chemicals. CAUTION! The active charcoal filter must be changed at least once a year.

The manufacturer reserves the right to discontinue or change specifications or designs at any time without notice and without incurring obligations. 11/2015

Flammable cabinets

Corrosive cabinets

Toxic cabinets and multirisk

Pesticide range

Fume hoods, filtering cabinets - Ventilation

Containment and Cans

Anti-fire equipments and File cabinets

Showers and first-aid equipments

RANGE 14.X

CE



FILTERING VENTILATION SECURE CABINETS

►
AF5-2X
+CORG51

◀
AF3X
+CORG51

▼
AFP5-2X
+CORG51

▼
AFP3X
+CORG51



CERTIFICATION

- Adsorption capacity in compliance with the NF X 15-211 norm.
- In compliance with the health regulation articles (R.5132-66 and R.5132-68).
- In compliance with the recommendations of the National Institute of Research and Safety at work.
- Large warning labels in compliance with ISO 3864 and NF X08.003 norms, 92/58/CEE European directive.
- Electric fan in compliance with CE specifications.

ADVANTAGES

- Available with Polymethylmethacrylate glazed doors or with steel doors.
- Independent cabinet ensuring perfect security.
- Elimination of dangerous vapors.
- No need of connection to an exhausting system. No modification of building structure required.
- Ventilation system with lighting control.
- Specialised high efficiency active charcoal filter, in compliance with the NF X 15-211 norm, treated following chemical products stored.
- Dust pre-filter, 92% efficiency with more than 3 µm particles.
- Easy change of the active coal filter.
- The standard timer supplied with your hood indicates you, all the time, the total use duration of your hood. After programming, every 60 hours, a sound alarm invites you to check the saturation of the active coal filter.

TECHNICAL SPECIFICATIONS

Storage compartment(s):

- Built in steel 10/10th.
- White epoxy paint RAL 9010.
- Supplied with «Flammable», «Corrosive» (x2) and «Toxics» large warning labels.
- Steel containment shelves (Height 20mm) adjustable in height.
- Removable bottom containment sump (in each compartments (height 100mm).
- Independent storage compartments on AFP5-2X and AF5-2X models.
- Self latching doors with key locks.
- High and low vents:
 - Inlet with fire grid,
 - outlet Ø 100mm with fire grid.

Ventilation/filtration compartment:

- Noiseless fan : 220-240 volts - 50 Hz - 0,2 A - 47 watts; flow: 86 m³/h; 0,1 A; 20 watts; sound level 43 dB(A); protection: IP54; delivered with cable and plug.
- Box to equip with molecular (charcoal) filter ORG 50 or CORG 51 for filtration and recirculation of the air inside the lab, or with a using kit CAR50, without charcoal, for an external connection



OPTIONS

- **Additional shelf.**

- **Active charcoal filter:**

- The cabinets are delivered without active charcoal filter. You must select one in the file below depending on your chemicals stored.

- **Containment shelf and base trough in PVC** for corrosive products.

- **Control of filter saturation level by REACTIVE TUBES:**

- Control port on the side of the cabinet.
- Manual pump usage.
- Control of efficiency of active coal filter's saturation level by observing the tubes.

- **Industrial absorbent mat for retention tank (P/N JF10D).**

CABINETS

P/N	Description	Dimensions H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Maximum load by shelf ⁽¹⁾	Weight (kg)
AFP3X	Filtering ventilation cabinet with steel door	Ext. 2135 x 560 x 545 Int. 1795 x 555 x 480	150	41	3	50	75
AF3X	Filtering ventilation cabinet with glazed door	Ext. 2135 x 560 x 545 Int. 1795 x 555 x 480	150	41	3	50	75
AFP5-2X	Filtering ventilation cabinet with steel door	Ext. 2135 x 1110 x 545 Int. (2x) 1795 x 555 x 480	(2x) 140	(2x) 41	6	50	130
AF5-2X	Filtering ventilation cabinet with glazed door	Ext. 2135 x 1110 x 545 Int. (2x) 1795 x 555 x 480	(2x) 140	(2x) 41	6	50	130

⁽¹⁾ Evenly distributed

CHARCOAL FILTERS AND ACCESSORIES

P/N	Description	Dimensions H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Weight (kg)
CORG51	Active coal filter for corrosive and organic vapors ⁽¹⁾	70 x 390 x 390	-	-	-	9
ORG50	Active coal filter for organic vapors	70 x 390 x 390	-	-	-	8
FOR50	Active coal filter for formaldehyde vapors	70 x 390 x 390	-	-	-	8
CAR50	Kit for using without filter					2
PMAF	Manual pump					0,4
TROR	Pack of 10 reactive tubes for «organic tests»					0,1
TRAC	Pack of 10 reactive tubes for «corrosive tests»					0,1
TROA	Pack of 5 reactive tubes for «organic tests» and 5 reactive tubes for «corrosive tests»					0,1
EE1	Steel additional containment shelf	22 x 550 x 465	-	5	-	3
SEPVC	PVC additional containment shelf	20 x 530 x 460	-	5	-	4
SBPVC	PVC containment sump	100 x 530 x 460	-	24	-	3
JF10D	Industrial absorbent mat					1

⁽¹⁾ The latest generation «CORG» filter absorbs a large majority of chemicals commonly used in laboratories: organic and inorganic acids, solvents and organics.

RANGE 3030.X**EN 14470-1 FM 6050 CE**

EN 14470-1 & FM⁽¹⁾ FILTERING VENTILATION SAFETY CABINETS TYPE-30 MINUTES

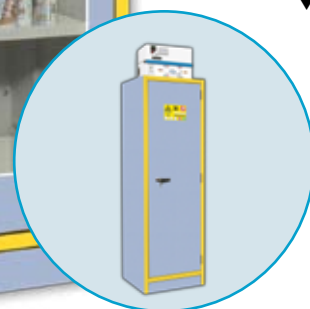


▶
AFV35
+CORGS1

◀
AFV34
+CORGS1

▼
AF35
+CORGS1

▼
AF34
+CORGS1



CERTIFICATION

- Adsorption capacity in compliance with the NF X 15-211 norm.
- In compliance with the health regulation articles (R.5132-66 and R.5132-68).
- In compliance the recommendations of the National Institute of Research and Safety at work.
- Tested and approved Type 30 according to EN 14470-1 (04-2004) and EN 1363-1 (06-2000).
- ⁽¹⁾Tested and certified 10 minutes to FM 6050 (Factory Mutual international) - Certification supplement in progress.
- Standardized pictograms according to ISO 3864, NF X08.003, Directive 92/58 / EEC, EN 14470-1 (04-2004) and FM specifications.
- Electric fan in compliance with CE specifications.

ADVANTAGES

- Available with Polymethylmethacrylate glazed doors.
- Independent cabinet ensuring perfect security.
- Elimination of dangerous vapors.
- No need of connection to an exhausting system. No modification of building structure required.
- Ventilation system with lighting control.
- Specialized high efficiency active charcoal filter, in compliance with the NF X 15-211 norm, treated following chemical products stored.
- Dust pre-filter, 92% efficiency with more than 3 µm particles.
- Easy change of the active coal filter.
- Fire resistance of 30 minutes according to ISO 834 standard curve.
- Pedestal area under driveable by a forklift by removing panel.
- Self-closing cabinets, with predominant wing (doors models AFV35 and AF35) thanks to thermofuse starting at 43 °C.

TECHNICAL SPECIFICATIONS

Storage compartment(s):

- Construction in insulating panels offering a high resistance to chemical aggressions.
- RAL 7035 light gray frame with yellow plated fields RAL 1023.
- Glazed door (s), thickness 17 mm. (for models AFV34 and AFV35)
- Labelling with standardized symbols.
- Adjustable shelves in height with 32 mm pitch.
- Removable tray in the lower part.
- Air inlet and outlet Ø 100 mm for possible connection.
- Doors with automatic closing with predominance of wings.
- Door system in open position with automatic closing in case of fire.
- 3-points lock.
- Closure with anti-spark lock.
- Leveling feet for leveling adjustment.
- Independent storage compartments for AFV35 and AF35 models.

Ventilation/filtration compartment:

- Noiseless fan : 220-240 volts - 50 Hz - 0,2 A - 47 watts; flow: 86 m³/h; 0,1A; 20 watts; sound level 43 dB(A); protection: IP54; delivered with cable and plug.
- The cabinets are delivered without active charcoal filter. You must select a filter depending on your stored chemicals.



OPTIONS

- Additional shelf, Perforated cover plate retention drawer

- Active charcoal filter:

- The cabinets are delivered without active charcoal filter. You must select one in the file below depending on your stored chemicals.

- Containment shelf and base trough in PVC for corrosive products.

- Control of filter saturation level by REACTIVE TUBES:

- Control port on the side of the cabinet.
- Use of a manual pump.
- Active coal filter saturation level efficiency control by tube reading.

- Industrial absorbent mat for retention tank (P/N JF10D).

CABINETS (must be equipped with a filter)

P/N	Description	Dimensions H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Weight(kg)
AF34	Filtering ventilation cabinet	Ext. 2210 x 605 x 550 Int. 1581 x 491 x 419	130	20	3	132
AFV34	Filtering ventilation cabinet with glazed door	Ext. 2210 x 605 x 550 Int. 1581 x 491 x 419	130	20	3	132
AF35	Filtering ventilation cabinet	Ext. 2210 x 1115 x 550 Int. (2x) 1581 x 490 x 419	(2x) 120	(2x) 20	6	247
AFV35	Filtering ventilation cabinet with glazed door	Ext. 2210 x 1115 x 550 Int. (2x) 1581 x 490 x 419	(2x) 120	(2x) 20	6	247

CHARCOAL FILTERS AND ACCESSORIES

P/N	Description	Dimensions H x W x D (mm)	Storage capacity (L)	Containment capacity (L)	Number of shelves	Weight (kg)
CORG51	Active coal filter for corrosive and organic vapors ⁽¹⁾	70 x 390 x 390	-	-	-	9
ORG50	Active coal filter for organic vapors	70 x 390 x 390	-	-	-	8
FOR50	Active coal filter for formaldehyde vapors	70 x 390 x 390	-	-	-	8
CAR50	Kit for using without filter					2
PMAF	Manual pump					0,4
TROR	Pack of 10 reactive tubes for «organic tests»					0,1
TRAC	Pack of 10 reactive tubes for «corrosive tests»					0,1
TROA	Pack of 5 reactive tubes for «organic tests» and 5 reactive tubes for «corrosive tests»					0,1
E48	Steel additional containment shelf	30 x 490 x 410	-	6	-	3
SE148	PVC additional containment shelf	20 x 475 x 405	-	5	-	3
SB148	PVC containment sump	100 x 475 x 405	-	19	-	4
JF10D	Industrial absorbent mat (10 sheets)					1

⁽¹⁾ The CORG multi-purpose activated carbon filter allows the vast majority of commonly used products to be adsorbed: organic and organic acids, organic compounds or solvents.

RECYCLING AIR BOX Labopur®

Take advantage of Labopur®'s technology with any safety cabinet



^H50C + CORG51



^H50C+ CORG51 (for changing the filter)

OPERATING PROCESS

The fan extracts harmful and toxic vapors from the cabinet. The charcoal filter purifies the fumes before safely rejecting them in the environment.

CONFORMITY

- Active coal filters adsorption capacity and filtration system are tested and certified NF X 15-211.
- Electric fans are in conformity with European specification CE.

ADVANTAGES

- Labopur's technology.
- Adaptability to all types of cabinets, with 3 inlets for connection.
- Easy installation and connection.
- Warning light insures good functioning of the ventilation system.
- Front control window immediately indicates if the filter is inside and well adapted to your needs.
- High efficiency active coal filter specialised and treated following products stored in compliance with NF X 15-211.
- Dust-protecting pre-filter, efficiency 92% for particles > 3 µm.
- Easy replacement of the active coal filter.
- The standard timer supplied with your recycling air box indicates the total use of your box. After programming, every 60 hours, a sound alarm invites you to check the saturation of the active coal filter.

TECHNICAL SPECIFICATIONS

- Steel frame 12/10th.
- Epoxy painting : white RAL 9010, blue RAL 5015.
- Soft and silent electrical fan: 220-240 volts - 20 watts, 0,1 A, 43 db (A) (excluding air flow) - Airflow 86 m3/hour - Protection: IP54.
- Inlet airflow diameter : 100 mm.

OPTIONS

- Active coal filter : boxes are provided without active coal filter. You have to select the type of filter in the boarding below, as per the stored products.
- Connecting kit.
- Control of filter saturation level by REACTIVE TUBES: Control port on the front of the box. Easy using of specialized reactive tubes. Using of manual pump for testing. Control of the filter efficiency by reading the reactive tubes color codes.

We remind you that you can use filter for specific applications.

CONNECTING KIT OPTION (KRC)

The kit allows to connect easily your ventilation or filtration box with any cabinet.

It includes :



- 1 sleeve diameter 100mm, ref CHJ, to fix on the exhaust of the cabinet.
- 1 meter of flexible tube diameter 100mm ref KL 100.
- 2 clamp diameter 100 mm, ref. CDS100.

Ref	Description	Dimensions H x W x D (mm)	Weight (kg)
H50C	Recycling air box (delivered without filter)	310 x 505 x 485	15
ORG50	Active coal filter for organic vapors	70 x 390 x 390	8
CORG51	Polyvalent active coal filter for corrosive and organic vapors	70 x 390 x 390	9
FOR50	Active coal filter for formaldehyde vapors	70 x 390 x 390	9
CAR50	Kit to use recycling air box without filter	70 x 390 x 390	2
PMAF	Manual pump	-	0,4
TROR	Pack of 10 reactive tubes for organic tests	-	0,1
TRAC	Pack of 10 reactive tubes for corrosives tests	-	0,1
TROA	Pack of 5 reactive tubes for organic test and 5 reactive tubes for corrosive tests	-	0,1

(1) The latest generation «CORG» filter absorbs a large majority of chemicals commonly used in laboratories : organic and inorganic acids, solvents and organics.

RANGE H

VERTICAL RECYCLING AIR BOX Labopur®

Take advantage of Labopur®'s technology with under bench cabinets



*H40 + CORGFC
(Bench and cabinet not included)



Castors



*H40 + CORGFC
(Easy replacement of the active coal filter)

OPERATING PROCESS

The fan extracts harmful and toxic vapors from the cabinet. The charcoal filter purifies the fumes before safely rejecting them in the environment.

CONFORMITY

- Active coal filters adsorption capacity and filtration system are tested and certified NF X 15-211.
- Electric fans are in conformity with European specification CE.

ADVANTAGES

- Labopur's technology.
- Adaptability to all types of cabinets, and especially for under bench cabinets
- Easy installation and connection.
- Warning light insures good functioning of the ventilation system.
- Front control window immediately indicates if the filter is inside and well adapted to your needs.
- High efficiency active coal filter specialised and treated following products stored in compliance with NF X 15-211.
- Dust-protecting pre-filter, efficiency 92% for particles > 3 µm.
- Easy replacement of the active coal filter.
- Castors at the back for easy movement

TECHNICAL SPECIFICATIONS

- Steel frame 12/10th.
- Epoxy painting : white RAL 9010, blue RAL 5015.
- Soft and silent electrical fan: 220-240 volts - 20 watts, 0,1 A, 43 db (A) (excluding air flow) - Airflow 86 m3/hour - Protection: IP54.
- Inlet airflow diameter : 100 mm.

OPTIONS

- Active coal filter : boxes are provided without active coal filter. You have to select the type of filter in the boarding below, as per the stored products.
- Connecting kit.
- Control of filter saturation level by FILTERALARM: Control by sensor. Electronic board measuring the airflow through the filter. Adjustment allowing detection for filter saturation or airflow troubles. The sound system underlines a dysfunction. Warning light indicator.
- Control of filter saturation level by REACTIVE TUBES: Control port on the front of the box. Easy using of specialized reactive tubes. Using of manual pump for testing. Control of the filter efficiency by reading the reactive tubes color codes.

We remind you that you can use filter for specific applications.

CONNECTING KIT OPTION (KRC)

The kit allows to connect easily your ventilation or filtration box with any cabinet

It includes :

- 1 sleeve diameter 100mm, ref CHJ, to fix on the exhaust of the cabinet.
- 1 meter of flexible tube diameter 100mm ref KL 100.
- 2 clamp diameter 100 mm, ref. CDS100.



Ref	Description	Dimensions H x W x D (mm)	Weight (kg)
H40	Recycling air box (delivered without filter)	670 x 270 x 460	18
ORGFC	Active coal filter for organic vapors	100 x 200 x 400	8
CORGFC	Polyvalent active coal filter for corrosive and organic vapors	100 x 200 x 400	9
FORFC	Active coal filter for formaldehyde vapors	100 x 200 x 400	9
CARFC	Kit to use recycling air box without filter	70 x 390 x 390	2
PMAF	Manual pump	-	0,4
TROR	Pack of 10 reactive tubes for organic tests	-	0,1
TRAC	Pack of 10 reactive tubes for corrosives tests	-	0,1
TROA	Pack of 5 reactive tubes for organic test and 5 reactive tubes for corrosive tests	-	0,1

(1) The latest generation «CORG» filter absorbs a large majority of chemicals commonly used in laboratories : organic and inorganic acids, solvents and organics.

VENTILATION AND FILTRATION BOXES

CDV-A
+ option KRC
+ option KL100
+ option CDS100



CDF-P
+ option KRC



VENTILATION BOX (CDV-A)

USE AREA

The electric fan allows the extraction of toxic vapours generated inside your safety cabinet.

CONFORMITY

Electric fan in compliance with ISO 3744; CE marking.

ADVANTAGES

- Adaptable to all of our cabinets.
- Simple and aesthetic fitting.
- Easy connection between the cabinet and the vent box.
- Connection by flexible tube Ø 100 mm (in option).
- Lighting control allowing to survey the proper working of the fan.

TECHNICAL SPECIFICATIONS

- Built in steel 12/10th, white epoxy paint RAL 9010.
- Electric engine with switch ON/OFF with lighting control.
 - 220/240 volts – 50 Hz – 97 W – 0,54 A – 55,5 dB(A) (excluding air flow)
 - Flow : 215 m3/h – Protection : IP44.
 - Exhaust inlet and outlet : Ø 100 mm..

CONNECTING KIT OPTION (KRC)

It allows to connect easily your ventilation or filtration box with any cabinet
It includes :



- 1 sleeve diameter 100mm, ref CHJ, to fix on the exhaust of the cabinet.
- 1 meter of flexible tube diameter 100mm ref KL 100.
- 2 clamp diameter 100 mm, ref. CDS100.

FILTRATION BOXES (CDF-A, CDF-ACORGET CDF-P)

USE AREA

The electric fan allows the exhaust of toxic vapours generated inside the safety cabinet. The vapours are purified by the active coal filter and rejected without danger in the atmosphere.

CONFORMITY

- CE marking

ADVANTAGES

- Adaptable to all of our contacts.
- No modification of building's structure required.
- Simple and aesthetic fitting.
- Easy connection between the cabinet and the vent box.
- Connection by flexible tube Ø 100 mm (in option).

TECHNICAL SPECIFICATIONS

Filtration box CDF-A model (not show on the picture)

- Built in steel 12/10th, White epoxy paint RAL 9010.

Filtration box CDF-P model

- Built in cellular PVC, White colour

Each box contains independent compartments :

Filtration compartment :

- «Candle» type active coal filter (H150 x Ø150 mm), ref. CDFORG on CDF-A model CDFCORG on CDF-P model; must be changed at least once a year.
- Filter settled on the box by 3 lugs and airtightness insured thanks to a rubber seal.

Ventilation compartment :

- Electric engine :
 - 220/240 volts – 50 Hz – 20 W – 0,09 A – 43 dB(A) (excluding air flow).
 - Flow : 86 m3/h – Protection : IP54.
 - Exhaust inlet and outlet : Ø 100 mm.

P/N	Description	Overall dimensions H x W x D (mm)	Equiped with active coal filter	Weight (kg)
CDV-A	Ventilation box in steel	235 x 235 x 250	no	8
CDF-A	Filtration box in steel with filter	285 x 410 x 285	CDFORG	13
CDF-ACORG	Filtration box in steel with filter	285 x 410 x 285	CDFCORG	13
CDF-P	Filtration box in cellular PVC with filter	305 x 580 x 300		10
KRC	Connecting kit for box	-	-	1
KL100	1 metre flexible tube Ø 100 mm	-	-	0,2
CHJ	Connection unit Ø 100 mm	-	-	0,1
CDS100	Clamp collar Ø 100 mm	-	-	-
CDFORG	Active coal filter for organic vapors	H 150 x Ø 150	Filter must be changed at least once a year	3
CDFCORG	Polyvalent active coal filter for corrosive and organic vapors	H 150 x Ø 150		3
CDFFOR	Active coal filter for formaldehyde vapors	H 150 x Ø 150		3

⁽¹⁾ The latest generation «CORG» filter absorbs a large majority of chemicals commonly used in laboratories : organic and inorganic acids, solvents and organics.

VENTILATION ATEX BOXES “ with Filtration Option ”



CERTIFICATION

- **Model with ATEX airflow:** Electric fan with ATEX volute approved ATEX CE II 3/G.
- **Model with ATEX engine:** Electric fan with ATEX engine approved ATEX CE II 3/G EEx e IIB T4.
- **Model with ATEX airflow and engine block:** Electric fan with airflow approved ATEX CE II 3/G and engine block approved ATEX CE II 3/G EEx e IIB T4.

ADVANTAGES

- Convenient for all safety cabinets.
- Easy and rapid installation, nice looking.
- Easy connection between the cabinet outlet and the box inlet.
- Connection by flexible tube diameter 100mm (in option).

TECHNICAL CHARACTERISTICS

- Built in steel 12/10th.
- White epoxy paint RAL 9010.
- **Electric fan with ATEX airflow:**
 - 220-240 volts – 50 Hz – 12 W – 0,17 A – 47 dB(A) (excluding air flow).
 - Airflow: 80 m3/h – IP55 protection.
 - Inlet diameter: 100 mm / Outlet diameter: 100 mm.
- **Electric fan with ATEX engine:**
 - 220-240 volts – 50 Hz – 120 W – 1,07 A – 65 dB(A) (excluding air flow).
 - Airflow: 190 m3/h – ATEX CE II 3/G EEx e IIB T4 protection.
 - Inlet diameter: 100 mm / Outlet diameter: 100 mm.
- **Electric fan with ATEX airflow and engine block:**
 - 380 volts phase – 50 Hz – 180 W – 0,82/0,47 A 65 db (A) (excluding air flow).
 - Airflow: 200 m3/h - Volute protection: ATEX CE II 3/G, Engine protection : ATEX CE II 3/G EEx e IIB T4.
 - Inlet diameter: 100 mm / Outlet diameter: 100 mm.
 - Three-phase 16 A.

FILTRATION OPTION WITH CHARCOAL FILTER

Our ATEX ventilation boxes may be equipped with an active charcoal filter. You may select it in the bottom of the file depending on the chemicals you will store in your safety cabinet. The adsorption capacity of charcoal filters is tested approved according the new NF X 15-211 may 2009 - Class 2 norm.



3 different charcoal filters are proposed:

- CDFORG Charcoal filter for organic vapors.
- CDFCORG “Universal”⁽¹⁾ charcoal filter for organic and corrosive vapors.
- CDDFOR charcoal filter for formaldehyde vapors

CONNECTING KIT OPTION (KRC)

It allows to connect easily your ventilation or filtration box with any cabinet.

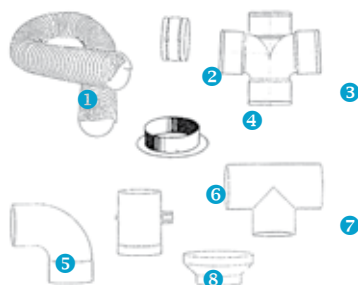
It includes :

- 1 sleeve diameter 100mm, ref CHJ, to fix on the exhaust of the cabinet.
- 1 meter of flexible tube diameter 100mm ref KL 100.
- 2 clamp diameter 100mm, ref. CDS100.



P/N	Description	ATEX type	Voltage	Dimensions H x W x D (mm)	Weight (kg)
CVAT	Ventilation box with ATEX volute (without filtration option)	Volute	220 v mono	305 x 650 x 285	14
CMAT	Ventilation box with ATEX engine (without filtration option)	Engine	220 v mono		18
CTAT	Ventilation box with ATEX volute and engine (without filtration option)	Volute & Engine	380 v three phase		18
KRC	Connecting kit for box	-	-	-	1
❶ KL100	Flexible tube diameter 100mm, per meter	-	-	-	0,2
❷ CHJ	Connecting sleeve diameter 100mm	-	-	-	0,1
CDS100	Clamp diameter 100mm	-	-	-	0,01
CDFORG	Active charcoal filter for organic vapors	Filter must be changed at least once a year			3
CDFCORG	“Universal” ⁽¹⁾ charcoal filter for organic and corrosive vapors				3
CDDFOR	Active charcoal filter for formaldehyde vapors				3

VENTILATION EQUIPMENTS



P/N	Description	Weight (kg)
② R100	Connecting sleeve diameter 100mm	0,5
③ RT188	PVC cross diam 100 mm	0,5
⑤ CT90	PVC elbow (90°) diam 100 mm	0,5
⑥ V125	Manual regulating PVC valve diam 125 mm	1
⑦ BT188	PVC T diam 100 mm (also available in Y, please contact-us)	0,5
⑧ ELE75	PVC reducer diam 100/75 mm	0,5
⑨ ELE39	PVC reducer diam 125/100 mm	0,5

⁽¹⁾ The latest generation «CORG» filter absorbs a large majority of chemicals commonly used in laboratories : organic and inorganic acids, solvents and organics.

NOTES