



TECHNICALS INSTRUCTIONS
for
HORIZONTAL
LAMINAR FLOW
Type OPTIMUM H
Serial Number:

ADS Laminaire S.A.
35-37 rue Baudin
93315 Le Pré Saint Gervais – France
Tel : 0033-1 48 44 74 69
Fax : 0033-1 48 44 14 64

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I – CONSTRUCTION

1 - STRUCTURE

All surfaces are covered with veneer laminated plywood in white colour. The polished laminate is extremely easy to maintain. We guarantee you that due to our conception and manufacture, the OPTIMUM will be perfectly strong. It prevents the creation of fine particles and thus ensures a better dust proof enclosure.

2 - WORK SURFACE

The area in front of the filtration surface has a positive pressure under horizontal laminar Flow.

3 - LIGHTING

Fluorescent lighting more than 600 lux is provided on the working area. All the lighting system is installed out the flow working area.

4 - AUTOMATIC AIR FLOW CONTROL

This cabinet is equipped with an adjustable and direct centrifugal fan designed to maintain the air flow velocity at low rotation speed (ECM technology: principle hereunder)

In order to avoid any vibration, engine and turbine are balanced together and the blower is mounted on rubber vibration isolators.

The laminar air flow velocity is 0.4 m/s +/- 10 %.

II – METHOD OF OPERATIONS

The work volume is continuously swept by the horizontal laminar air flow which complies with class 10 FS 209 e, ISO 4, to protect against any external contamination.

III - OPERATING INSTRUCTIONS

- Install the cabinet on a horizontal table.
- Clean the working area with alcohol.
- Connect on mono phase plug and earthen wire
- Press the start/stop button, the blower starts. There is one delay (purification time) before working.
- Lighting: to switch the light ON or OFF, press button ECL.
- The red alarm light, marked “COL“, progressively lighted indicates the clogging of the filter.
- The red alarm light, marked “ALM “, indicates that the filter is clogged and requires changing.

AUDIO ALARMS

Alarm is coupled to a buzzer which may be disconnected.
(instruction on demand)

IV – TECHNICAL DATA

OPTIMUM cabinet Data Sheet:

OPTIMUM H / HX												
Type	9	91	92	12	121	122	16	161	162	18	181	182
weight	90 kg			150 kg								
Air Flow Rate (laminar flow)												
Exhausted Air Flow Rate												
Effective width (mm)	921			1226			1531			1836		
Overall width (Type H) (mm)	957			1262			1567			1886		
Overall width (stainless steel Type HX) (mm)	924			1229			1534			1841		
Effective depth (mm)												
Overall Depth												
Effective Height												
Overall Height												
Absolute Filter for blowing	M 6/9	M 7/9	M 9/9	M 6/12	M 7/12	M 9/12	M 6/15	M 7/15	M 9/15	M 6/18	M 7/18	M 9/18
Absolute filter for exhaust												
lighting	Fluo 600			Fluo 1200								
Type UV	45 –15 W			90 – 30 W								
Noise Level	L65 dB according to NF norm L60 dB according to european norm											
Power Alimentation	Mono 220 + T 15 A 50 Hz											
LUX level	600 to 800 Lux											

V - MAINTENANCE

- Replace HEPA filter when the “COL“ alarm light on.
- Before replacing the filter, decontaminate the area.
- To replace the filter check out the following operations:

Air flow filter:

Unscrew the clamping screws. Discard the old filter and replace the new one and carry out the same manipulation in reverse.

Blower motor:

No maintenance.

Fluorescent light:

Situated under the front cap for direct access.

Electric's and electronics components:

Situated under the front cap for direct access.

VI – GUARANTY AGREEMENT

The **OPTIMUM H 181** is guaranteed One Year for spare parts, except for wrong use and disposables.

CONDITIONS OF THE GUARANTY:

- During the period of guaranty, the customers will benefit in case of failure, from free spare parts replacement.

- The guarantee is not available for:

- In case of consecutive damages referring to a wrong utilisation or a default of maintenance.
(non respect of orders) or an external cause (damages of water, fire, and so on C.f. the insurance of your establishment.)

- In case of external intervention, other than **ADS LAMINAIRE** company during the period of the guaranty.

VII – CERTIFICATE CE/CEM

« CE » CONFORMITY CERTIFICATE

The Manufacturer, undersigned:

ADS LAMINAIRE
35-37 rue Baudin
93315 le Pré-Saint-Gervais cedex

Insure that: all equipment defined as follow:

TYPE: OPTIMUM H

File: 96 602 1070 59 6600 GA 380/01865801.7R-RN/ma

Is conformed with:

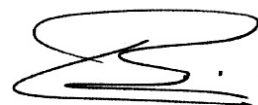
- Recommendation from annexe I of European Directives 89/392 modified, at this day, by directives 91/368, 93/44 et 93/68.
- Pacts n° 92-767 of 29-07-92 bringing transposition of European Directives 89/392 of 14-09-89 and 91/368 of 20-06-91 concerning Technical Rules and Conformity Certification which is suitable.
- The following Directives: 73/23 CEE - 89/336
- According to legislation and Law European Member State bringing transposition of pre indicated European Directives as below (1)
- National Norms: **NFC 20.010 / NFC 20.030**

Date: **Le Pré-Saint-Gervais (93),**

Year 2003

Name and Function : **B. BIJAOUI – Managing Director -**

Sign:



(1) valable uniquement dans le cas d'une exportation et à la demande de l'Etat membre. préciser alors le nom de l'état ainsi que la nature, le titre et la date du ou des actes législatifs ou réglementaires applicables.