Air Supply Vent Technical Data
ASV-90

“For a fresher indoor climate!”
“Pour un environnement intérieur plus frais!”

ASV-90
Air Supply Ventilator

Air Supplémentaire par Ventilation naturelle

Condar Company
111 Kangaroo Drive
Columbus, North Carolina 28722

Call 828.436.2102
Monday-Friday 8AM-5PM
Fax@Condar.com
or e-mail Mike Whitt
MikeWhitt@Condar.com
Contractors who have purchased the Fresh 90
**Technical data Fresh 90**

- **Capacity at 10 Pa:** 9.0 l/s
- **Wall opening:** Ø105 mm
- **Max wall thickness:** 350 mm. Additional wall pipes are available for thicker walls.
- **Material:** ABS-plastic (recyclable)
- **Colour:** White, RAL 9010

**Capacity**

The lines for the filter alternatives illustrate fully open vent.

**Technical data Fresh 90-dB**

- **Wall opening:** Ø150 mm
- **Max wall thickness:** 400 mm. For other lengths please contact Fresh AB.

**Dimensions Fresh 90, Ø99mm**

**Dimensions Fresh 90, Ø102mm**

**Dimensions Fresh 90-dB, Ø140mm**

**Sound data**

The diagrams show sound reduction with fully open vent. The calculations are based on a reference area of 10 m².

Fresh 90-dB with 200mm wall pipe.

Fresh 90-dB with 300mm wall pipe.

Fresh 90-dB with 400mm wall pipe.

The manufacturer reserves the right to make specification changes without notice.
TEST REPORT

Object: Condar ASV90 with 140mm outside grill and one-way PRESSURE GUARD

Measure equipment: Custom-made measure box supplied with air from a 100mm diameter duct fan. Flow measured with a flow pipe, Weab 50mm diameter and a Testo 512 manometer. Pressure drop measured with a SwemaMan 80 manometer.

Conducted by: Tomas Soerke

Test data:

<table>
<thead>
<tr>
<th>Pa object</th>
<th>Pa Weab</th>
<th>Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>2</td>
<td>3.3</td>
</tr>
<tr>
<td>8</td>
<td>5</td>
<td>4.1</td>
</tr>
<tr>
<td>10</td>
<td>7.5</td>
<td>4.7</td>
</tr>
<tr>
<td>12</td>
<td>10.5</td>
<td>5.4</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
<td>5.6</td>
</tr>
<tr>
<td>15</td>
<td>15.5</td>
<td>6.4</td>
</tr>
<tr>
<td>17</td>
<td>20</td>
<td>7.9</td>
</tr>
<tr>
<td>20</td>
<td>28</td>
<td>8.7</td>
</tr>
<tr>
<td>23</td>
<td>38</td>
<td>9.3</td>
</tr>
<tr>
<td>25</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

Diagram

Results: The "Pa Weab" is not usable data. These values come from the measuring pipe and translate into flow. It takes about 6-8 Pa to have some air to open the pressure guard. To have 8 l/s (as a standard ventilator has at 10 Pa) it needs 20 Pa. The flexible flaps work against the flow and give a resistance reducing the flow.
“For a fresher indoor climate!”
“Pour un environnement intérieur plus frais!”

ASV-90
Air Supply Ventilator
Air Supplémentaire par Ventilation naturelle

Condar

Easy Installation / Installation facile

1. Locate the ventilator’s position and cut or drill a 4” diameter hole from the inside.
2. Cut the tube to length and insert into hole. Seal inside and out with the caulk provided.
3. Screw the exterior grill assembly to the outside wall.
4. Remove the cover from the interior control module and fasten the rear part to the interior wall with the screws and anchors provided.
5. Slip the damper slide control into the bottom channel.
6. Replace the cover, and your ASV-90 is ready to use!

CONTENTS:
1 – ASV-90 Interior Controller
1 – Insulated Vent Cap
1 – Exterior Grill
2 – 6” long 4” diameter Extension Tubes
1 – Exterior Insect Screen
1 – Standard Dust Filter
Includes caulk material, screws and plastic anchors

CONTENU:
1 – ASV-90 Appareil de contrôle intérieur
1 – Couvercle isolant de ventilateur
1 – Grille extérieure
2 – Tubes à rallonge 15cm de long par 10cm de diamètre
1 – Moustiquaire extérieure
1 – Filtre à poussière standard
Ainsi que du mastic, des vis et des chevilles
Filtered, Draft-free Fresh Air
The Condar ASV Helps in Every Room of Your Home.
Today’s homes are tighter, and more energy efficient, but sometimes a tight home just doesn’t have sufficient air changes to ensure good air quality. The Condar ASV lets you control fresh air levels in your home to keep your air safe, fresh and clean.

De l’air frais filtré sans aucun courant d’air déplaisant.
Le ASV de Condar vient à l’aide de toutes les pièces de votre maison.
Aujourd’hui, nos maisons sont plus hermétiques afin de conserver l'énergie. Par contre, une maison trop étanche n’apporte pas un changement d’air adéquat pour assurer une bonne qualité d’air. Le ASV de Condar vous aide à contrôler la quantité d’air de votre maison pour vous apporter de l’air frais, filtré et sans danger.

OPTIONS FOR THE ASV-90 / ACCESSOIRES OPTIONNELS:

- **Pollen Filter** - Screens out 90% of airborne pollen
- **High Tect Filter** - Screens out finer environmental contaminants
- **Storm Shield** - For high wind areas
- **Coverplates** - 6 1/2” or 8 1/4” to cover larger wall openings

To see more details:
- **Top View**  Vue d’en haut
- **Side View**  Vue de Coté
- **Bottom View**  Vue du dessous

**Tough ABS Molded Polymer**
- UV stable in sunlight
- Withstands temperature extremes
- Condensate resistant
- Naturally sound dampening
- Paintable with latex paint
- 3 year limited warranty

**Polyèmes moulés ABS résistants**
- Résistant aux rayons ultra violet
- Supporte les grands écarts de température
- Résiste à la condensation
- Amortit les bruits
- Peut être peint avec de la peinture au latex
- 3 ans de garantie limitée
- Complete range of filters
- Several qualities

**Fresh Filter**
There are several filter-options for our vents, from coarse basic filters to high-efficient filters which separate traffic fumes, bacterias, viruses etc.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
<th>Art no bulk</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard filter Fresh 80</td>
<td>Dust &amp; insect-filter, 20 PPI</td>
<td>803276</td>
</tr>
<tr>
<td>Pollen filter Fresh 80</td>
<td>More compact than the Standard filter, EU4</td>
<td>803280</td>
</tr>
<tr>
<td>Environmental filter Fresh 80</td>
<td>High-efficient electrostatic filter, EU7</td>
<td>803277</td>
</tr>
<tr>
<td>Standard filter TL80R</td>
<td>Dust &amp; insect-filter, 20 PPI</td>
<td>663003</td>
</tr>
<tr>
<td>Allergy filter TL80R</td>
<td>More compact than the Standard filter, EU4</td>
<td>663001</td>
</tr>
<tr>
<td>Environmental filter TL80R*</td>
<td>High-efficient electrostatic filter, EU7</td>
<td>663013</td>
</tr>
<tr>
<td>Standard filter Fresh 90</td>
<td>Dust &amp; insect-filter, 20 PPI</td>
<td>903276</td>
</tr>
<tr>
<td>Pollen filter Fresh 90</td>
<td>More compact than the Standard filter, EU4</td>
<td>903280</td>
</tr>
<tr>
<td>Environmental filter Fresh 90</td>
<td>High-efficient electrostatic filter, EU7</td>
<td>903277</td>
</tr>
<tr>
<td>Standard filter Fresh 100</td>
<td>Dust &amp; insect-filter, 20 PPI</td>
<td>873276</td>
</tr>
<tr>
<td>Pollen filter Fresh 100</td>
<td>More compact than the Standard filter, EU4</td>
<td>873280</td>
</tr>
<tr>
<td>Environmental filter Fresh 100</td>
<td>High-efficient electrostatic filter, EU7</td>
<td>873277</td>
</tr>
<tr>
<td>Standard filter Fresh 100 Thermo</td>
<td>Dust &amp; insect-filter, 20 PPI</td>
<td>000119</td>
</tr>
<tr>
<td>Pollen filter Fresh 100 Thermo</td>
<td>More compact than the Standard filter, EU 4</td>
<td>000134</td>
</tr>
<tr>
<td>Standard filter TL-P</td>
<td>Dust &amp; insect-filter, 20 PPI</td>
<td>663007</td>
</tr>
<tr>
<td>Allergy filter TL-P</td>
<td>More compact than the Standard filter, EU4</td>
<td>663005</td>
</tr>
<tr>
<td>Environmental filter TL-P*</td>
<td>High-efficient electrostatic filter, EU7</td>
<td>663016</td>
</tr>
<tr>
<td>Standard filter Fresh 40</td>
<td>Dust &amp; insect-filter, 20 PPI</td>
<td>403276</td>
</tr>
<tr>
<td>Standard filter AL-dB 450/40</td>
<td>Dust &amp; insect-filter, 20 PPI</td>
<td>460029</td>
</tr>
<tr>
<td>Standard filter AL-dB 800/42</td>
<td>Dust &amp; insect-filter, 20 PPI (2 pcs required)</td>
<td>460030</td>
</tr>
<tr>
<td>Fliimmer® filter</td>
<td>Highly efficient filter</td>
<td>423277</td>
</tr>
<tr>
<td>Channel filter</td>
<td>Dust &amp; insect-filter, 20 PPI, for mounting in Ø100mm-channel</td>
<td>663011</td>
</tr>
<tr>
<td>Filter TL-X*</td>
<td>Dust &amp; insect-filter, 20 PPI</td>
<td></td>
</tr>
<tr>
<td>Filter TL-C*</td>
<td>Highly efficient filter, EUB</td>
<td>663014</td>
</tr>
</tbody>
</table>

* not a stock-item
Standard filter
Dust & insect-filter made of foamed polyurethane, 20 PPI.

Pollen filter
Filter which efficiently separates pollen etc. Required for people with allergies or otherwise sensitive people. The filter is made of synthetic fibres and is heat resistant up to 100°C. The filter should be replaced at regular intervals (if washed its efficiency will be adversely affected). Filter class EU4.

Environmental filter
Filter with an extremely high separation capacity. The filter is used in combination with the standard filter. The fibres are electrically charged and acts as a magnet. The filter is highly effective against traffic fumes, viruses, bacterias etc. The filter should be replaced at regular intervals. The filter is heat resistant up to 100°C. Filter class EU7.

Flimmer® filter
The Flimmer® filter is a Swedish, universal patented filter-construction. The advantages are several;
* Separation along the fibres
* Low and constant pressure fall during the whole time of use
* Long durability, 1-2 years between filter-changes
* High collecting efficiency on all types of particles and sizes
* The filter as whole is adjusted to the environment = inflammable (contains only polypropylene)

Flimmer® filter collecting efficiency

<table>
<thead>
<tr>
<th>Interval size of particle</th>
<th>0,10-</th>
<th>0,17-</th>
<th>0,27-</th>
<th>0,42-</th>
<th>0,62-</th>
<th>0,87-</th>
<th>1,17-</th>
<th>1,92-</th>
<th>2,87-</th>
<th>&lt;6,12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collecting efficiency %</td>
<td>58</td>
<td>59</td>
<td>61</td>
<td>72</td>
<td>78</td>
<td>82</td>
<td>88</td>
<td>91</td>
<td>92</td>
<td>97</td>
</tr>
</tbody>
</table>

The curve shows % efficiency for particle sizes in micron.
Category 1 = viruses, tobacco smoke etc.
Category 2 = bacteria, soot from petrol etc.
Category 3 = Pollen.
Airflow: 0.2 m/s.

The measurements are made by the Royal Institute of Technology (KTH) in Stockholm. Collecting efficiencies for different particle-sizes at 10 Pa low pressure and 10 l/s airflow (measured with 2 filter cassettes).