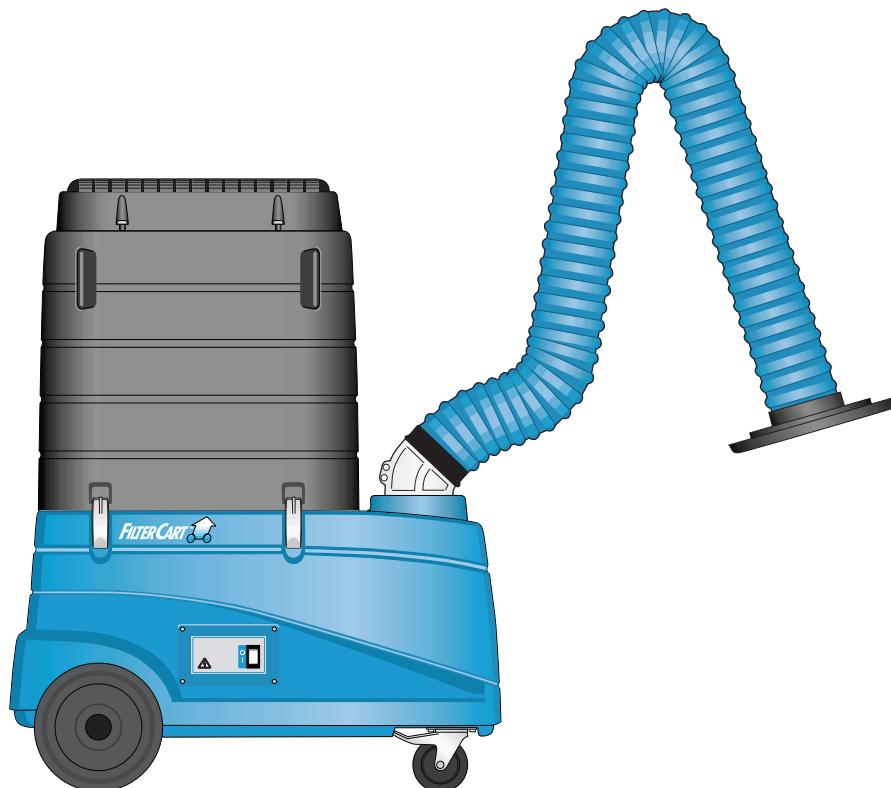


## Instruction and Operation Manual

# Portable, Mobile & Compact Extraction Units

## FilterCart

CARBON



### **WARNING! Risk of personal injury**

- FOR INDOOR USE ONLY
- The product must not be used in an environment with a danger of explosion or for dust/gases in explosive concentrations.
- The product must not be used for dust or welding fumes.
- The product must not be used for extracting toxic substances.
- The product must not be used for extracting odorless substances.
- The product must not be used without filter cartridge and casing.



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# Declaration of Conformity

## Declaration of Conformity

We, AB Ph. Nederman & Co., declare under our sole responsibility that the Nederman product:

FilterCart Carbon (Part No. \*\*, and stated versions of \*\*) to which this declaration relates, is in conformity with all the relevant provisions of the following directives and standards:

### Directives

2006/42/EC, 2014/30/EU, 2011/65/EU.

### Standards

EN ISO 12100:2010, EN 60204-1:2018, EN 61000-6-2:2019, EN 61000-6-4:2019, EN 61000-3-3:2013, EN ISO 20607:2019

The name and signature at the end of this document is the person responsible for both the declaration of conformity and the technical file.

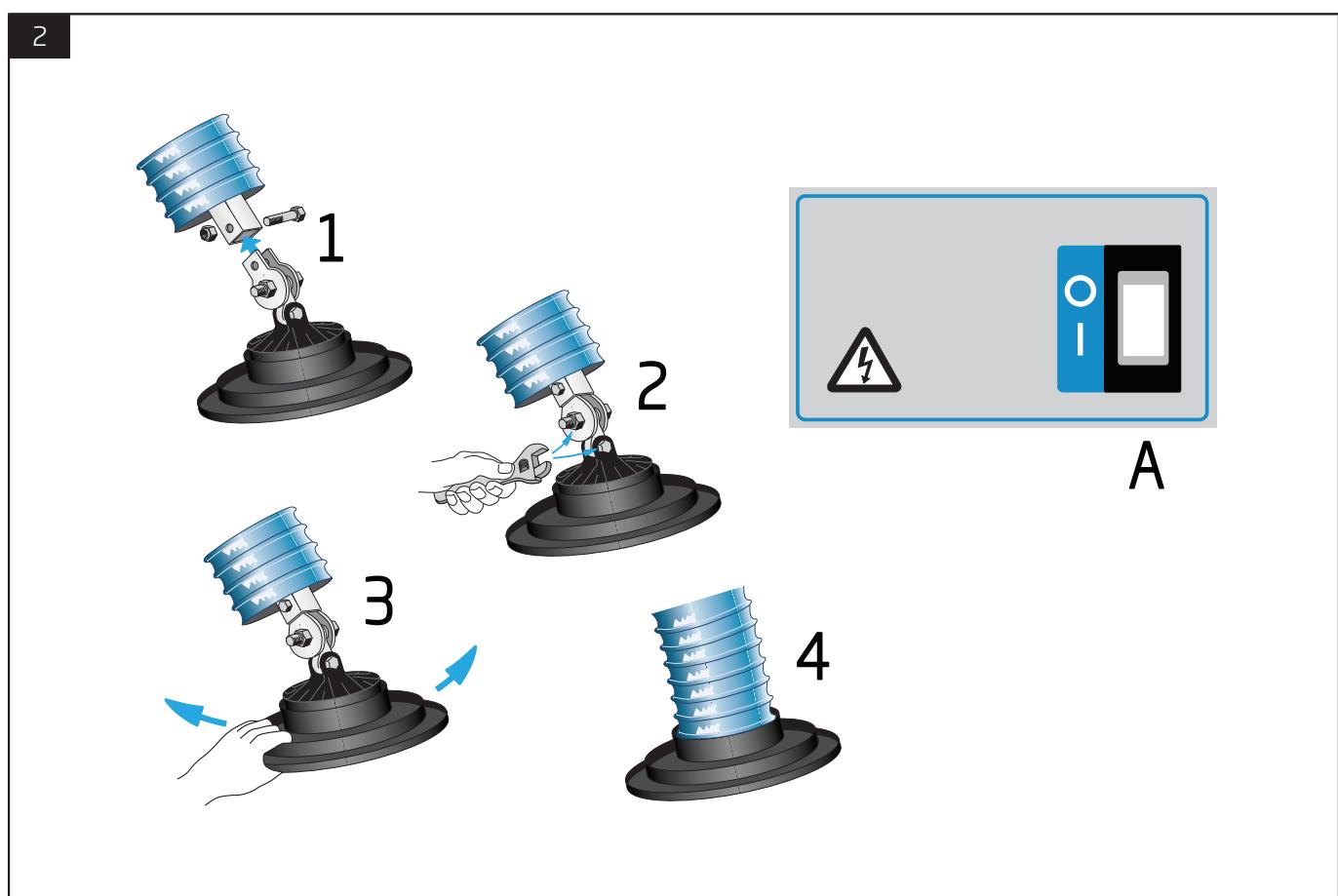
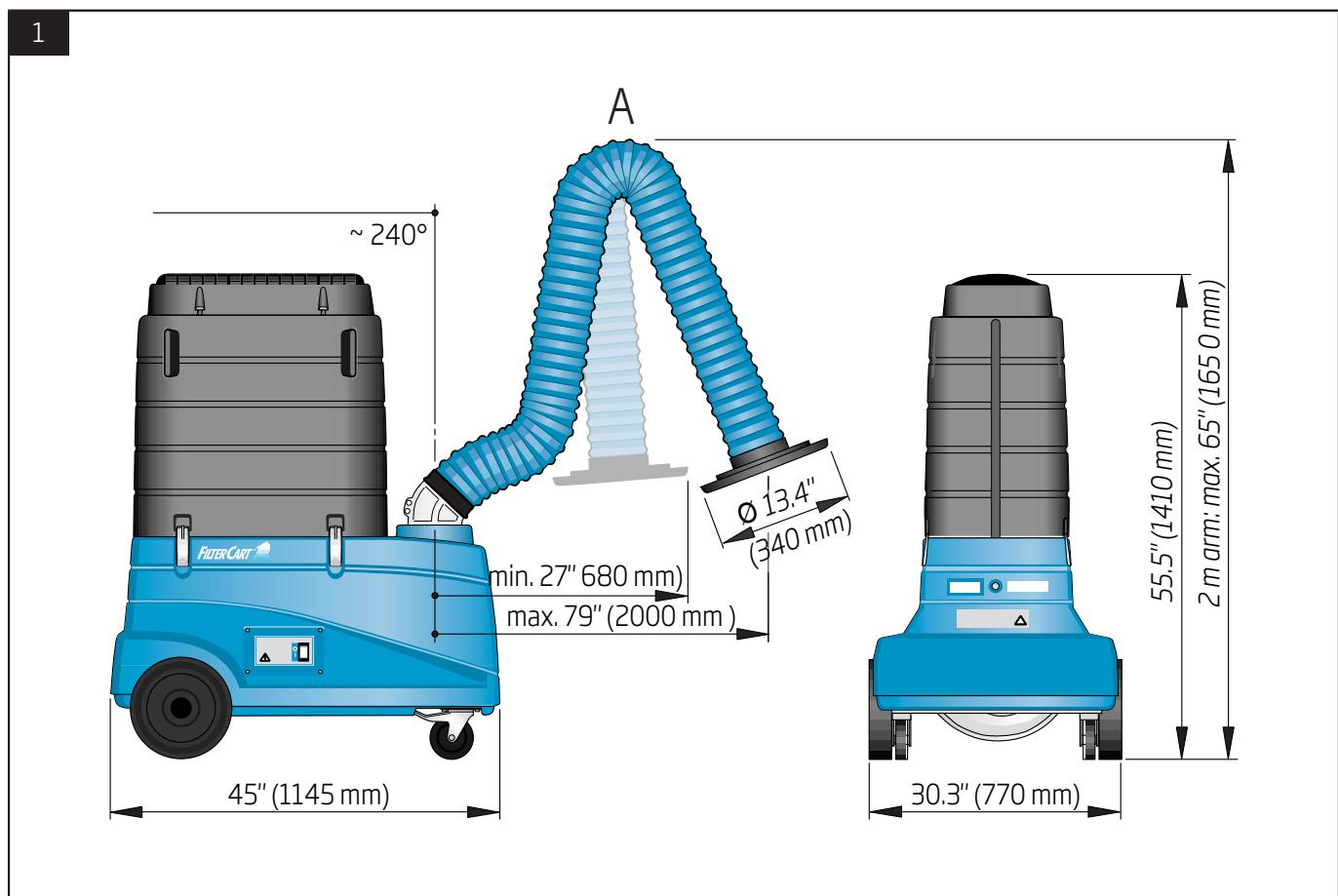


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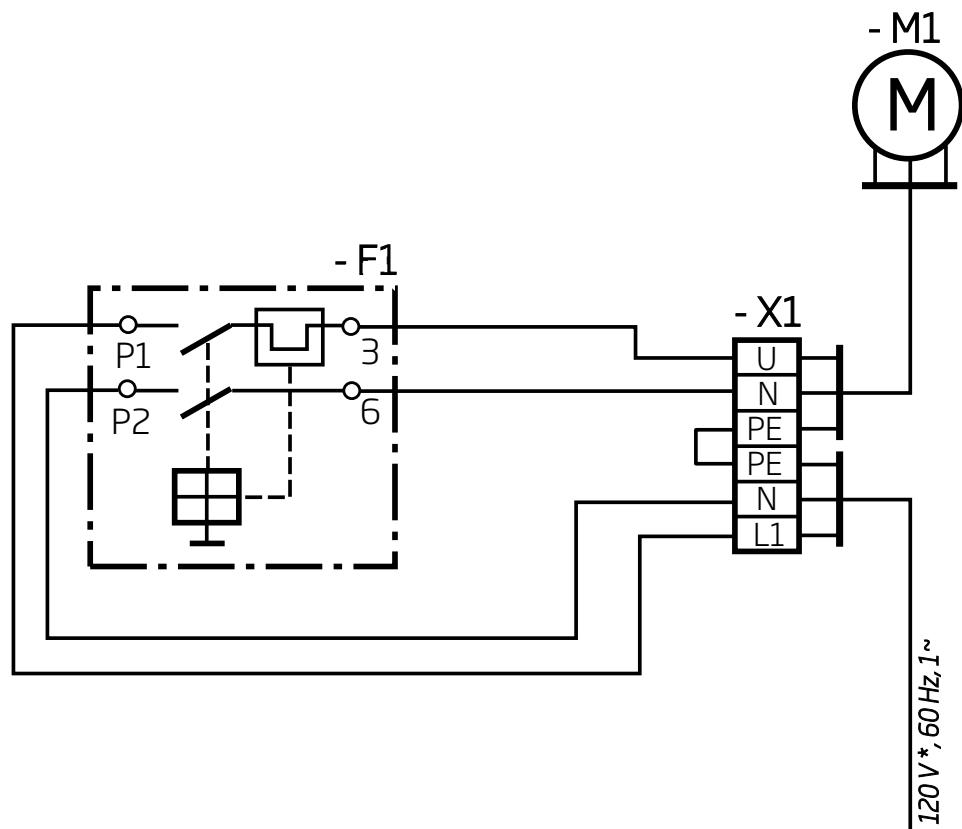
Anna Cederlund  
Product Center Manager  
Technical Product Management  
2022-11-10



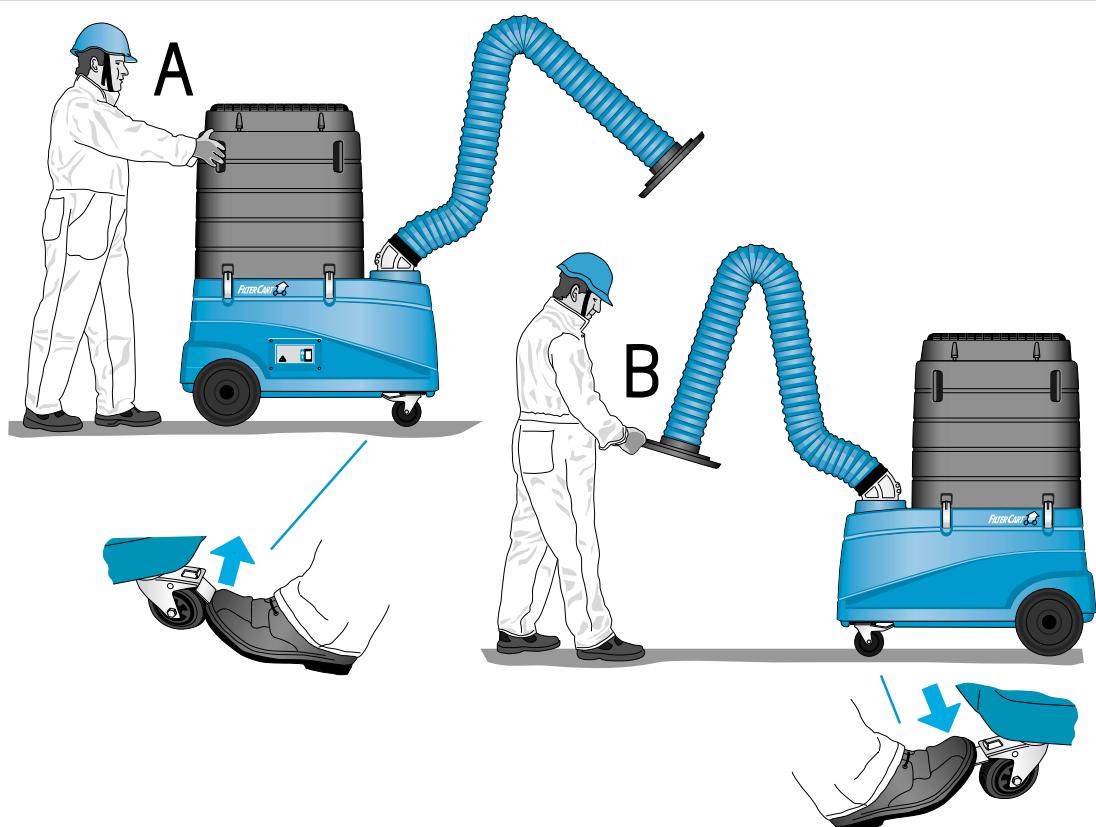
## Figures



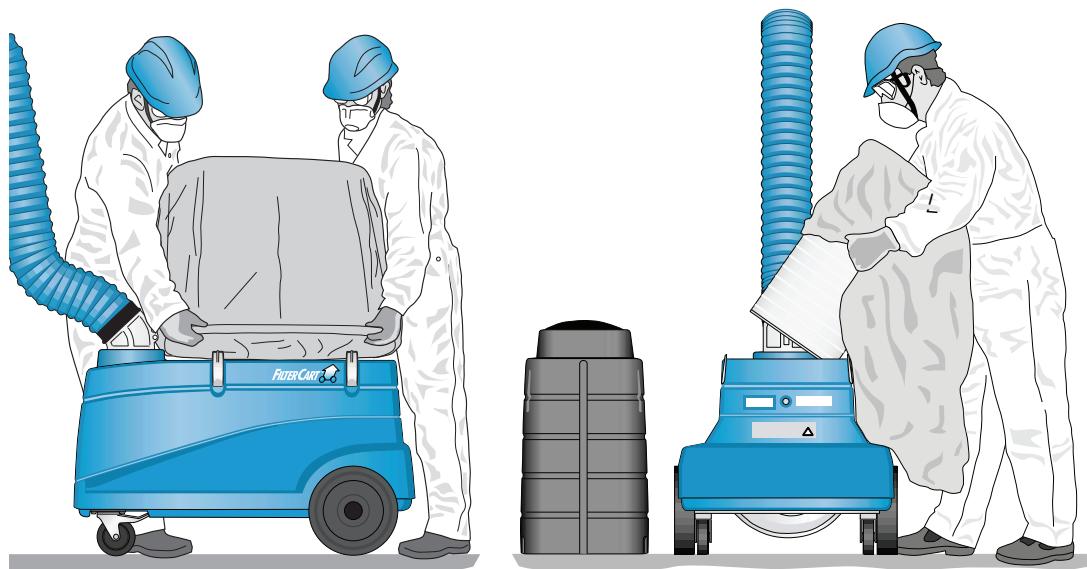
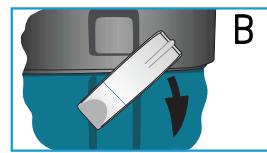
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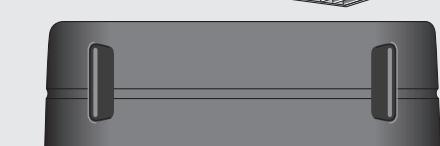
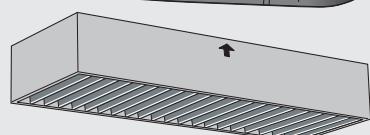
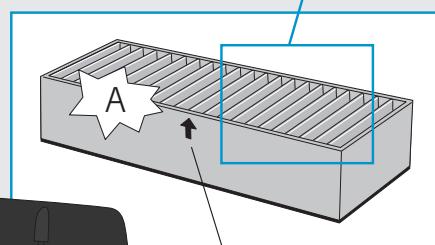
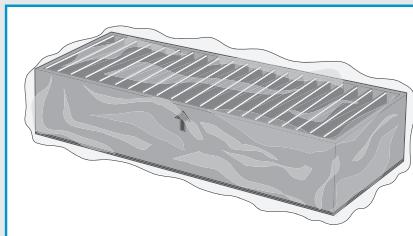
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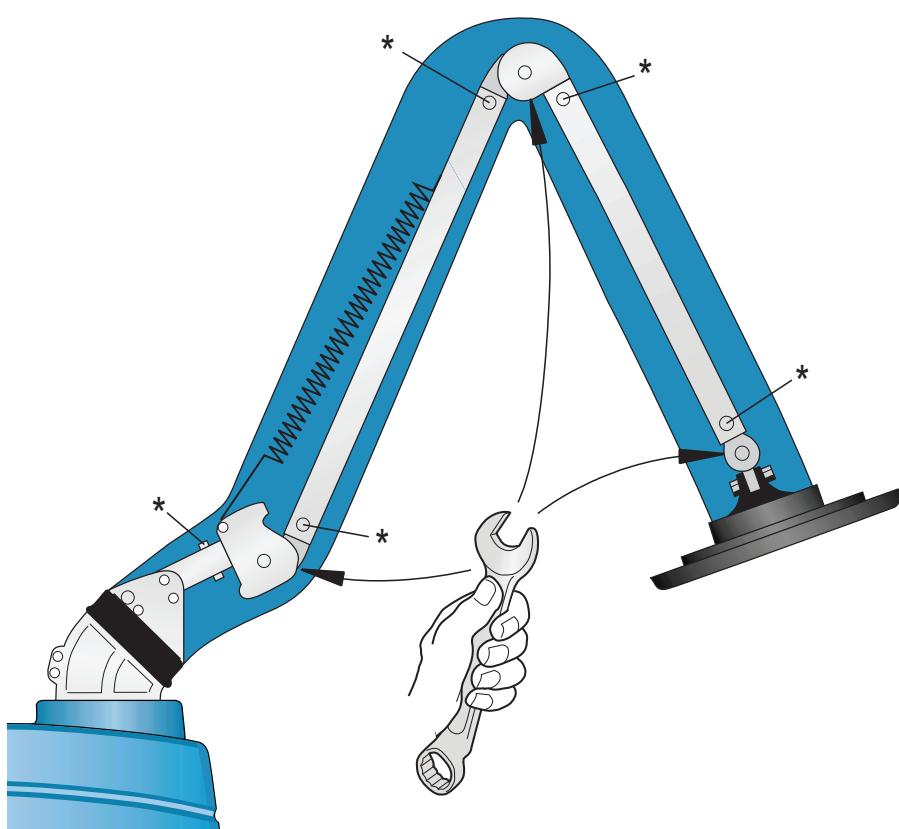
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## 1 Preface

Thank you for using a Nederman product!

The Nederman Group is a world-leading supplier and developer of products and solutions for the environmental technology sector. Our innovative products filter, clean and recycle in the most demanding of environments. Nederman's products and solutions improve productivity, reduce costs and the impact on the environment from industrial processes.

Read all product documentation and the product identification plate carefully before installation, use, and service of this product. Replace documentation immediately if lost. Nederman reserves the right, without prior notice, to modify and improve its products including documentation.

All installation, maintenance, and repair must be done by qualified personnel using only Nederman original spare parts and accessories. Contact the nearest authorized distributor or Nederman for advice on technical service and obtaining spare parts. If there are any damaged or missing parts when the product is delivered, notify the carrier and the local Nederman representative immediately.

## 2 Safety

### 2.1 Classification of important information

This document contains important information that is presented either as a warning, caution or note, according to the following examples:



#### **WARNING! Risk of personal injury**

Warnings indicate a potential hazard to the health and safety of personnel, and how that hazard may be avoided.



#### **CAUTION! Risk of equipment damage**

Cautions indicate a potential hazard to the product but not to personnel, and how that hazard may be avoided.



#### **NOTE!**

Notes contain other information that is important for personnel.

## 2.2 General safety instructions



#### **WARNING! Risk of personal injury**

- The product must not be used in an environment with a danger of explosion or for dust or gases in explosive concentrations.
- **The product must not be used for dust or welding fumes.**
- **The product must not be used for extracting toxic substances.**
- The product must not be used for extracting odorless substances.
- The product must not be used without filter cartridge and casing.

## 3 Description

The FilterCart Carbon is **only intended for indoor use**. It is designed for extraction and filtration of odors and vapors from non-toxic smelling solvents in moderate concentrations.

### 3.1 Overload protector

See [Figure 2](#). The FilterCart Carbon is equipped with an overload protector that disconnects the power automatically if the fan motor is overloaded.

The overload protector is easily reset by pushing button "A" on the control board.

### 3.2 Dimensions

See [Figure 1](#).

A: Horizontally swiveling arm.

### 3.3 Technical data

| FilterCart Carbon                             |  |
|---|--|
| Capacity                                      | 412-530 cfm (700-900 m <sup>3</sup> /hr) |
| Filtration efficiency, main filter            | Depending on type of pollution.          |
| Filtration efficiency, HEPA filter            | > 99.95% DOP 0.3 µm                      |
| Main filter                                   | 66 lbs (30 kg) active carbon             |
| Filter area, HEPA filter                      | 81 ft <sup>2</sup> (7.5 m <sup>2</sup> ) |
| Motor power                                   | 0.75 hp (0.55 kW)                        |
| Voltage*                                      | 120 V                                    |
| Phase   | 1 ~                                      |
| Frequency**                                   | 60 Hz                                    |
| Extraction arm, action radius                 | maximum 6' 7" (2 m)                      |
| Extraction arm, swivelling                    | approx. 240°                             |
| Weight, with 6'7" (2 m) arm                   | 189 lbs (86 kg)                          |
| Temperature, max. ambient temp.               | 104 °F (40 °C)                           |
| Temperature, max. airflow temp.               | 104 °F (40 °C)                           |
| Noise level, measured according to ISO 11204. | 73 dB(A)                                 |
| Material recycling                            | 90 weight-%, without filter cartridge    |

\* Depending on the model.

## 4 Installation

### 4.1 Initial operation

See [Figure 2](#), item A.

- 1 Ensure the FilterCart Carbon has not been damaged during transport.
- 2 Check that the mains voltage is the same as on the sign plate of the FilterCart Carbon .
- 3 Connect the connection cable with plug to the mains.
- 4 Start the FilterCart Carbon with the circuitbreaker A on the controlboard.

### 4.2 Fitting the Fume Extractor hood

The Fume Extractor arm is already fitted. The hood must be fitted according to the [Figure 2](#), items 1-4. Adjust the links so that the hood can be easily positioned.

### 4.3 Wiring diagram

See [Figure 3](#).

- M1: Fan moto 0.75 hp ( 0.5 kW ).
- X1: Terminal block, connection to mains (voltage, depending on model).
- F1: Circuit switch, overload protector.

## 5 Directions for use

See [Section 4.1 Initial operation](#) and [Figure 4](#).

- The hood of the extraction arm should be positioned as close to the pollution source as possible.
- The FilterCart Carbon is to be moved from behind according to item A and with the wheels unlocked.
- The extraction arm should be positioned with the wheels locked according to item B.

## 6 Maintenance

Installation, repair and maintenance work must be carried out by qualified personnel using only original spare parts. Contact your nearest authorised distributor or AB Ph. Nederman & Co. for advice on technical service or if you require spare parts. See also [www.nederman.com](http://www.nederman.com).



### **WARNING! Risk of personal injury**

- Disconnect the mains connection cable before starting any maintenance work.
- Use necessary personal safety equipment.

See [Figure 7](#). Maintenance is recommended at least once a year. Do as follows:

- Change the filter cartridge (and optional HEPA-filter) if necessary, see [Section 6.1 Changing the filter cartridge](#).
- Check the airflow capacity of the FilterCart Carbon.
- Check that the Fume Extractor hose is not damaged. If necessary change the hose.
- Check that the hose to the fan inlet is not damaged. If necessary change the hose.
- Check that no objects have been caught on the guard net on the fan inlet.
- If necessary, adjust the Fume Extractor links.
- If necessary, tighten the arm profile bolts, see the \* symbols in [Figure 7](#).
- Check that the mains connection cable and the fan motor cable are not worn out or damaged.
- Check that the eccentric locks tighten the filter casing properly. Adjust the eccentric locks if necessary. See [Section 6.1 Changing the filter cartridge](#).

### 6.1 Changing the filter cartridge

See [Figure 5](#). The filter cartridge is disposable and is to be thrown away after use. The life of the filter cartridge varies greatly depending on how the FilterCart Carbon is used and how much and what type of pollutants are collected.

Change the filter cartridge when the smell from the filtrated substances comes through the filter outlet. Always check that the hoses for the extraction arm and the fan inlet not are damaged before it is decided to change the filter cartridge.



### **WARNING! Risk of personal injury**

Use necessary personal safety equipment when replacing the filter cartridges.

Change the filter cartridge in the following way:

- 1 Disconnect the mains connection cable.
- 2 Unlock the eccentric locks and remove the filter casing.
- 3 Use the plastic bag which comes with the new filter cartridge and pull it over the used cartridge.

Fold the plastic bag under the cartridge and close it with the band supplied.

- 4 Use a duster to wipe off the filter cartridge contact surfaces in the FilterCart Carbon. Put the duster in the plastic bag with the filter cartridge and close the bag with the band supplied.
- 5 Handle the used filter cartridge according to the relevant regulations for the collected substances.
- 6 Check that the new filter cartridge is not damaged. Also, check that the seal fitted on the underside of the cartridge is not damaged. Then fit the cartridge on the FilterCart Carbon.
- 7 Refit the filter casing. Make sure the eccentric locks tighten the filter casing properly.
  - A. Increasing the locking power.
  - B. Decreasing the locking power.

### 6.2 Changing the HEPA-filter (accessory)

See [Figure 6](#). If the FilterCart Carbon has been supplied with a HEPA-filter, this is to be changed at the same time as the main filter cartridge is changed.



### **WARNING! Risk of personal injury**

Use necessary personal safety equipment when changing the HEPA-filter.

Change the HEPA-filter cartridge in the following way:

- 1 Disconnect the mains connection cable.
- 2 Unscrew the top cover.
- 3 Remove the used HEPA-filter and put it in the plastic bag which comes with the new HEPA filter. Close the plastic bag with the band supplied.
- 4 Handle the used HEPA-filter according to the relevant regulations for the substances that have been collected.
- 5 Check that the new HEPA-filter, item A not is damaged.



### **NOTE!**

The filter surface must not be touched.

- 6 Verify that the UP-arrow, item B, is pointing upwards. Handle the HEPA-filter very carefully and fit it in the FilterCart Carbon. Ensure it is fitted in the correct position and that the seal is downwards. Check that the seal is not damaged.
- 7 Refit the top cover. Fasten it securely.

## 7 Spare Parts



### **CAUTION! Risk of equipment damage**

Use only Nederman original spare parts and accessories.

Contact your nearest authorized distributor or Nederman for advice on technical service or if you require help with spare parts.

## **7.1 Ordering spare parts**

When ordering spare parts always state the following:

- The control number (see the product identification plate).
- Part number and name of the spare part
  - <https://www.nederman.com/en-us/service/spare-part-search>
- Quantity of the parts required.

## **8 Recycling**

The product has been designed for component materials to be recycled. Different material types must be handled according to relevant local regulations. Contact the distributor or Nederman if uncertainties arise when scrapping at the end of service life.

## Notes

# Nederman

The Nederman Group is one of the World's leading suppliers of products and solutions within the environmental technology sector focusing on industrial air filtration and recycling. These products and solutions reduce the environmental impact of industrial production and create safe and clean working environments while boosting production efficiency.

The group's offering covers the design stage through installation, commissioning and servicing with subsidiaries in 29 countries and agents and distributors in over 30 countries.

Nederman is ISO 9001 and 14001 certified and develops and produces in its own manufacturing and assembly facilities in Europe, North America and Asia.

## Nederman Service Capabilities

Nederman has certified service partners trained extensively in servicing our machinery. Make sure to choose a certified technician to service your Nederman equipment as they have the correct tools and knowledge to solve any machinery issues and improve its performance. Be sure to ask if your technician is certified by Nederman.

Our services for dust collection systems are customized to your particular needs. We work with you to understand your needs, then develop a program to meet your specific needs. Our services include: (*not all services available in all locations*)

- Bag Change-outs
- Bag Selection Recommendations
- Collector Re-builds
- Dye Testing for Leakage
- Electrical Tests - Current, Voltage
- Emergency Call-outs
- Filter Media Analysis
- Mechanical Survey and Repair
- Multi-year Contracts
- New Collector Start-up Service
- On-going Technical Support
- Preventative Maintenance Programs
- Repair and Replace Gauges/Timers/Valves
- Stack Emission Testing
- Training Programs
- Troubleshooting / Auditing
- Velocity, Pressure and Temperature Tests
- Written Service Report

## Customer Service and Technical Support

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