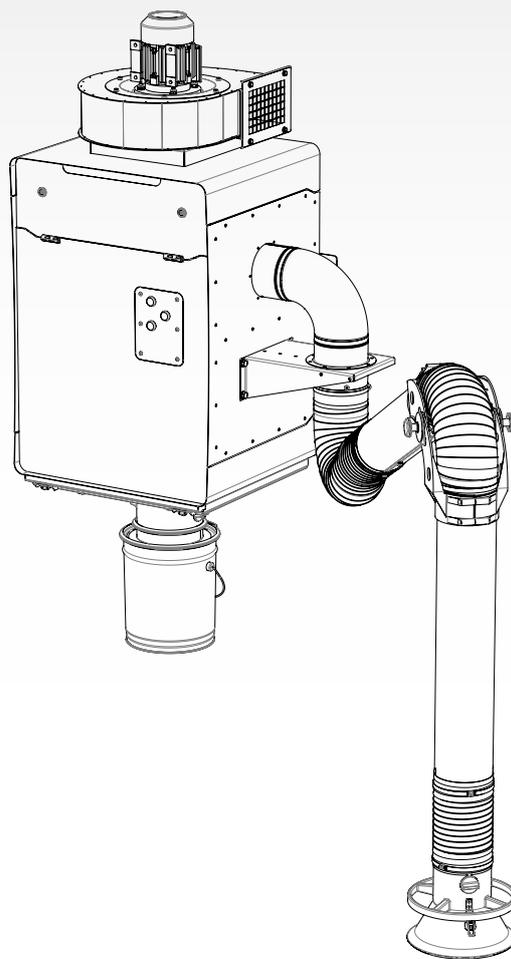


Stationary filter unit

## WALLPRO 2.0



EN

Installation and user manual

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### EN | ORIGINAL INSTRUCTION

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*To improve comprehension for people whose first language is not English, we have written parts of this manual in Simplified Technical English (STE). STE is a controlled language originally developed for aerospace industry maintenance manuals. It offers a carefully limited and standardized subset of English, along with specific writing rules.*

## PREFACE

### Using this manual

This manual is intended to be used as a work of reference for professional, well trained and authorised users to be able to safely install, use, maintain and repair the product mentioned on the cover of this document.

### Pictograms and symbols

The following pictograms and symbols are used in this manual:

	<b>TIP</b> Suggestions and recommendations to simplify carrying out tasks and actions.
	<b>ATTENTION</b> A remark with additional information for the user. A remark brings possible problems to the user's attention.
	<b>CAUTION!</b> Procedures, if not carried out with the necessary caution, could damage the product, the workshop or the environment.
	<b>WARNING!</b> Procedures which, if not carried out with the necessary caution, may damage the product or cause serious personal injury.
	<b>CAUTION!</b> Denotes risk of electric shock.
	<b>WARNING!</b> Fire hazard! Important warning to prevent fire.
	<b>WARNING!</b> Explosion hazard! Important warning to prevent explosions.
	<b>Personal protective equipment (PPE)</b> Instruction to use respiratory protection when you do service, maintenance and repair jobs, as well as during functional testing. We recommend to use a half-face respirator according to EN 149:2001 + A1:2009, class FFP3 (Directive 89/686/EEC).
	<b>Personal protective equipment (PPE)</b> Instruction to use protective gloves when you do service, maintenance and repair jobs.

### Text indicators

Listings indicated by “-” (hyphen) concern enumerations.  
Listings indicated by “•” (bullet point) describe steps to perform.

### Service and technical support

For information about specific adjustments, maintenance or repair jobs which are not dealt with in this manual, please contact the supplier of the product. He will always be willing to help you. Make sure you have the following specifications at hand:

- product name
- serial number

You can find these data on the identification plate.

## 1 INTRODUCTION

### 1.1 Identification of the product

The identification plate contains, among other things, the following data:

- product name
- serial number



- supply voltage and frequency
- power consumption

### 1.2 General description

The WallPro 2.0 is a stationary welding fume filter including one (WallPro *Single*) or two (WallPro *Double*) extraction arms and a fan. The highly efficient filter cartridge is automatically cleaned by the integrated HyperClean™ system based on external compressed air supply.

The extraction arm(s) can be mounted directly to the filter unit (“DM” types) or at an external position (“EM” types).

The WallPro 2.0 *Basic* and WallPro 2.0 *Basic PowerPlus* are filter units with fan but without extraction arm(s). They are suitable for connection to an external device.

#### 1.2.1 Intensity of use

The WallPro 2.0 Single “PowerPlus” – that combines the largest arm diameter with an extra powerful fan – is particularly suitable for heavy duty applications with large quantities of fume, such as flux-cored arc welding in combination with an automated welding process.

Extraction level	Max. extraction capacity per arm	Application
“Standard”	1000 m <sup>3</sup> /h (590 CFM)	medium welding fume production
“Power”	1450 m <sup>3</sup> /h (850 CFM)	medium to heavy fume production
“PowerPlus”	1800 m <sup>3</sup> /h (1060 CFM)	very heavy fume production

#### 1.2.2 Configurations

Type	Extraction arm	Fan	Control equipment <sup>1</sup>
WallPro 2.0 Single-			
160/3	1x KUA-160/3H	FUA-3000	50Hz fan: ControlGo
160/4	1x KUA-160/4H		
200/3	1x KUA-200/3H		
200/4	1x KUA-200/4H	FUA-4700	60Hz fan: ControlPro
200/3 PowerPlus	1x KUA-200/3H		
200/4 PowerPlus	1x KUA-200/4H		
WallPro 2.0 Double-			
160/3	2x KUA-160/3H	FUA-4700	ControlPro
160/4	2x KUA-160/4H		
200/3	2x KUA-200/3H		
200/4	2x KUA-200/4H		

Type	Duct connection	Fan	Control equipment <sup>1</sup>
WallPro 2.0			
Basic	1x Ø 160 mm (6 in.)	FUA-3000	50Hz fan: ControlGo 60Hz fan: ControlPro
Basic PowerPlus	1x Ø 200 mm (8 in.)	FUA-4700	ControlPro

1. Refer to § 2.2.2 for an explanation

### 1.3 Options and accessories

The following products can be obtained as an option and/or accessory:

- Dustbin extension set (metric / imperial)
- MCC-05 | Inductive sensor for automatic start/stop (only in combination with ControlPro control equipment)
- Filter disposal bag (5 pieces) | for dust-free filter removal
- SAS-250 straight | Silencer (straight) Ø 250 mm<sup>2</sup>
- SAS-315 straight | Silencer (straight) Ø 315 mm<sup>3</sup>
- LL-5.5/24 | Manual on/off switch on the hood, incl. LED working light

### 1.4 Technical specifications



#### 1.4.1 Filter unit

WallPro 2.0 Single   Double	
Material (housing)	electro-zinc coated steel
Weight	125 kg (275 lbs.) (excl. arm and fan)
Capacity of dustbin	18 litres (4¾ gallon)
Filter cartridge	
Type	CART-O/PTFE/20
Filter material	BiCo polyester with PTFE membrane
Filter surface area	20 m <sup>2</sup> (215 ft <sup>2</sup> )
Washable	no
Compressed air system	
Required compressed air quality	dry and oil-free according to ISO 8573-3 class 6
Inlet pressure	5-10 bar (75-150 PSI)
Required pressure	5 bar (75 PSI) (by integrated pressure regulator)
Compressed air connection	G 3/8" (female)
Compressed air consumption	800 nL (2⅞ ft <sup>3</sup> ) per cleaning cycle
Welding fume class	
W3	according to ISO 15012-1:2013

#### 1.4.2 Extraction arm

Type	KUA-160/3H	KUA-160/4H	KUA-200/3H	KUA-200/4H
Weight (incl. arm bracket)	19 kg (42 lbs.)	21 kg (46 lbs.)	33 kg (73 lbs.)	35 kg (77 lbs.)
Length	3 m (10 ft)	4 m (13 ft)	3 m (10 ft)	4 m (13 ft)
Diameter	Ø 160 mm (6 in.)		Ø 200 mm (8 in.)	

#### 1.4.3 Fan

Type	FUA-3000	FUA-4700
Weight	22 kg (49 lbs.)	35 kg (77 lbs.)
Max. extraction capacity:		
WallPro 2.0 Single		
- 1x KUA-160	1000 m <sup>3</sup> /h	n/a
- 1x KUA-200	1450 m <sup>3</sup> /h	1800 m <sup>3</sup> /h

2. For fan type FUA-3000

3. For fan type FUA-4700 | Silencer strongly recommended in case of a WallPro 2.0 Single "PowerPlus"

Type	FUA-3000	FUA-4700
WallPro 2.0 Double		
- 2x KUA-160	n/a	2 x 1000 m <sup>3</sup> /h
- 2x KUA-200	n/a	2 x 1450 m <sup>3</sup> /h
WallPro 2.0 Basic		
- 1 inlet (left or right)	1250 m <sup>3</sup> /h	2100 m <sup>3</sup> /h
- 2 inlets (left and right)	n/a	2 x 1550 m <sup>3</sup> /h
Power consumption:		
- 50 Hz	1,1 kW (1.5 HP)	2,2 kW (3 HP)
- 60 Hz	1,5 kW (2 HP)	2,2 kW (3 HP)
Motor design:		
- 50 Hz	IEC	IEC
- 60 Hz	NEMA	NEMA
Energy efficiency:		
- 50 Hz	IE3 premium	IE3 premium
- 60 Hz		
Fan outlet (via transition)	Ø 250 mm	Ø 250 mm
Noise level		
- with silencer (ref. § 1.3)	75 dB(A)	76 dB(A)
	67 dB(A)	71 dB(A)
Available connection voltages	400V/3ph/50Hz 208-230V/3ph/60Hz 460V/3ph/60Hz 575V/3ph/60Hz	

#### 1.4.4 Control panel

Certification	
WallPro 2.0 50Hz versions	CE
WallPro 2.0 60Hz versions	UL 508A

#### 1.4.5 Dimensions

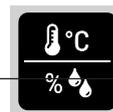
Refer to Fig. I on page 21.



### 1.5 Working range

Refer to Fig. II on page 22.

### 1.6 Ambient and process conditions



Process temperature:	
- min.	5°C (41°F)
- nom.	20°C (68°F)
- max.	70°C (158°F)
Max. relative humidity	90%
Suitable for outdoor use	no

Refer to the available product data sheets for detailed product specifications.

### 1.7 Transport of the unit

You cannot hold the manufacturer liable for any transportation damage after delivery of the product.



## 2 PRODUCT DESCRIPTION

### 2.1 Components

The product consists of the following main components and elements:

Fig. 2.1

- A Extraction fan<sup>4</sup>
- B Service panel
- C Filter cartridge
- D Extraction arm<sup>5</sup>
- E Arm bracket
- F Fan outlet transition
- G HyperClean™ system (filter cleaning system)
- H Indicator panel
- I Hopper
- J Dustbin
- K Control panel (type ControlGo or ControlPro)

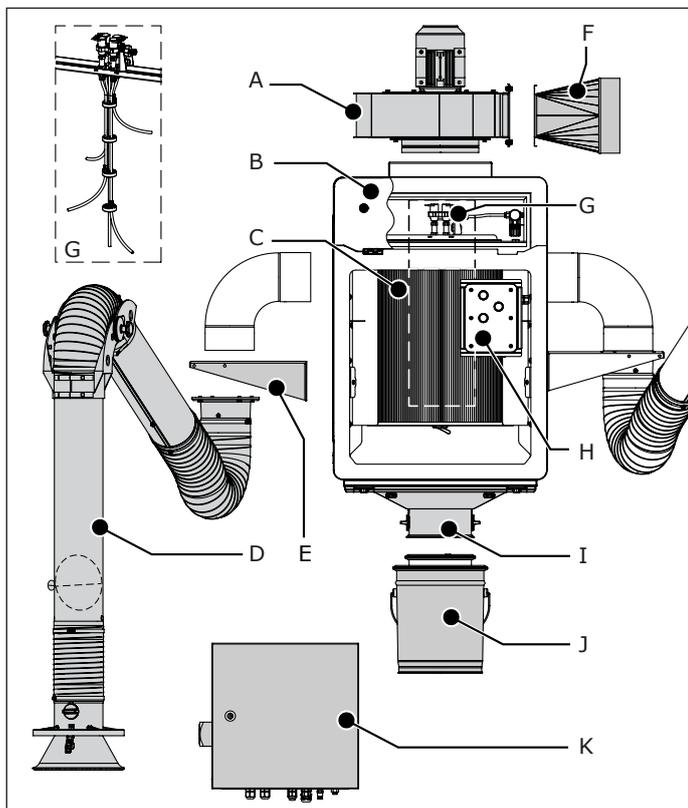


Fig. 2.1 Main components and elements

## 2.2 Operation

The WallPro 2.0 works in accordance with the recirculation principle. Welding fume is extracted through the hood of the connected extraction arm (1 or 2) by the fan. The polluted air passes the deflector plate(s)<sup>6</sup> behind the inlet opening(s) and is cleaned by the filter cartridge. The welding fume particles are collected at the outside of the filter cartridge. The cleaned air is returned in the workshop through the outlet of the fan or exhausted to the atmosphere via an outlet duct.

### 2.2.1 Filter cleaning system

The WallPro 2.0 is equipped with the HyperClean™ system, that thoroughly cleans the filter cartridge from the inside out. The HyperClean™ system is divided into four levels. Each level has its own air hose that releases compressed air and rotates 360 degrees during 30 seconds. This means that one cleaning cycle takes two minutes.

Filter cleaning mainly takes place offline (= while the fan is off)<sup>7</sup>. If the pressure drop over the filter cartridge reaches the pre-set threshold value during use, an online cleaning cycle

4. Type: FUA-3000 or FUA-4700

5. Type: KUA-160 or KUA-200

6. To protect the filter cartridge and to distribute the air equally inside the unit

7. Offline filter cleaning is the most effective way of cleaning. The combination of offline and online cleaning guarantee the optimum performance of the unit.

takes place. You can activate the filter cleaning system manually as well (both offline and online).

The dust and dirt particles fall into the dustbin.



Refer to § 5.3 for more details about the activation of the cleaning system.

### 2.2.2 Control equipment

Depending on your specific product type, there are two ways to activate the HyperClean™ system and to control the connected fan.

#### 1. ControlGo

Intelligent control panel for basic fan and filter control.

*ControlGo monitors the availability of compressed air, activates the HyperClean™ system and controls the fan.*

#### 2. ControlPro

Intelligent control panel with integrated HMI for advanced fan and filter control.

*ControlPro contains an extensive feature package to monitor and arrange the HyperClean™ system and to control the fan. By means of the user-friendly HMI you can program all desired parameters. The HMI gives a clear insight into the system status and performance at all times. ControlPro allows for remote access via a network connection.*



Refer to § 1.2.2 to know which control equipment is supplied with which product type.

## 3 SAFETY INSTRUCTIONS

### General

The manufacturer does not accept any liability for damage to the product or personal injury caused by ignoring of the safety instructions in this manual, or by negligence during installation, use, maintenance, and repair of the product mentioned on the cover of this document and any corresponding accessories. Specific working conditions or used accessories may require additional safety instructions. Immediately contact your supplier if you detect a potential danger when using the product.



**The user of the product is always fully responsible for observing the local safety instructions and regulations. Observe all applicable safety instructions and regulations.**

### User manual

- Everyone working on or with the product, must be familiar with the contents of this manual and must strictly observe the instructions therein. The management should instruct the personnel in accordance with the manual and observe all instructions and directions given.
- Do not change the order of the steps to perform.
- Keep the manual with the product.

### Users

- The use of this product is exclusively reserved to authorised, trained and qualified users. Temporary personnel and personnel in training can only use the product under supervision and responsibility of skilled engineers.
- Stay alert and keep your attention to your work. Do not use the product when you are under the influence of drugs, alcohol or medicine.

- The product is not to be used by children or persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction.
- Children must be supervised not to play with the product.

### Intended use<sup>8</sup>

The product has been designed exclusively for extracting and filtering gases and particles which are released during the most common welding processes. Using the product for other purposes is considered contrary to its intended use. The manufacturer accepts no liability for any damage or injury resulting from such use. The product has been built in accordance with state-of-the-art standards and recognised safety regulations. Only use this product when in technically perfect condition in accordance with its intended use and the instructions explained in the user manual.

### Technical specifications

Do not change the specifications given in this manual.

### Modifications

Modification of (parts of) the product is not allowed.

### Installation

- The installation of this product is exclusively reserved to authorised, trained and qualified engineers.
- The electric connection must be executed in accordance with the local codes and requirements. Ensure compliance with the EMC regulatory arrangements.
- During installation, always use Personal Protective Equipment (PPE) to avoid injury. This also applies to persons who enter the work area during installation.
- Use sufficient climbing gear and safety guards when working on a higher level than 2 metres (local restrictions may apply).
- Do not install the product in front of entrances and exits which must be used for emergency services.
- Mind any gas and water pipes and electric cables.
- Make sure that the workspace is well illuminated.
- Stay alert and keep your attention to your work. Do not install the product when you are under the influence of drugs, alcohol or medicine.
- Air containing particles such as chromium, nickel, beryllium, cadmium, lead etc., should never be recycled. This air must always be brought outside the working area.

### Use



#### WARNING!

Fire hazard! Do **not** use the product for:

- polishing applications in combination with grinding, welding or any other application that generate sparks (fibers from polishing or abrasive flap disks are highly flammable and pose a high risk of filter fires when exposed to sparks)
- arc-air gouging
- extracting and/or filtering flammable, glowing or burning particles or solids or liquids
- extracting and/or filtering of aggressive fumes (such as hydrochloric acid) or sharp particles
- sucking cigarettes, cigars, oiled tissues, and other burning particles, objects, and acids

8. "Intended use" as explained in EN-ISO 12100-1 is the use for which the technical product is suited as specified by the manufacturer, inclusive of his directions in the sales brochure. In case of doubt it is the use which can be deduced from the construction, the model and the function of the technical product which is considered normal use. Operating the machine within the limits of its intended use also involves observing the instructions in the user manual.

- extracting and/or filtering dust particles which are released when welding surfaces treated with primer



#### WARNING!

Explosion hazard! Do **not** use the product for explosion-hazardous applications, e.g.:

- aluminium laser cutting
- grinding aluminium and magnesium
- explosive environments or explosive substances/gases



#### WARNING!

Do **not** use the product for:

- extraction of hot gases (more than 70°C/158°F continuously)
- flame spraying
- oil mist
- heavy oil mist in welding fume
- extraction of cement, saw dust, wood dust etc.

- Inspect the product and check it for damage. Verify the functioning of the safety features.
- During use, always use Personal Protective Equipment (PPE) to avoid injury. This also applies for persons who enter the work area.
- Check the working environment. Do not allow unauthorised persons to enter the working environment.
- Protect the product against water and humidity.
- Make sure the room is always sufficiently ventilated; this applies especially to confined spaces.
- Make sure that the workshop, in the vicinity of the product, contains sufficient approved fire extinguishers (suitable for fire classes ABC).
- Do not leave any tools or other objects in or on the unit.
- The welding current return circuit between the workpiece and the welding machine has a low resistance. Thus avoid connection between the workpiece and the WallPro 2.0, so that there is no possibility of the welding current flowing back to the welding machine via the protective earth conductor of the WallPro 2.0.

### Service, maintenance and repairs

- Obey the maintenance intervals given in this manual. Overdue maintenance can lead to high costs for repair and revisions and can render the guarantee null and void.
- Always use Personal Protective Equipment (PPE) to avoid injury. This also applies for persons who enter the work area.
- Make sure the room is sufficiently ventilated.
- Use tools, materials, lubricants and service techniques which have been approved by the manufacturer. Never use worn tools and do not leave any tools in or on the product.
- Use sufficient climbing gear and safety guards when working on a higher level than 2 metres (local restrictions may apply).
- Clean the area afterwards.



#### ATTENTION

Service, maintenance and repairs must be performed in accordance with directive TRGS 560 and TRGS 528 by authorised, qualified and trained persons (skilled) using appropriate work practices.



#### ATTENTION

Before you carry out service, maintenance and/or repair jobs:

- fully disconnect the unit from the mains



#### Personal protective equipment (PPE)

Wear respiratory protection and protective gloves during service, maintenance and repairs.

**WARNING**

The industrial vacuum cleaner that you use during service and maintenance must meet dust class H according to EN 60335-2-69 or HEPA class (efficiency  $\geq 99.97\%$  at  $0.3 \mu\text{m}$ ).



For an overview of the mounting material per specific configuration, refer to Fig. IV on page 23.

**4 INSTALLATION****4.1 Tools and requirements**

You need the following tools and requirements to install the unit:

- basic tools
- fork-lift truck
- electrical tools

**4.1.1 To be sourced locally****General**

- Hardware to install the filter unit to the wall<sup>9</sup>
- Hardware to install the control panel (hardware max.  $\varnothing 10 \text{ mm}$ )
- Mains cable: 4G1.5
  - type H05VV-F (PVC, standard cable); or:
  - type H05RN-F (rubber, for heavy duty, e.g. when part of the cable is on the floor)
- Motor cable: 4G1.5
  - type H05VV-F (PVC, standard cable); or:
  - type H05RN-F (rubber, for heavy duty, e.g. when part of the cable is on the floor)
- Quick release coupling with a male G 3/8" thread
- Compressed air hose

**WallPro 2.0 type "EM" only**

- Wall mounting hardware for the arm bracket(s)<sup>10</sup>
- Ducting  $\varnothing 160 \text{ mm}$  (6 in.) /  $\varnothing 200 \text{ mm}$  (8 in.)<sup>11</sup> between the filter unit and the arm bracket(s)

**Option**

- In case of a dustbin extension set:
- duct  $\varnothing 200 \text{ mm}$  or 8 in.

**4.2 Unpacking**

The package contains:

**Filter unit**

- Filter unit (without side panels), incl. 10 m (33 ft) cable<sup>12</sup>
- Wall bracket
- Dustbin set
- Air hose (filter pressure) 2x10 m (2x33 ft)
- SealApplicator (seal assembly lubricant)
- Filter disposal bag (5 pieces)
- Mounting material

**Side panel (2)**

- Side panel

**Mounting kit**

- Mounting and ducting material (types "DM" only)
- Inlet flange + non-return valve

Additionally for "EM" configurations in 60Hz:

- Duct adapter metric-imperial<sup>13</sup>  
(WallPro 2.0 Single: 1 piece | WallPro 2.0 Double: 2 pieces)

- The type of hardware depends on the wall type
- For mounting at an external position; the type of hardware depends on the wall type
- Depending on the type of extraction arm
- For connection with the control panel
- From  $\varnothing 160 \text{ mm}$  to  $\varnothing 6 \text{ in.}$  /  $\varnothing 200 \text{ mm}$  to  $\varnothing 8 \text{ in.}$ , depending on the configuration

**Extraction arm (1 or 2)**

Refer to the installation manual of the KUA-160 or KUA-200, that is supplied with the product.

**Extraction fan**

- Fan
- Fan outlet transition (from rectangular to round  $\varnothing 250 \text{ mm}$ )

**Control equipment**

- Control panel (ControlGo or ControlPro)
- Double-bit key
- Mounting bracket (4), incl. mounting material

**4.3 Filter unit****ATTENTION**

It is important to follow the mounting sequence as written in this (4.3) and the next (4.4) paragraph.

The table below explains the various configuration types.

WallPro 2.0 type				Explanation
Single-				1 extraction arm
Double-				2 extraction arms
Basic				no extraction arm(s)
	160/			Arm diameter $\varnothing 160 \text{ mm}$
	200/			Arm diameter $\varnothing 200 \text{ mm}$
		3-		Arm length 3 m
		4-		Arm length 4 m
			DM	Direct mount
			EM	External mount
			ControlGo	Control panel
			ControlPro	Control panel with integrated HMI

A number of installation steps are only applicable to one or more specific configurations. These are indicated at the beginning of a certain paragraph. The grey/empty cells are universal.

Some examples:

Applies to:				
			DM	Applies to all "DM" types

Applies to:				
WallPro 2.0 Single-			EM	Applies to all WallPro 2.0 Single types and all "EM" types

Applies to:				
			ControlPro	Applies to all types with ControlPro control panel

Write your configuration type below.

WallPro 2.0 type:			



 **TIP**  
For stable assembly conditions, we recommend to leave the filter unit on the pallet (until step 4.6).

### 4.3.1 Reinforcement plate

Applies to:			
		DM	

In case of a WallPro 2.0 Single "DM" (direct mount) you must install a reinforcement plate behind the lower part of the side panel to support the weight of the arm bracket + extraction arm. The package of the WallPro 2.0 Double "DM" contains two reinforcement plates for both sides of the filter housing.

 In case of a WallPro 2.0 type "EM" (external mount), where the extraction arm is mounted separately from the filter unit, the reinforcement plate is not necessary. In that case, proceed with § 4.3.2.

To install the reinforcement plate, do the following.

Fig. 4.1

- Insert the 4 cage nuts M12 from the inside in the corresponding positions of the plate;
  - KUA-160 / arm Ø 160 mm: inner positions (A)
  - KUA-200 / arm Ø 200 mm: outer positions (B)

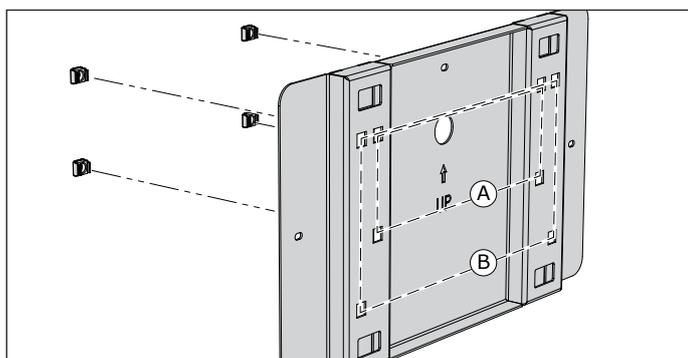


Fig. 4.1 Cage nuts

Fig. 4.2

- Determine on which side<sup>14</sup> you want to install the extraction arm (left or right).
- Install the reinforcement plate on that side of the filter unit with the 7 flange bolts M6x16.

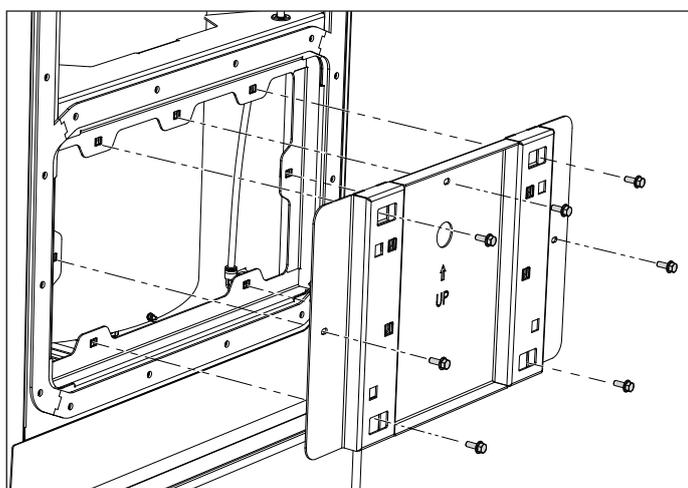


Fig. 4.2 Mounting of the reinforcement plate

14. In case of a WallPro 2.0 Double you must install a reinforcement plate on both sides

### 4.3.2 Inlet flange + non-return valve (assembly)

Applies to all types of units

You must install the assembly, that consists of an inlet flange with non-return valve, on the side panel of the filter unit. In case of a WallPro 2.0 Double, you must install an assembly on both side panels.

 The side panels are universal, so you can install them either left or right.

To install the assembly, do the following.

Fig. 4.3

- Depending on the mounting position<sup>15</sup>, determine the inside of the side panel.
- Put sealing material (E) around the inlet opening on the inside of the side panel.
- Insert the assembly from the inside of the panel through the opening. Make sure that the axis of the non-return valve is in vertical position (B).
- Attach the assembly (A) to the side panel with the 6 bolts M6, washers and nuts.
- Secure the non-return valve to the inlet flange with 2 self-tapping screws (F+G). Two small holes in the inlet flange indicate the correct position. Make sure that you install one screw on top and the other one at the bottom of the assembly.
- Make sure that the non-return valve can fully open.

**In case of a LL-5.5/24 | Manual on/off switch on the hood, incl. LED working light (option)**

- Install the cable gland M16 + nut M16 (C).

**If not:**

- Install the screw plug M16 + nut M16 (D).

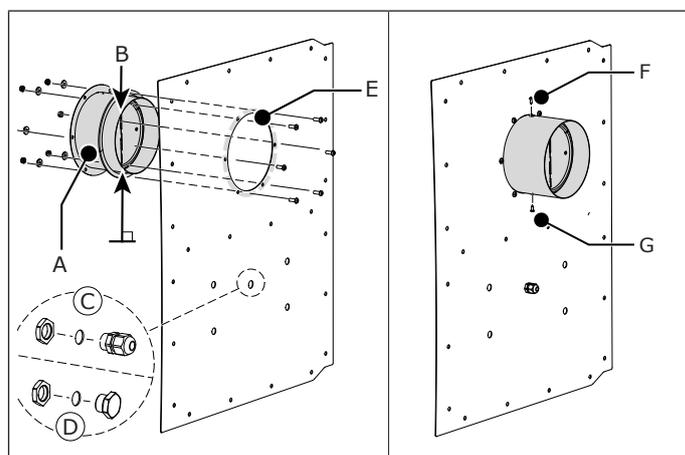


Fig. 4.3 Inlet flange + non-return valve (assembly)

### 4.3.3 Side panel

Applies to:			
		DM	

15. On the left or right side of the filter unit

 Make sure that you have the 4 bolts M12 at hand that you need to install the arm bracket.

For the correct use of SealApplicator, refer to the instruction sheet that is supplied with the spray bottle.

Refer to Fig. V on page 21 for the exact mounting position of the side panel with respect to the cover plates (top + bottom).

Fig. 4.4

- (1) Remove the backing material of the seals.
- (2) Spray SealApplicator lubricant on the seals<sup>16</sup>.
- (3) Put the side panel **within 60 seconds**<sup>17</sup> on the filter unit.
- (4) Align the side panel with the 4 bolts M12x30 into the cage nuts and partly tighten them<sup>18</sup>.
- (5) Install the side panel with the 24 bolts M6x16 + sealing washers M6.
- (6) Disassemble the 4 bolts M12x30.

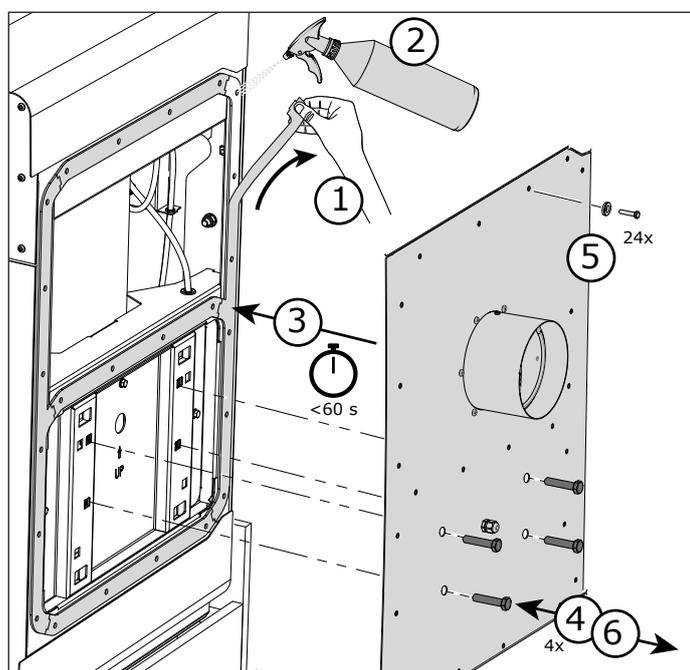


Fig. 4.4 Mounting of the side panel

Applies to:			
WallPro 2.0 Double-		DM	

- Repeat the instructions of § 4.3.3 to install the other side panel.

Applies to:			
WallPro 2.0 Single-			
WallPro 2.0 Basic			
		EM	

16. By the use of SealApplicator you can slightly shift the side panel to get the right position. After approx. 60 seconds the lubricant is dry so you cannot shift anymore.

17. After approx. 60 seconds SealApplicator lubricant loses its functions and you cannot shift anymore.

18. You must remove them later on to install the arm bracket.

- Repeat the instructions of § 4.3.3 to install the side panel<sup>19</sup>, with the exception of steps (4) and (6). To align the panel, put two bolts M6x16 in the top corners first. Then install the remaining 22 bolts.

#### 4.3.4 Arm bracket

Applies to:			
		DM	

 **ATTENTION!** Make sure that you have installed the reinforcement plate behind the side panel; refer to § 4.3.1.

Fig. 4.5

- Install the arm bracket on the filter unit with 4 bolts M12x30<sup>20</sup> and washers M12.

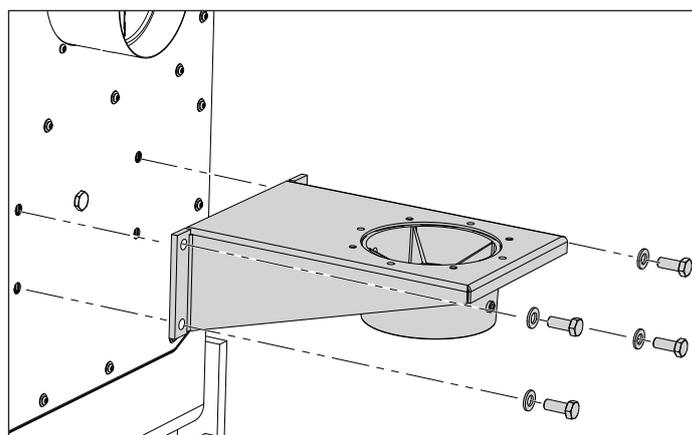


Fig. 4.5 Mounting of the arm bracket

Applies to:			
WallPro 2.0 Double-		DM	

If applicable:

- Do the same procedure for the other arm bracket.

Applies to:			
		EM	

Recommended installation height of the arm bracket: at approx. 2-2,3 m (6½-7½ ft) from the floor (top of the wall bracket). Also refer to the footnote on page 9.

- Install the arm bracket(s) at the desired position on the wall, preferably as close as possible to the filter unit.

#### 4.4 Extraction fan

Depending on the selected configuration, the package contains a fan type FUA-3000 or FUA-4700. You can install the fan in different positions to get the desired outlet direction;

- FUA-3000: 6 possible directions
- FUA-4700: 2 possible directions (left and right)

 Refer to Fig. III on page 22 for an overview of the possible outlet directions.

To install the fan, do the following.

19. WallPro 2.0 Single: blind side panel | WallPro 2.0 "EM": side panel with inlet flange + non-return valve

20. The ones you used to align the side panel in step 4.3.3

Fig. 4.6

- Put adhesive rubber strip (A) around the inlet opening on top of the filter unit. Make sure that the strip does not entirely cover the holes.
- Disassemble the service panel (refer to Fig. 2.1B).

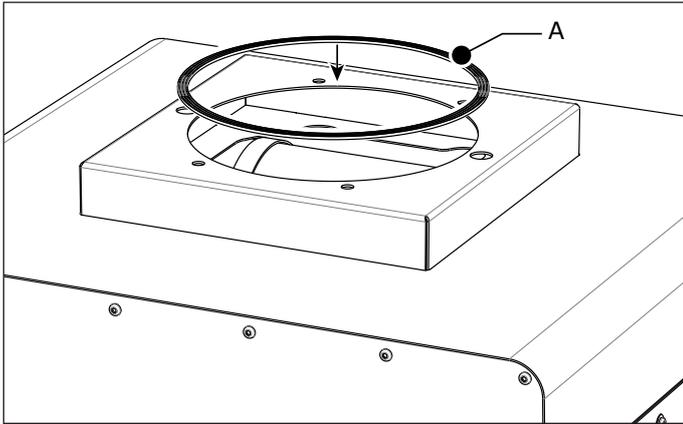


Fig. 4.6 Adhesive rubber strip

 If you intend to connect an outlet duct and/or silencer to the fan, we recommend to install the necessary outlet transition (from rectangular to round) first. Refer to § 4.10.1 for the installation instruction.

The inlet flange of the fan contains 6 bolts. The positions of these bolts correspond with the 6 holes on top of the filter unit; 2 large and 4 small holes. To install the fan, you only need the 4 small holes.

Fig. 4.7

- Determine the desired outlet direction of the fan.
- Determine which 4 bolts correspond with the 4 small holes in the filter unit.
- Remove these 4 bolts from the inlet flange<sup>21</sup>.
- (1) Put 4 positioning studs (A) at the position of the removed bolts.
- (2) Carefully put the fan on top of the filter unit. Make sure to put the positioning studs in the 4 holes.
- Put 4 flange locknuts M8 (B) from the inside on the studs and tighten them.
- Install the service panel.

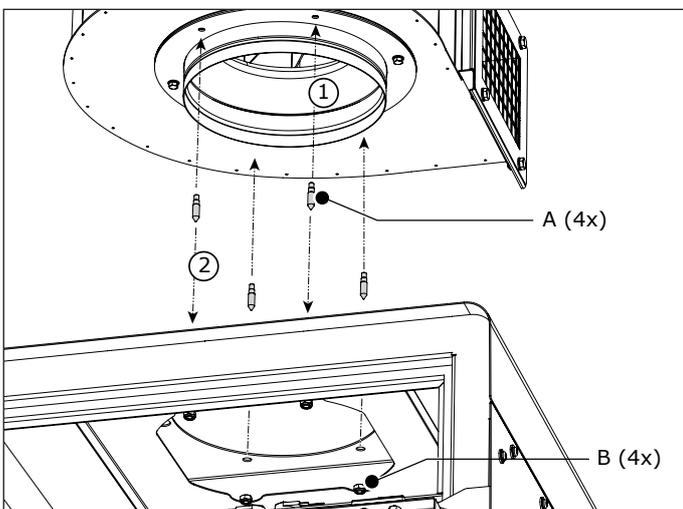


Fig. 4.7 Positioning studs

21. You do not need these four bolts anymore. The other two bolts remain unused but must stay in the inlet flange

## 4.5 Compressed air connection (filter unit)



### ATTENTION

The compressed air must be dry and oil-free according to ISO 8573-3 class 6.

Fig. 4.8

- Install a quick release coupling with a male G 3/8" thread to the female fitting (A) on the unit.
- Install a compressed air supply hose to this coupling.
- Connect the air hoses<sup>22</sup> in the connectors + and - (B+C).

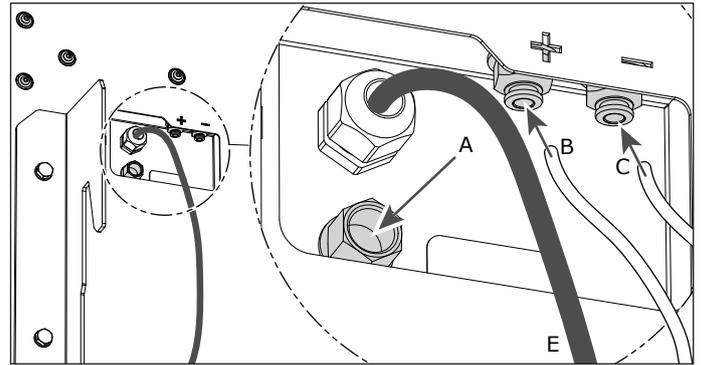


Fig. 4.8 Compressed air connection (rear of the unit)

## 4.6 Wall bracket



### ATTENTION!

Before you install the wall bracket, make sure that the wall or mounting structure is strong and rigid enough. Refer to § 1.4 for the weight of the filter unit, fan and extraction arm(s).

- Refer to Fig. VI on page 24 for the recommended installation height<sup>23</sup> and the hole pattern of the wall bracket.

To install the wall bracket, do the following.

Fig. 4.9

- The wall bracket is temporarily attached to the unit by a cable tie. Cut the cable tie.
- Install the wall bracket (B) to the wall or mounting structure. Use all 4 mounting points. Make sure that the wall bracket is level.
- Lift the unit and insert the hooks (A) in the slots of the wall bracket.
- Secure the unit to the wall bracket with the bolts M10x30, locknuts M10 and washers M10 (C).

22. The different colours simplify correct connection to the control panel

23. In case of an "EM" type, the installation height is less critical, since the extraction arms are mounted separately from the filter unit. However, to avoid bends (=pressure drop) in the ducting, we recommend to install the filter unit at the indicated height and to connect the arms as close as possible to the filter unit.

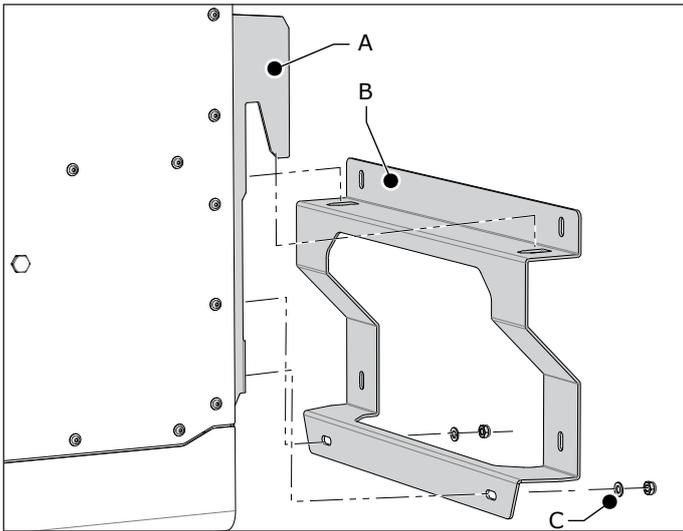


Fig. 4.9 Mounting of the wall bracket

#### 4.7 Extraction arm

For assembly of the extraction arm(s), refer to the installation manual of the KUA-160 or KUA-200, that is supplied with the product.

##### 4.7.1 LL-5.5/24 | Manual on/off switch on the hood, incl. LED working light (option)

- Install the LL-5.5/24 in the hood of the extraction arm in accordance with the instruction sheet that is supplied with the product.

Subsequently:

Fig. 4.10

- Feed the cable through the extraction arm to the rotating flange (A).
- Feed the cable through the grommet into the cable gland (B).
- Tighten the cable gland.

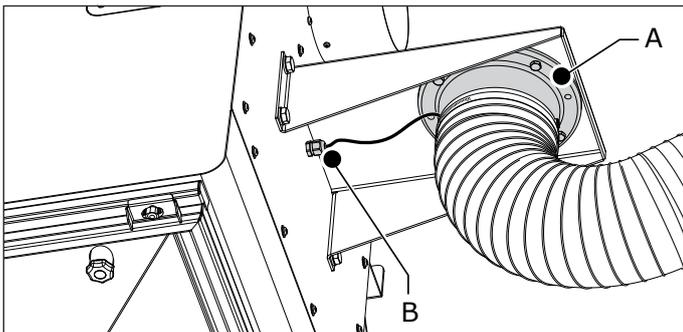


Fig. 4.10 Grommet + cable gland

Fig. 4.11

- Release the hopper (D) to get access to the inside of the unit.
- "DM" types only: Feed the cable through the reinforcement plate (A).
- Remove the blind plug (C) from the nearest (left or right)<sup>24</sup> cable gland (B), just below the indicator panel.
- Feed the cable through the cable gland (B) inside the unit.
- Tighten the cable gland.

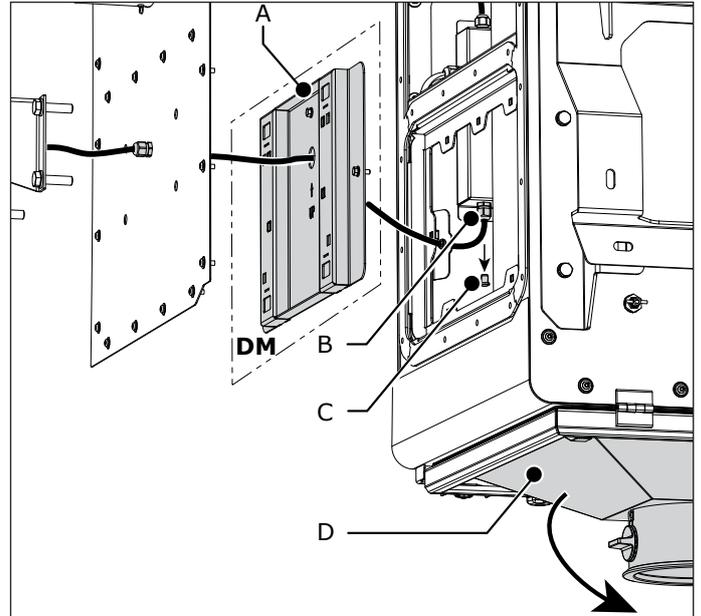


Fig. 4.11 Cable connection

Fig. 4.12

- Remove the cover of the indicator panel.
- Cut the cable to the appropriate length.
- Connect the cable as indicated below. The wire numbers (#) correspond with those on the instruction sheet that is supplied with the LL-5.5/24<sup>25</sup>.

Wire #	Colour	Connection
03	red	10 →
04	black	11 →
05	grey	12 →
06	blue	13 →

Working light	10	11	12	13
	10	11	12	13
External start/stop	10	11	12	13
	10	11	12	13

Fig. 4.12 Cable connection inside indicator panel



#### ATTENTION!

Before you proceed, make sure that all cable glands are fully tightened, to prevent leakage of dust.

#### 4.7.2 Inlet ducting

Applies to:

			DM	
--	--	--	----	--

Fig. 4.13

- Put adhesive rubber strip (G) around the opening of the arm bracket. Make sure that the strip does not entirely cover the holes.
- Put the mounting flange (D) over the duct flange (C).
- Put the bend (E) into the duct flange (C).
- Put the other side of the bend (E) into the inlet flange<sup>26</sup> (B).

24. In case of a WallPro 2.0 Double: use the left cable gland for the left arm and vice versa

25. Manual on/off switch, incl. LED working light

26. Inlet flange + non-return valve (assembly)

- Install the mounting flange to the arm bracket with 4x bolts M8 with 8x washers and 4x locknuts (F), that are supplied with the extraction arm.
- Make sure that all connections are airtight.

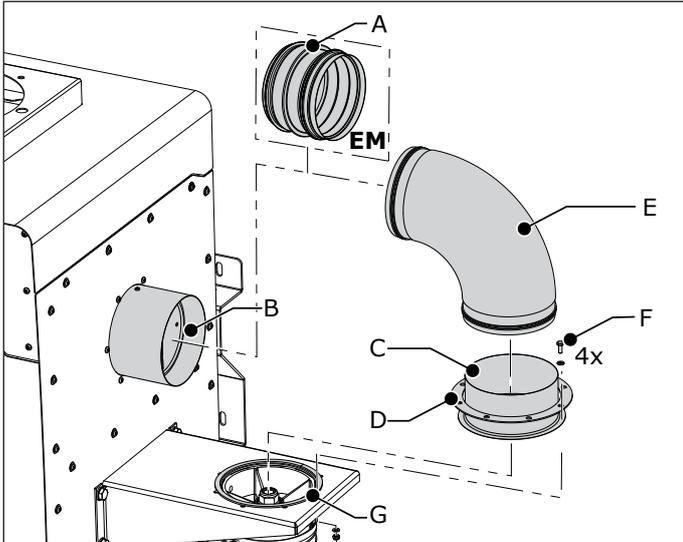


Fig. 4.13 Inlet ducting

Applies to:			
			EM

- If applicable<sup>27</sup>: install the duct adapter metric-imperial (A) in the inlet flange (B).
- Install ducting<sup>28</sup> between B (or A) and the extraction arm.
- Make sure that all connections are airtight.

## 4.8 Dustbin

To install the dustbin, do the following.

Fig. 4.14

- Install the dustbin assembly (C) to the hopper (A) with the supplied duct clamp (B).
- Turn the rotary knob (D) in vertical position to open the shut-off valve.

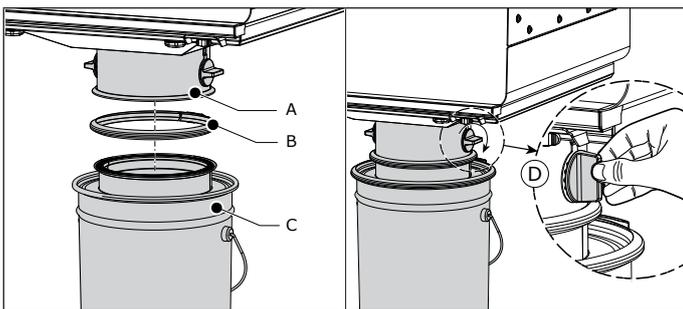


Fig. 4.14 Mounting of the dustbin

### 4.8.1 Dustbin extension set (option)

For easy maintenance, you can install the dustbin on the floor via the dustbin extension set.

The dustbin extension set consists of the following components:

Fig. 4.15

- A Duct connection ring
- B Extension duct  $\varnothing$  200 mm /  $\varnothing$  8 in. (to be sourced locally)
- C Hose clamp
- D Rubber collar
- E PVC hose
- F Hose clamp
- G Rubber collar
- H Hose connection ring
- I Duct clamp

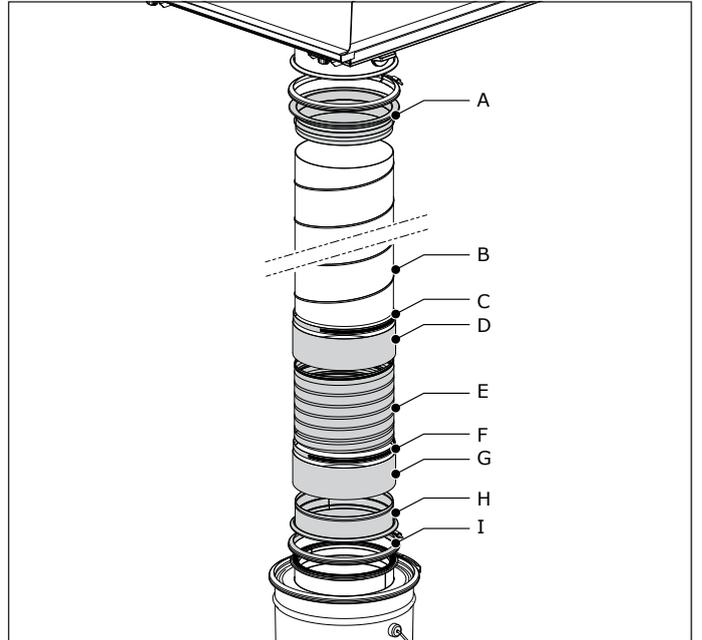


Fig. 4.15 Dustbin extension set

- Install the dustbin extension set between the filter unit and the dustbin with the supplied components + extension duct.
- Use the rubber collars to make the connections airtight.

## 4.9 Control panel

### 4.9.1 Connections



Refer to the separately supplied electrical diagram for the electric connections.  
Refer to § 4.1.1 for the required cable specifications.

Fig. 4.16

- Install the control panel at an appropriate position.
- Connect the control panel to the fan (B).
- Connect the control cable (C) from the filter unit to the control panel (refer to Fig. 4.8E).
- Install the compressed air hose (D).
- Install the air hoses (E). Make sure that the + and - corresponds with the + and - connection on the rear of the filter unit<sup>29</sup> (refer to Fig. 4.8B+C).
- Connect the control panel to the mains (A).

27. In case of 60Hz configurations with an imperial duct size ( $\varnothing$  6 in. or  $\varnothing$  8 in.)

28.  $\varnothing$  160 mm / 6 in. or  $\varnothing$  200 mm / 8 in., depending on the inlet diameter

29. Mind the colour of the hoses

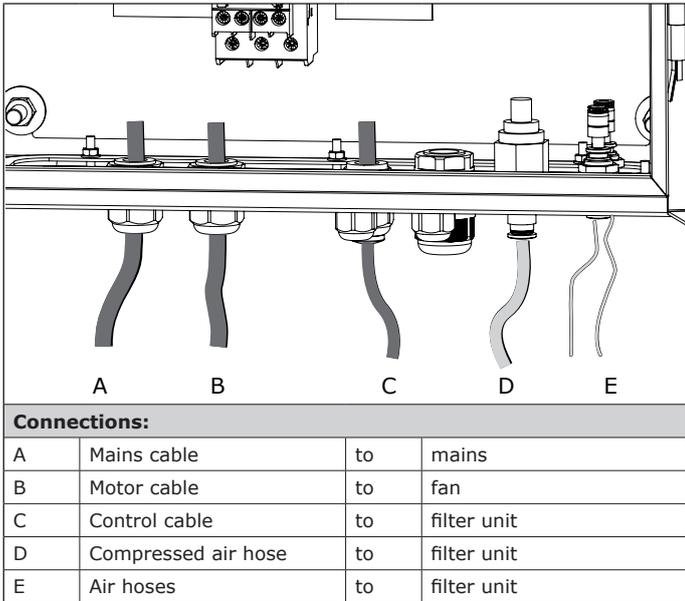


Fig. 4.16 Control panel

Applies to:				
				ControlPro

The control panel contains a connection for an optional ethernet and/or MCC-05<sup>30</sup> cable.

Optional:  
Fig. 4.17

- Open the ControlPro panel.
- Put the ethernet cable through an available cable gland.
- Connect the supplied ethernet field connector (B) to the ethernet cable (A).
- Remove the dust cap (C) of the HMI and put the ethernet cable in the corresponding LAN port.
- Tighten the cable gland and close the ControlPro panel.

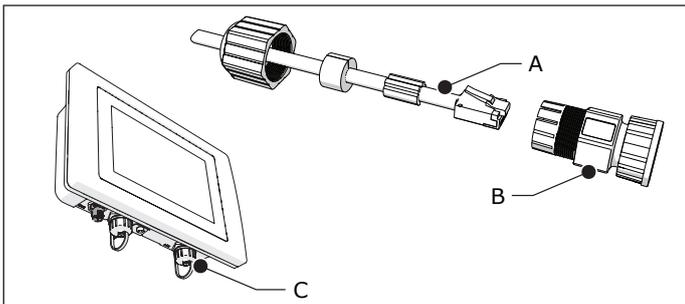


Fig. 4.17 Ethernet field connector

For connection of the optional MCC-05 cable:

- Refer to the separately supplied electrical diagram.

## 4.10 Fan outlet

Applies to all types of units

The fan has a rectangular outlet with grid for recirculation<sup>31</sup> of the filtered air into the workshop. In that case the supplied fan outlet transition –from rectangular to round– is redundant.

30. MCC-05 = inductive sensor

31. Make sure that recirculation is allowed by state or local regulations

For mounting to the optional silencer<sup>32</sup> or an outlet duct, you must install the fan outlet transition first. The table below shows the various outlet possibilities.

Fan outlet	Outlet transition	Outlet duct	Recirculation
		Exhaust to atmosphere	Exhaust to atmosphere
	Silencer	Recirculation	Recirculation
		Outlet duct	Exhaust to atmosphere

### 4.10.1 Fan outlet transition

Fig. 4.18

- Determine the desired outlet configuration.

In case of direct recirculation of the air, the outlet transition is redundant.

If applicable:

- Disassemble the grid (A).
- Install the outlet transition (B) to the fan with the bolts and nuts of the grid.
- Install the optional silencer and/or the outlet duct to the outlet transition.

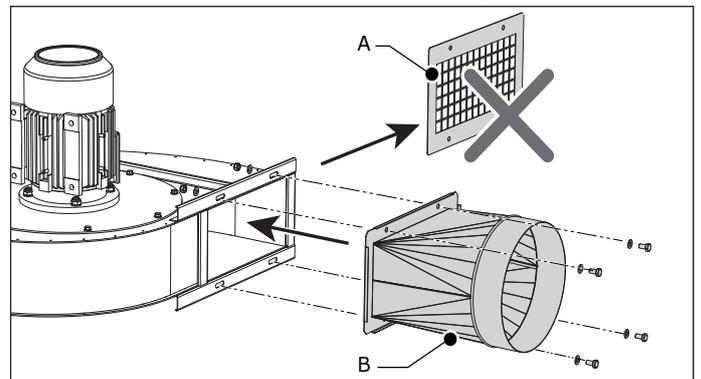


Fig. 4.18 Fan outlet transition

## 4.11 Commissioning checklist



#	Check	Ref. §	OK
1.	Are all cables correctly installed?	4.9.1	
2.	Are the air hoses (+ and -) correctly installed?	4.5	
3.	Is the direction of rotation of the fan correct? An arrow on the fan housing indicates the correct direction.		

32. Refer to § 1.3

#	Check	Ref. §	OK
4.	Is the filter unit connected to the compressed air supply?	4.5	
5.	<i>In case of the optional LL-5.5/24 (on/off switch + working light):</i> Are all cable glands fully tightened?	4.7.1	
6.	Is the shut-off valve of the dustbin open?	4.8	

## 5 USE



### WARNING!

Fire hazard! Do **not** use the product for polishing applications in combination with grinding, welding or any other application that generate sparks.

**Refer to chapter 3 / Safety instructions / Use.**

## 5.1 Control equipment

### 5.1.1 Control panel

Applies to:				
				ControlGo

Controls and indicators:

Fig. 5.1

- A White LED | POWER ON
  - LED off: system is off
  - LED blinking: system is starting up
  - LED on: system is ready
- B Green LED | FAN RUNNING
  - LED off: fan is off
  - LED blinking: fan is ramping down
  - LED on: fan is running
- C Yellow LED | WARNING
  - LED off: no problem
  - LED on: the blinking pattern shows the cause of the warning; refer to § 7.1.1
- D Red LED | ALARM
  - LED off: no problem
  - LED on: the blinking pattern shows the cause of the alarm; refer to § 7.1.2
- E Main switch
- F Green button | START/STOP FAN
  - to start and stop the fan manually
- G Black button | FILTER CLEANING
  - to activate an additional filter cleaning cycle
  - to suppress the buzzer (push and hold for 5 seconds)<sup>33</sup>
  - to reset the warning and alarm LED (push and hold for 5 seconds)
- H Buzzer | acoustic signal
  - together with the ALARM signal (D)
  - in some cases: together with the WARNING signal (C)
- I Tumbler switch 0-1 | Normal Mode / Service Mode (inside the control panel; not shown)
  - normal use: control panel in Normal Mode (1)
  - during service/maintenance/repair activities: put the control panel in Service Mode (0)

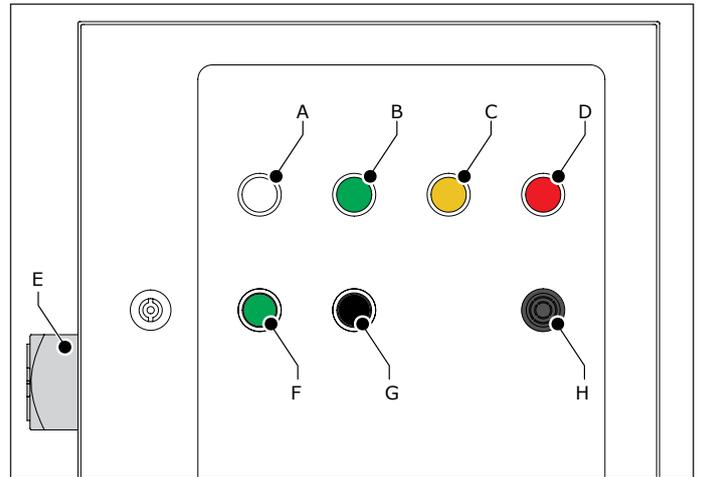


Fig. 5.1 Control panel **ControlGo**

Applies to:				
				ControlPro

Controls and indicators:

Fig. 5.2

- A HMI
- B Main switch
- C Buzzer
- D Tumbler switch 0-1 | Normal Mode / Service Mode (inside the control panel; not shown)
  - normal use: control panel in Normal Mode (1)
  - during service/maintenance/repair activities: put the control panel in Service Mode (0)

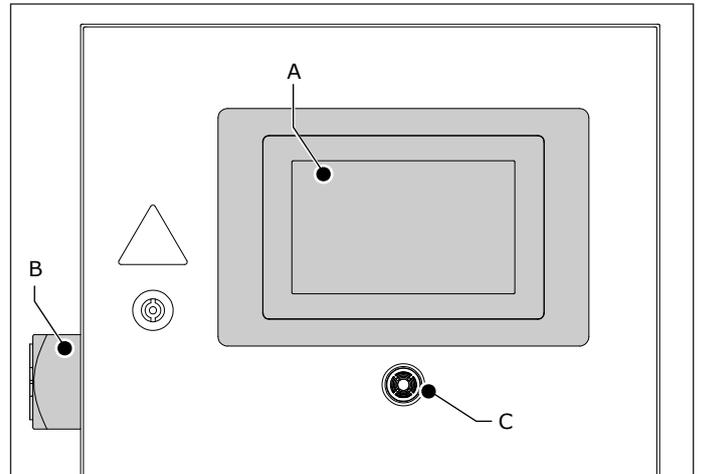


Fig. 5.2 Control panel **ControlPro**

Fig. 5.3

The HMI shows the actual system status at all times. You can activate the fan and cleaning system manually or have the entire system run fully automatically.

33. You must still solve the cause of the alert



Fig. 5.3 HMI

For extensive explanation on the HMI, refer to:

- the short user manual MAN\_ControlPro\_HMI<sup>34</sup>; and/or
- the online user manual on [www.plymovent.com/manuals/controlpro](http://www.plymovent.com/manuals/controlpro)<sup>35</sup>

**PLYMOVENT**  
clean air at work

**ControlPro/HMI**

EN User manual  
 NL Gebruikershandleiding  
 DE Betriebsanleitung  
 FR Manuel opérateur  
 ES Instrucciones para el uso

[www.plymovent.com/manuals/controlpro](http://www.plymovent.com/manuals/controlpro)

000011273/0

### 5.1.2 Indicator panel

**Applies to all types of units**

The filter unit itself contains an indicator panel with three pilot lights, that correspond with the ones on the control panel:

Fig. 5.3

- A Red LED on | indicates an alarm
- B Yellow LED on | indicates a warning
- C Green LED on | indicates that the fan is running

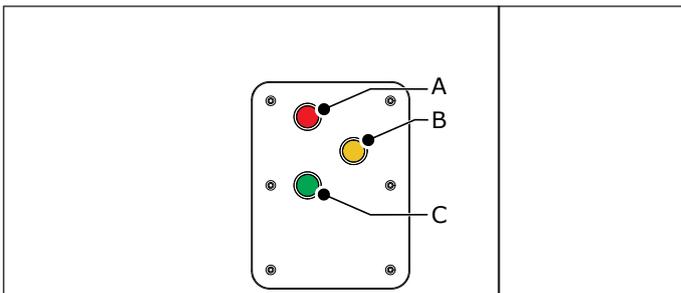


Fig. 5.3 Indicator panel

34. Available in several languages

35. Available in English language only

**Applies to:**

				ControlGo
--	--	--	--	-----------

- If the yellow or red LED is on, the blinking pattern on the control panel shows the cause of the warning or alarm; also refer to § 5.4.1 and 5.4.2.

**Applies to:**

				ControlPro
--	--	--	--	------------

- If the yellow or red LED is on, consult the HMI for the cause of the warning or alarm.

### 5.2 Use

**ATTENTION**

During use, make sure that the shut-off valve is open. Refer to Fig. 4.14D (rotary knob in vertical position).

**Applies to:**

				ControlGo
--	--	--	--	-----------

Refer to Fig. 5.1

- Position the hood of the extraction arm at max. 480 mm (19 in.) from the source of pollution. Refer to Fig. VII on page 24 for the correct position.
- Make sure that the shut-off damper inside the extraction arm is open (refer to Fig. VIII on page 24).
- Make sure that the main switch (E) is on.
- Push the START/STOP FAN (F) button to activate the fan<sup>36</sup>.

**Applies to:**

				ControlPro
--	--	--	--	------------

Refer to Fig. 5.2

- Position the hood of the extraction arm at max. 480 mm (19 in.) from the source of pollution. Refer to Fig. VII on page 24 for the correct position.
- Make sure that the shut-off damper inside the extraction arm is open (refer to Fig. VIII on page 24).
- Make sure that the main switch (B) is on.
- Use the HMI to activate the fan<sup>37</sup>.

**Applies to all types of units**

- Start welding.
- When the welding position changes, move the hood to the correct position in relation to the weld.

**WARNING**

To keep the welding fume away from the breathing zone of the welder, make sure that all fume is extracted through the hood.

- Put the unit off approx. 20 seconds after you have finished welding.

### 5.3 Filter cleaning system

The filter cleaning system can be activated in three different ways and takes place either offline (fan off) or online (fan on).

36. Option to activate the fan: on/off switch on the hood of the extraction arm

37. Options to activate the fan: on/off switch on the hood of the extraction arm or automatically via an inductive sensor (MCC-05)

Activation of filter cleaning system		Offline	Online	Duration (sec.)
Automatically	at fan shutdown	√		120
	pressure controlled		√	120
Manually	by push button or on the HMI <sup>38</sup>	√	√	120

During one cleaning cycle each air hose in the HyperClean™ system rotates 360 degrees for 30 seconds.

#### Manually | by push button or on the HMI

To activate the filter cleaning system manually:

- push the corresponding button

#### Automatically | at fan shutdown

After ≥30 minutes of (intermittent or continuous) operation, one cleaning cycle takes place when the fan is off, with a delay time of 15 seconds. If the fan starts running again within those 15 seconds, the filter cleaning system will not be activated.

#### Automatically | pressure controlled

A differential pressure switch activates the filter cleaning system immediately when the pressure drop reaches the threshold value during use.

### 5.4 Alerts

Applies to:				
				ControlGo

The pilot lights on the indicator panel (refer to Fig. 5.3) correspond with the ones on the control panel.



This paragraph briefly explains the yellow and red alerts on the control panel. Refer to paragraph 7.1 for detailed troubleshooting.

#### 5.4.1 WARNING

The yellow warning LED - in some cases accompanied by the buzzer - may show four different blinking patterns:

Yellow	Blinking pattern	Means
		Filter cartridges are clogged
		No compressed air (delay time: 10 seconds)
		Communication error
		Service Mode

In the WARNING mode the fan/system continues to run.

#### 5.4.2 ALARM

The red alarm LED - accompanied by the buzzer - may show two different blinking patterns:

Red	Blinking pattern	Means
		Fan/motor failure
		External device

In the ALARM mode the fan/system stops immediately.

38. Depending on the type of control panel

Applies to:				
				ControlPro

The pilot lights on the indicator panel (refer to Fig. 5.3) correspond with the system status on the HMI.

## 6 MAINTENANCE

### 6.1 Periodic maintenance



The product has been designed to function without problems for a long time with a minimum of maintenance. In order to guarantee this some simple, regular maintenance and cleaning activities are required which are described in this chapter. If you observe the necessary caution and carry out the maintenance at regular intervals, any problems occurring will be detected and corrected before they lead to a total breakdown.

 **WARNING**  
Overdue maintenance can cause fire.

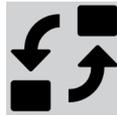
 **WARNING**  
If applicable, put the control panel in Service Mode before you do the activities as stated below;  
- for ControlGo: refer to Fig. 5.1 I  
- for ControlPro: refer to Fig. 5.2 D

The indicated maintenance intervals can vary depending on the specific working and ambient conditions. Therefore we recommend to thoroughly inspect the complete product once every year beside the indicated periodic maintenance. For this purpose contact your supplier.

Component	Action	Frequency: every X months	
		X=6	X=12
<b>Filter unit</b>			
Dustbin	Empty; refer to § 6.3	*)	
Housing	Clean the outside with a non-aggressive detergent		X
	Clean the inside with an industrial vacuum cleaner and remove dust from the filter compartment		X
	Check sealing material of the door. Replace if necessary		X
Mains cord	Check for damage. Repair or replace if necessary	X	
Hyperclean™ system	Check the air hoses for damage. Replace if necessary; refer to § 6.4	X	
<b>Extraction fan</b>			
Fan housing	Check for encrusted particles. Clean if necessary		X
<b>Extraction arm</b>			
Tubes	Clean the outside with a non-aggressive detergent	X	
	Clean the inside thoroughly	X	
Flexible hoses	Check for cracks or damages. Replace if necessary	X	
Hood	Check the movement of the hood. If necessary, adjust the friction; refer to § 6.5	X	
Arm movement	Check horizontal, vertical and diagonal arm movement. If necessary, adjust the friction; refer to § 6.5	X	

\*) During use, you must check the level of contents in the dustbin regularly. The emptying frequency depends on the intensity of use and will be a matter of experience. In the initial stage, do a check on the level of contents of the dustbin 2 times per month.

## 6.2 Filter replacement



### Personal protective equipment (PPE)

Wear respiratory protection and protective gloves when you replace the filter cartridge.



### WARNING

Do **not** replace the filter cartridge while the fan is running.

To replace the filter cartridge, do the following.



Scan the QR code to watch a short demo about filter replacement.



Fig. 6.1

- De-energize the unit.
- Turn the rotary knob (A) in horizontal position to close the shut-off valve.
- Loosen the quick release clamp (F) and remove the dustbin (G).
- Loosen the duct clamp (D) and remove the flange (E).



If there is enough space behind the filter unit to turn the hopper including flange 90°, it is not necessary to remove the flange.

- Loosen the 2 wing knobs (C) and release the bag frame (B).

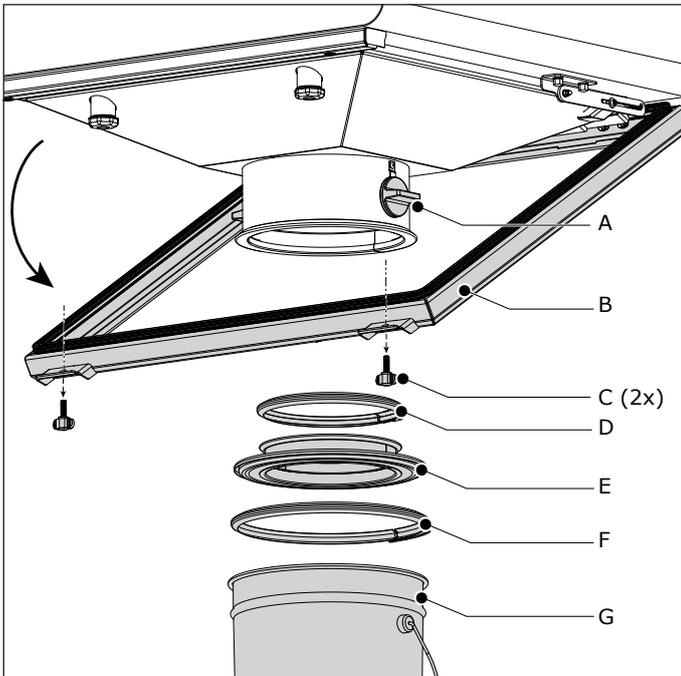


Fig. 6.1 Bag frame

Fig. 6.2

- (1) Put a plastic bag from the inside through the bag frame.
- (2) Close the bag frame and (3) fasten it with the 2 wing knobs.

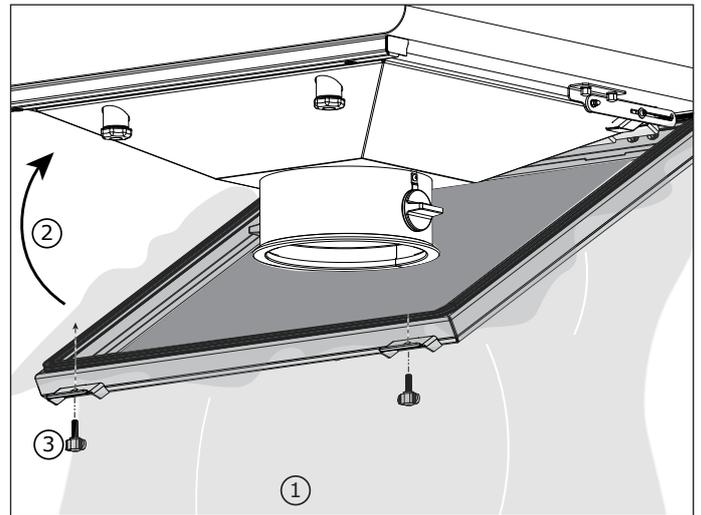


Fig. 6.2 Plastic bag

To guarantee dust-free filter removal, you must loosen the star knobs of the hopper and the filter cartridge via the outside of the plastic bag. This means that you do not touch the knobs directly.

Fig. 6.3

- Loosen the 2 star knobs (D) and release the hopper (C).
- Move the hopper in fully vertical position. Lock the hopper with the lid stays (B).
- Loosen the star knob (A) and carefully lower the filter cartridge into the plastic bag.
- Lift the plastic bag, turn it around and seal it with a cable tie.
- Loosen the 2 wing knobs and release the bag frame again (refer to Fig. 6.2).
- Clean the inside of the filter unit with an industrial vacuum cleaner.



At this stage of the filter replacement procedure, we recommend to replace the air hoses of the HyperClean™ system as well. Refer to § 6.4.

- Install a new filter cartridge, put the washer<sup>39</sup> on the rod and tighten the star knob<sup>40</sup>.
- Release the lid stays (B).
- Close the hopper and tighten the star knobs. Make sure to tighten them all the way to prevent leakage.
- Close the bag frame and tighten the wing knobs.
- Install the dustbin.
- Turn the rotary knob (refer to Fig. 4.14D) in vertical position to open the shut-off valve.
- Energize the unit.
- Push and hold the FILTER CLEANING button (ref. Fig. 5.1G) for 10 seconds to reset the red LED.
- Dispose of the used filter cartridge in accordance with federal, state or local regulations.

39. The washer is supplied with the new filter cartridge

40. The star knob is attached to a rope to prevent loss

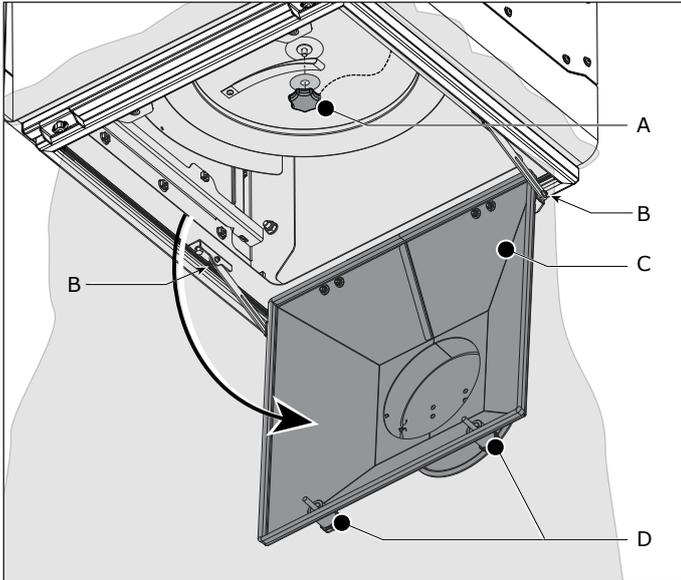


Fig. 6.3 Replacement of the filter cartridge

### 6.3 Emptying the dustbin

Due to the shut-off valve, it is possible to empty the dustbin while the fan is running. Therefore, it is not necessary to de-energize the unit.



**Personal protective equipment (PPE)**  
Wear respiratory protection and protective gloves when you empty the dustbin.



**WARNING**  
Do **not** empty the dustbin while a filter cleaning cycle takes place.

To empty the dustbin, do the following.

Fig. 6.4

- Option: de-energize the unit.
- Turn the rotary knob (A) in horizontal position to close the shut-off valve.
- Loosen the quick release clamp (B) and remove the dustbin (C).
- Empty the dustbin.
- Install the dustbin and fasten the quick release clamp.
- Turn the rotary knob (A) in vertical position to open the shut-off valve.
- If applicable: energize the unit.
- Dispose of the contents of the dustbin in accordance with federal, state or local regulations.

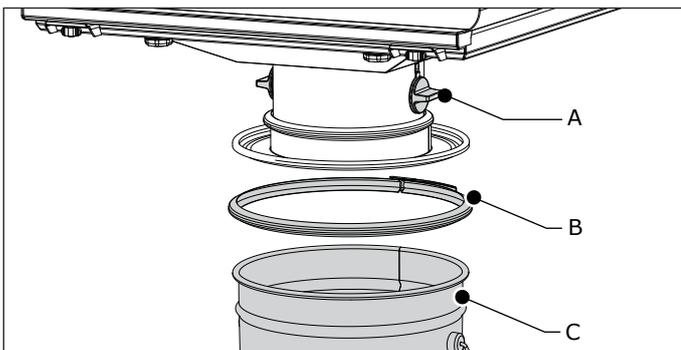


Fig. 6.4 Emptying the dustbin

### 6.4 Replacing the air hoses of the HyperClean™ system



We recommend to replace the air hoses during the filter replacement procedure or at least once per year.  
Replace all air hoses at the same time.

To replace the air hoses of the HyperClean™ system, do the following:

Fig. 6.5

- Remove the filter cartridge. Refer to the instructions of § 6.2.
- The air hoses are attached to the magnetic valves with push-in fittings. Disconnect the hoses from the push-in fittings (B).
- Loosen the locknut (A) and washer with a socket wrench 13 mm and remove the rod with the air hoses.
- Remove the used air hoses from the clamps (C).

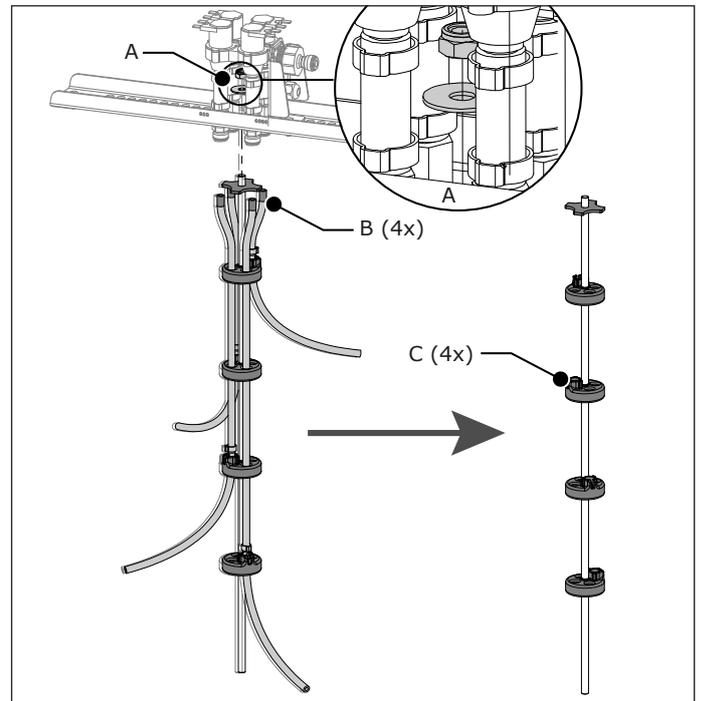


Fig. 6.5 Disconnecting the used air hoses

Fig. 6.6

- (1) Insert a new set of air hoses in the clamps.
- (2) Connect the air hoses to the push-in fittings.
- Install the rod and fasten it with the locknut and washer.

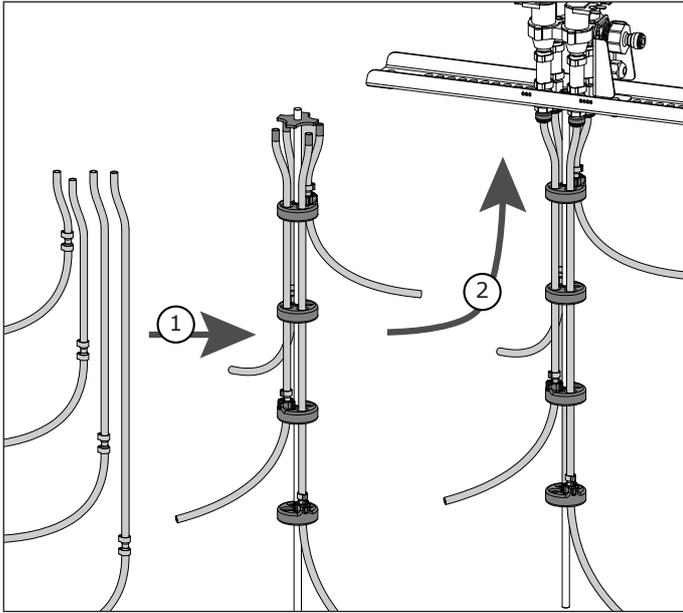


Fig. 6.6 New air hoses

## 6.5 Arm adjustment

If the extraction arm, or a part of it, does not stay in the desired position, you must adjust the friction. Refer to the corresponding installation manual how to adjust the balance.

## 7 TROUBLESHOOTING

If the unit does not function (correctly), consult the checklist below to see if you can remedy the error yourself. Should this not be possible, contact your supplier.



### WARNING

Obey the safety regulations that are written in chapter 3 when you carry out the activities below.

### 7.1 Alerts

#### Applies to:

ControlGo



### WARNING

If applicable, put the control panel in Service Mode before you do the activities as stated below;  
 - for ControlGo: refer to Fig. 5.1 I  
 - for ControlPro: refer to Fig. 5.2 D

#### 7.1.1 WARNING

Symptom	Problem	Possible cause	Solution
<b>WARNING: yellow LED blinking</b>			
<p><b>FILTER CLEANING</b></p> <p>Two functions:            - to suppress the buzzer (if applicable)            - to reset the warning LED</p> <p><i>You must still solve the cause of the warning. If you do not, the warning LED remains blinking.</i></p>			

Symptom	Problem	Possible cause	Solution
	Poor extraction capacity	Filter cartridge is clogged	Replace the filter cartridge (refer to § 6.2)
 + buzzer during actual filter cleaning	No filter cleaning possible	No compressed air available	Repair the compressed air connection/supply
		Compressed air pressure too low	Connect or replace the compressed air switch loose or defective
	No filter cleaning	Differential pressure switch is not connected or defective	Connect or replace the differential pressure switch
	All automatic functions are disabled	Service Mode	Open the control panel and put the tumbler switch to 1 ("Normal Mode")
	Unknown	Unknown	Restart the system
			Contact your Plymovent distributor

#### 7.1.2 ALARM

Symptom	Problem	Possible cause	Solution
<b>ALARM: red LED blinking</b>			
<p><b>FILTER CLEANING</b></p> <p>Two functions:            - to suppress the buzzer            - to reset the alarm LED</p> <p><i>You must still solve the cause of the alarm. If you do not, the alarm LED remains blinking and you will be unable to restart the system.</i></p>			
 + buzzer	Fan/motor failure	Fan control equipment defective	Repair or replace the fan/motor (connection) Repair or replace the fan control equipment
 + buzzer	External device	No communication with external device	Repair the connection
 + buzzer	Unknown	Unknown	Restart the system
			Contact your Plymovent distributor

#### Applies to:

ControlPro

Symptom	Problem	Possible cause	Solution
HMI screen is locked	No control on HMI possible	Control panel is in Service Mode	Put the tumbler switch inside the control panel to 0

Symptom	Problem	Possible cause	Solution
No installation wizard at start up	Configuration of the system not possible	System configured in an earlier stage	Direct to screen <b>5.8</b> to restart the wizard manually
			If necessary: reset PIN (refer to online user manual)
System does not start	System does not function	No mains voltage	Connect the mains voltage
		Main switch is off	Turn the main switch to on (refer to Fig. 5.2B)
Filter and/or fan pressure value = 0 when system is on	No pressure indication	Loose pneumatic hose(s)	Connect the hose(s)
Filter and/or fan pressure value ≠ 0 when system is off	Wrong pressure indication	Wrong pressure setting	Do a zero point calibration of the internal sensors (refer to screen 1.2)
Filter pressure value is negative or illogical	Wrong pressure indication	One pneumatic hose is loose	Connect the hose
		Inverted connection of the pneumatic hoses (+ vs. -)	Correct the connection (refer to § 4.8)
USB stick is not recognized	Firmware update not possible	USB-stick does not comply with USB 2.0 standard (too slow)	Use a USB 2.0 or USB 3.0 stick

## 7.2 Remaining troubleshooting

Applies to all types of units

Symptom	Problem	Possible cause	Solution
The fan does not start	The unit does not function	No mains voltage	Connect the mains voltage
		The mains cord is defective	Repair or replace the mains cord
		Loose contacts	Repair the contacts
		Motor defective	Repair or replace the motor
		START/STOP FAN button (green) is defective <sup>41</sup>	Replace the green button
		Thermal relay is activated	Reset the thermal relay
		Thermal relay is defective	Replace the thermal relay
The fan makes a humming sound, but does not run	Extraction capacity insufficient or no extraction at all	Motor uses 2 phases instead of 3	Repair the phase connection

41. ControlGo only

Symptom	Problem	Possible cause	Solution
Poor extraction capacity	The unit does not function properly	The shut-off damper in the hood of the extraction arm is (partly) closed	(Fully) open the shut-off damper
		Inverted direction of rotation of the motor	Change the direction of rotation
	Pollution of the facility	Filter cartridge ripped or placed incorrectly	Replace the filter cartridge or place it correctly
	No filter cleaning	Loose compressed air connection	Repair the compressed air connection
		No compressed air available or air pressure too low	Connect or repair the compressed air supply
The extraction arm does not stay in the desired position	Escape of fume; no proper extraction	Friction setting is not correct	Refer to the corresponding installation manual
You cannot get the arm in the desired position			
Button FILTER CLEANING does not react <sup>42</sup>	No manual activation of the filter cleaning system	Button FILTER CLEANING (black) is defective	Replace the black button
Dust leakage from the hopper	Sealing is insufficient	The adhesive rubber strip is damaged or worn	Replace the adhesive rubber strip
		The star knobs of the hopper are not fully tightened	Fully tighten the star knobs
Dust leakage from the extraction arm	The non-return valve is not functioning properly	Non-return valve cannot close properly due to pollution	Clean the non-return valve
		Mechanical failure	Replace the non-return valve

## 8 SPARE PARTS

### 8.1 Filter unit

The following spare parts are available for the filter unit;  
- refer to exploded view Fig. IX on page 25

### 8.2 Control panel

The following spare parts are available for the control panel;  
- refer to Fig. X on page 26

### 8.3 Extraction arm

The following spare parts are available for the extraction arms;  
- KUA-160: refer to the corresponding manual  
- KUA-200: refer to the corresponding manual



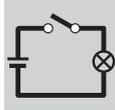
42. ControlGo only

## 8.4 Extraction fan

The following spare parts are available for the fan;  
- FUA-3000: refer to the corresponding manual  
- FUA-4700: refer to the corresponding manual

### 9 ELECTRICAL DIAGRAM

Refer to the separately supplied electrical diagram.



### 10 DISPOSAL

Dismantling and disposal of the unit must be done by qualified persons.



#### Personal protective equipment (PPE)

Wear respiratory protection and protective gloves when you dismantle and dispose of the unit.

#### 10.1 Dismantling

To safely dismantle the unit, obey the safety instructions that follow.

Before dismantling of the unit:

- disconnect it from the mains
- disconnect it from the compressed air
- clean the outside

During dismantling of the unit:

- make sure that the area is sufficiently ventilated, e.g. by a mobile ventilation unit

After dismantling of the unit:

- clean the dismantling area

#### 10.2 Disposal

Dispose of the pollutants and dust, together with the used filter cartridge, in a professional manner in accordance with federal, state or local regulations.

## CE DECLARATION

### CE declaration of conformity for machinery



We, Plymovent Manufacturing B.V., Koraalstraat 9, 1812 RK Alkmaar, Netherlands, herewith declare, on our own responsibility, that the product:  
- WallPro 2.0 filter unit

which this declaration refers to, is in accordance with the conditions of the following Directives:

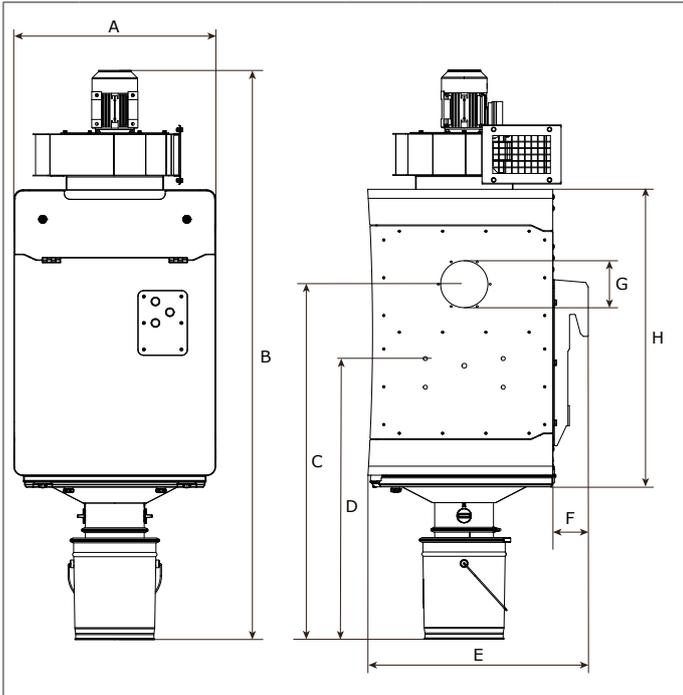
- Machine Directive 2006/42 EC
- EMC 2014/30 EU
- LVD 2014/35 EU
- ErP Directive 2009/125 EC
- W3 compliant (EN-ISO 15012-1:2013)

Signature:

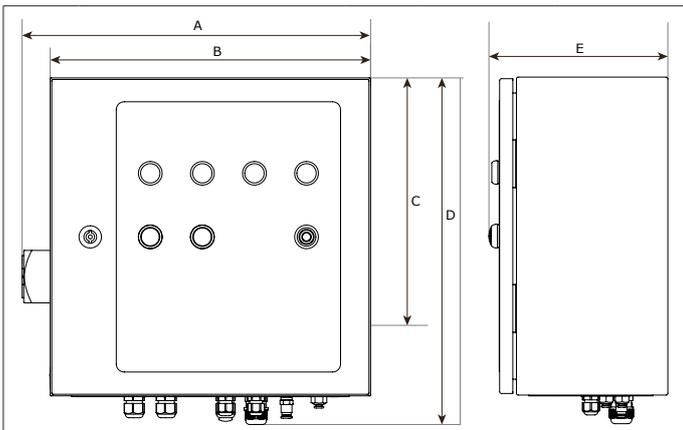
Name: M.S.J. Ligthart  
Position: Product Manager  
Date of issue: 15 January 2024

*For a CE declaration of the fan, refer to the corresponding manual.*

Fig. I Dimensions

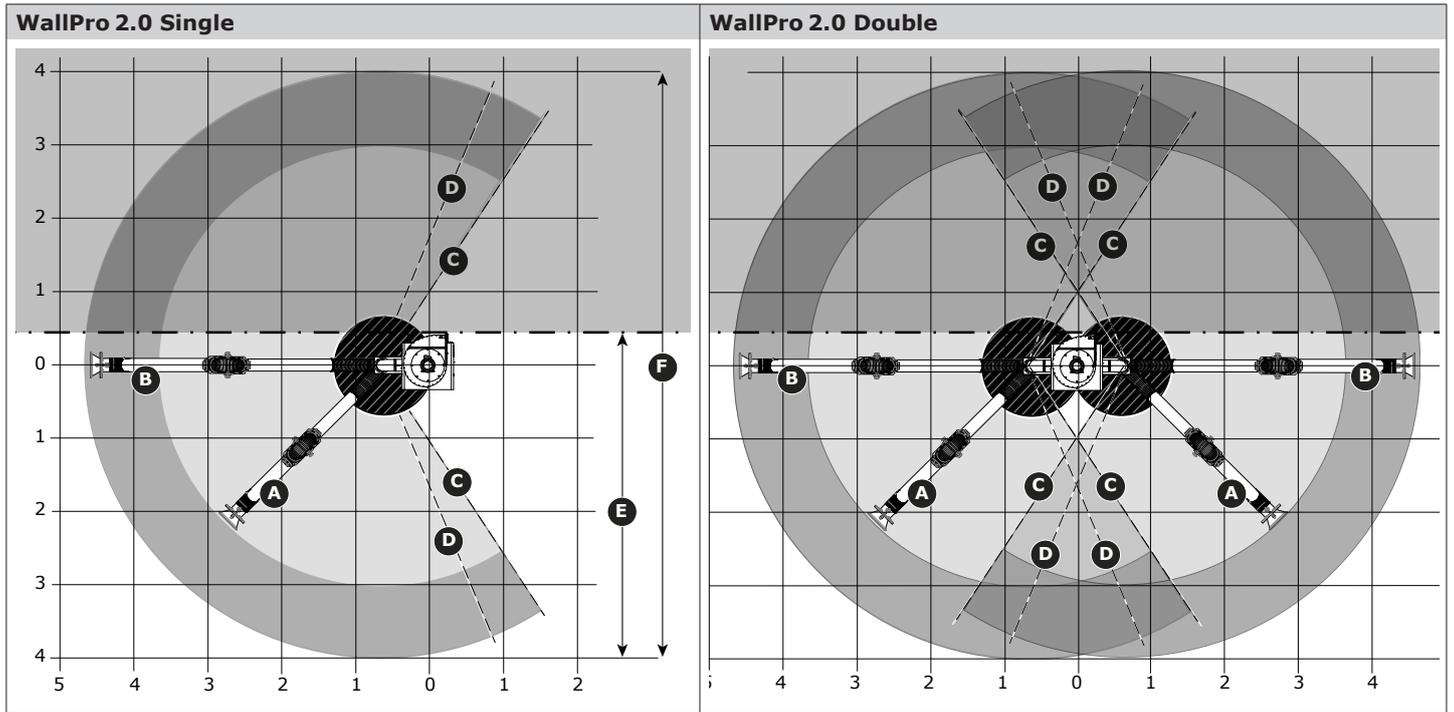


WallPro 2.0		mm	inch
<b>A</b>		700	27½
<b>B</b>	Single Basic	1991	78¾
	Single PowerPlus	2059	81⅛
	Basic PowerPlus		
	Double		
<b>C</b>		1236	48⅝
<b>D</b>		975	38¾
<b>E</b>		764	30⅛
<b>F</b>		123	4⅞
<b>G</b>	+ KUA-160	Ø 160	Ø 6
	+ KUA-200	Ø 200	Ø 8
<b>H</b>		1040	41



Control panel		mm	inch
<b>A</b>		435	17⅛
<b>B</b>		400	15¾
<b>C</b>		300	11¾
<b>D</b>		333	13⅛
<b>E</b>		161	6⅜

Fig. II Working range



	KUA- 160/3H	160/3H	200/3H	200/3H
Max. distance (m)	A	B	A	B
Max. angle	C	C	D	D

Mounting position	
E	Wall mounting
F	On a stanchion or similar

Fig. III Possible outlet directions of the fan

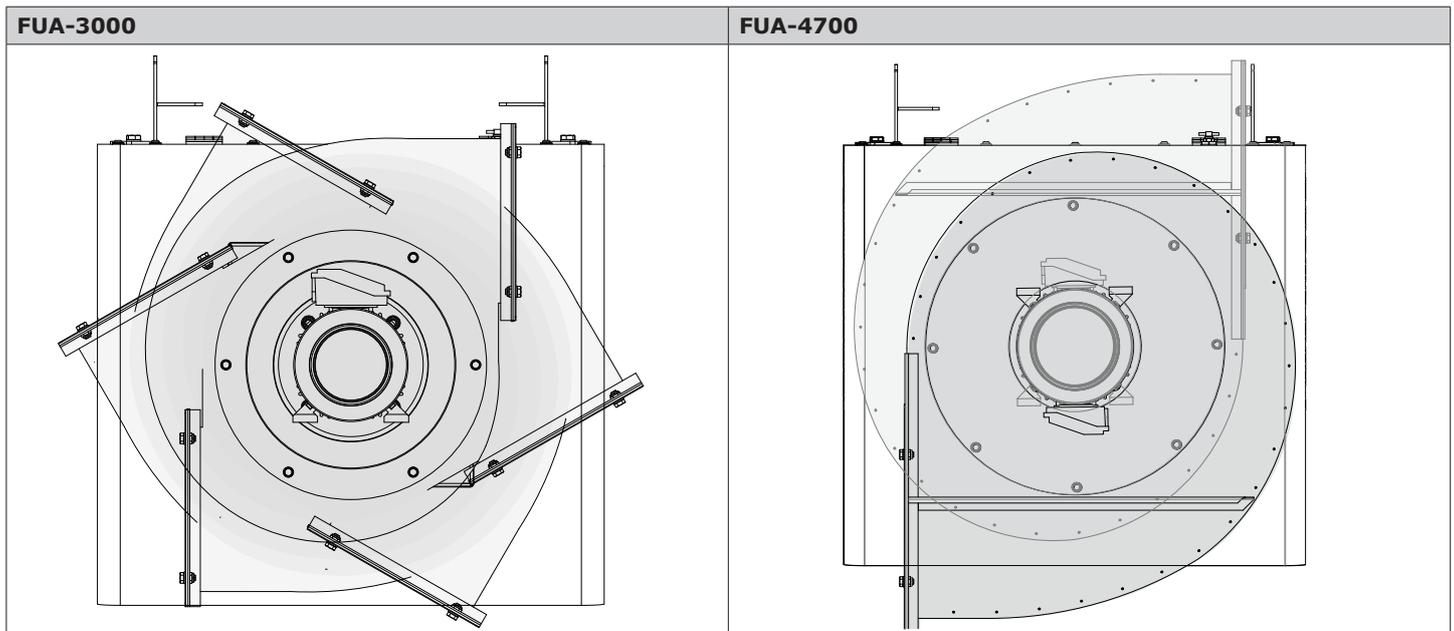
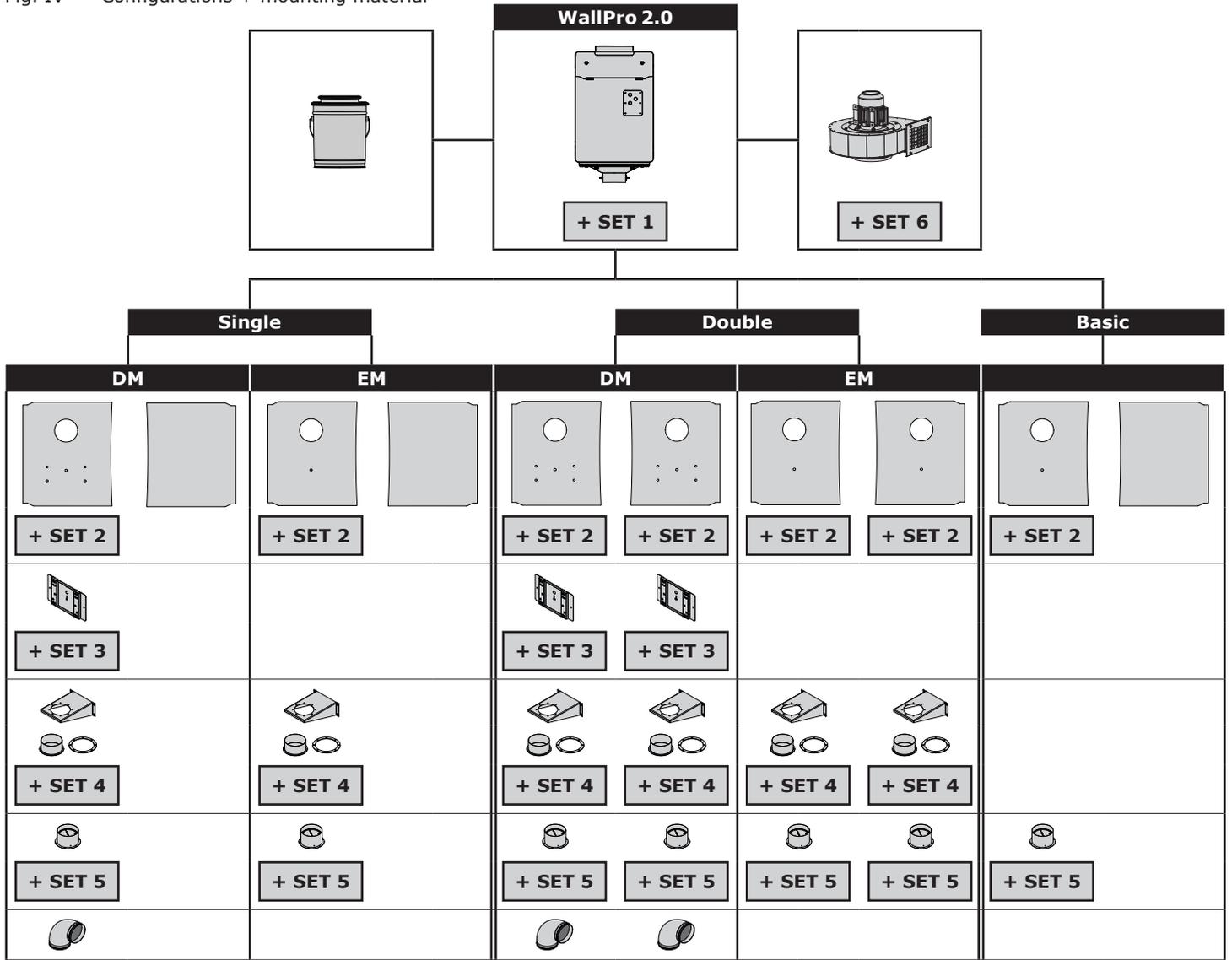


Fig. IV Configurations + mounting material



**SET 1 | Wall bracket + service panel**

- 2x Bolt M10x30
- 2x Locknut M10
- 4x Washer 10 mm
- 1x Key with square insert 8 mm

**SET 2 | Side panel**

- 1x Screw plug M16
- 1x Nut M16

- 1x Cable gland M16
- 24x Bolt M6x16
- 24x Sealing washer 6 mm

**SET 3 | Reinforcement plate**

- 7x Flange bolt M6x16
- 4x Cage nut M12

**SET 4 | Arm bracket + inlet ducting**

- 4x Bolt M12x30

- 4x Washer 12 mm
- 1x Adhesive rubber strip 0,6 m (2 ft.)
- 8x Washer 8 mm
- 4x Bolt M8x40
- 4x Locknut M8

**SET 5 | Duct flange + non-return valve**

- 6x Bolt M6x16
- 6x Locknut M6

- 6x Sealing washer 6 mm
- 6x Washer 6 mm
- 2x Self-tapping screw 4,2x13 mm

**SET 6 | Fan**

- 4x Positioning stud
- 4x Flange locknut M8
- 1x Adhesive rubber strip 0,9 m (3 ft.)

Fig. V Mounting position of the side panel

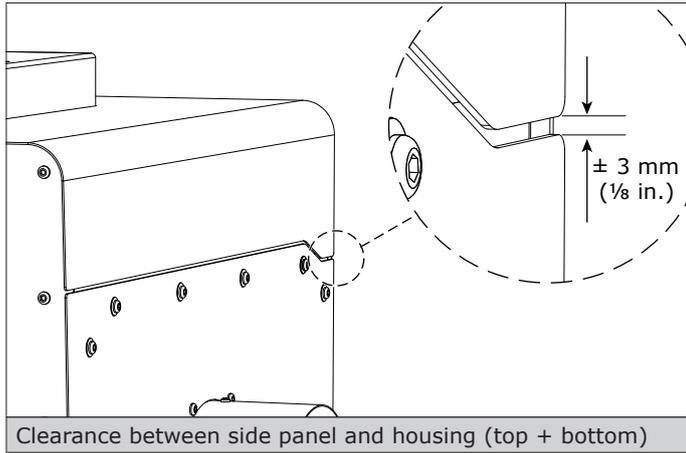


Fig. VI Installation height

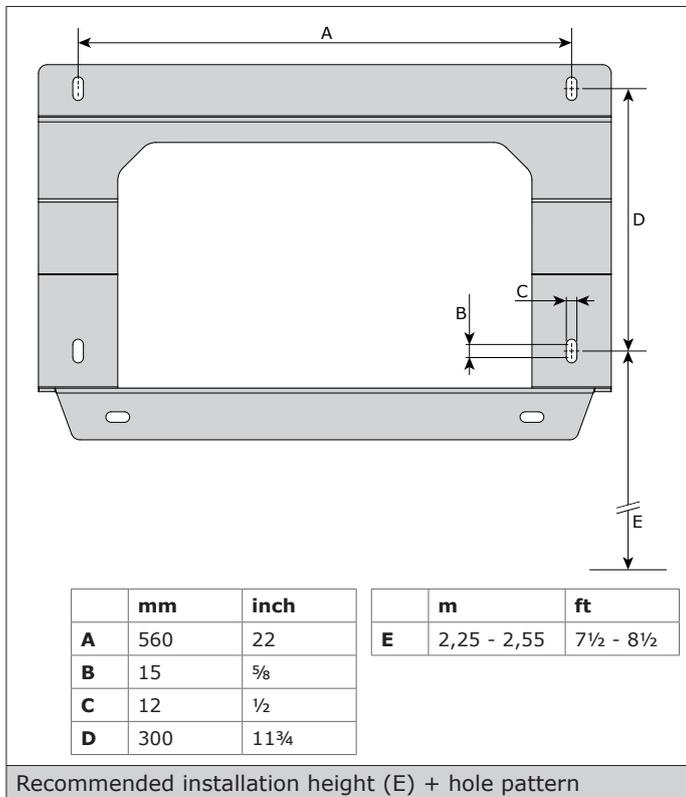


Fig. VII Positioning of the extraction arm

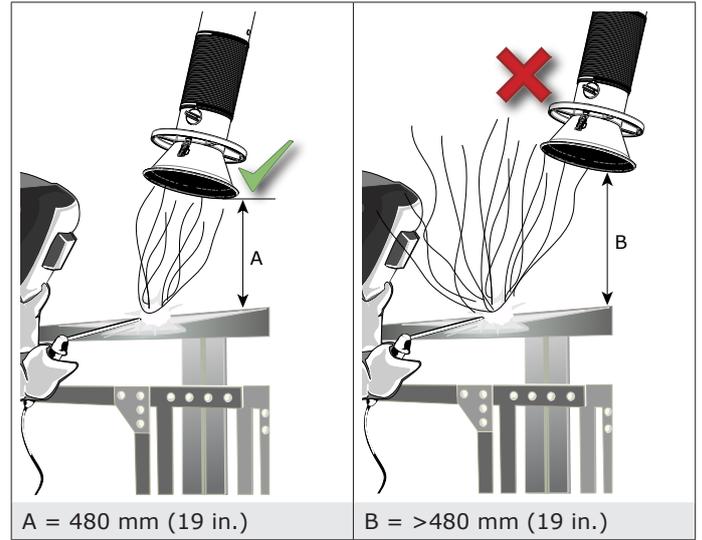


Fig. VIII Shut-off & control valve

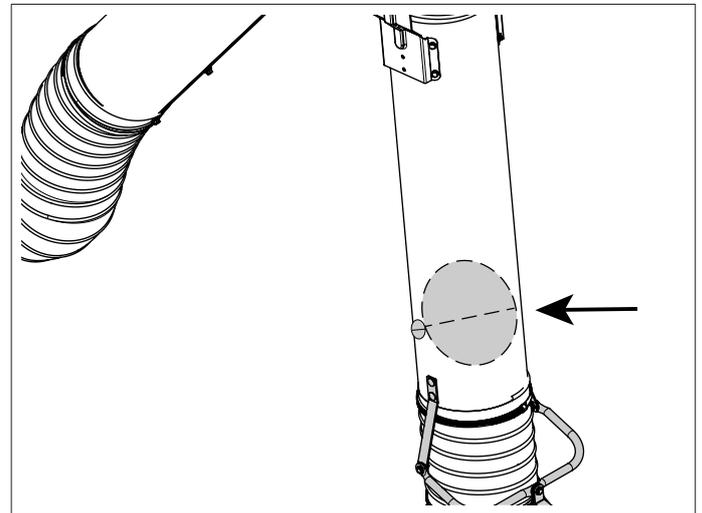
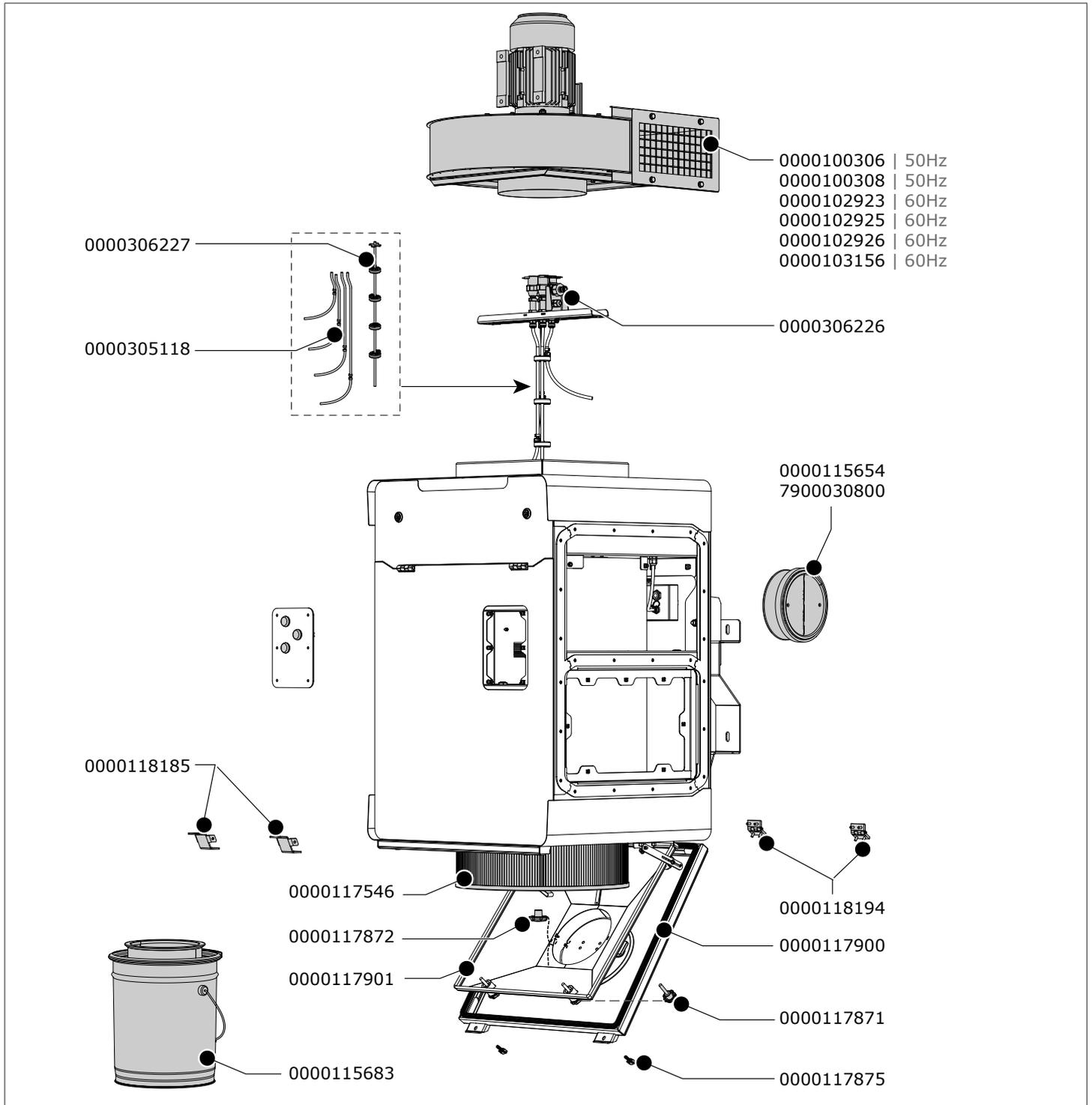


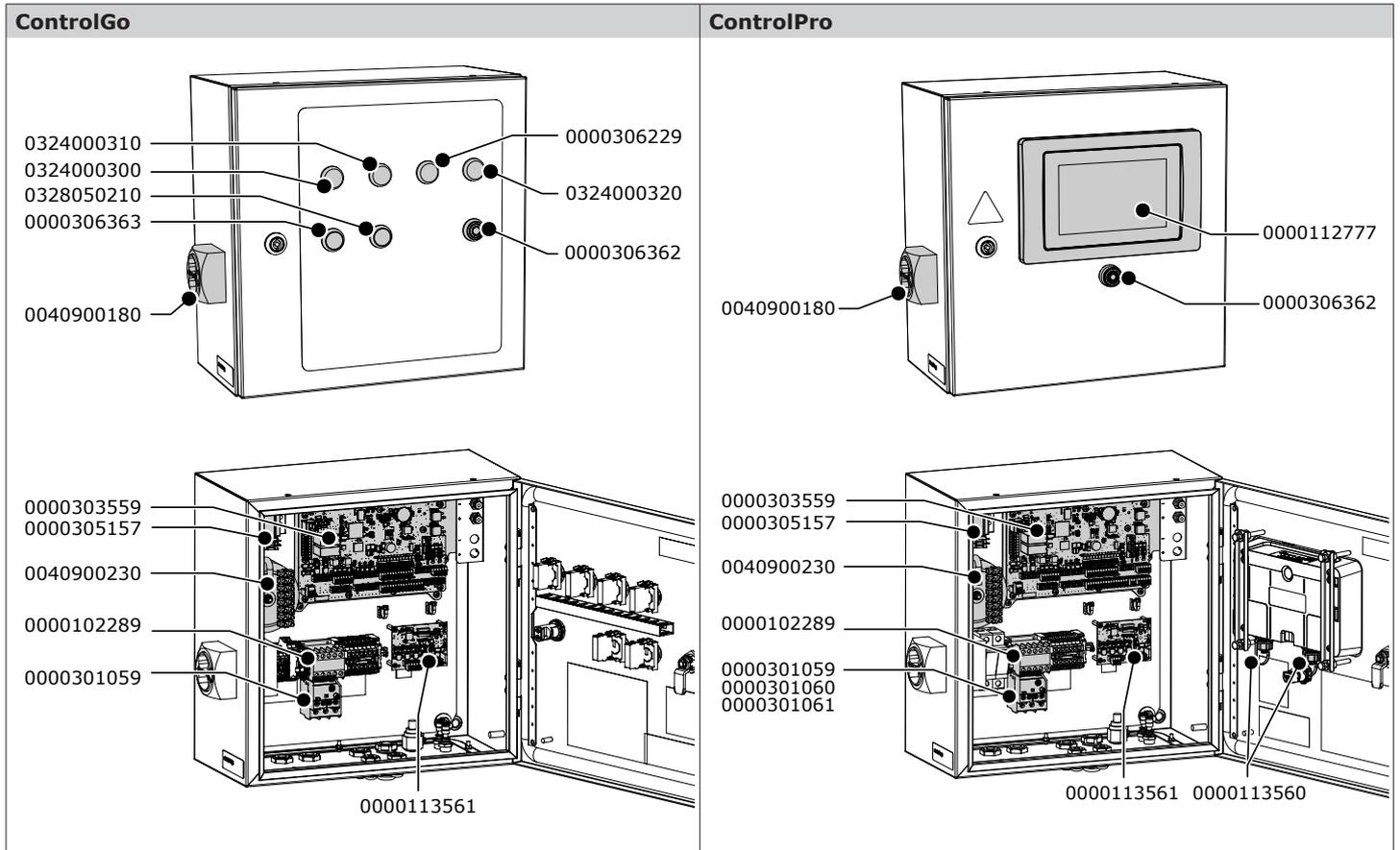
Fig. IX Exploded view filter unit **WallPro 2.0**



WallPro 2.0	Spare parts
0000100306	FUA-3000 (IEC); 400V/3ph/50Hz
0000100308	FUA-4700 (IEC); 400V/3ph/50Hz
0000102923	FUA-3000 (NEMA); 208-230/460V/3ph/60Hz
0000102925	FUA-4700 (NEMA); 208-230/460V/3ph/60Hz
0000102926	FUA-4700 (NEMA); 575V/3ph/60Hz
0000103156	FUA-3000 (NEMA); 575V/3ph/60Hz
0000115654	NRV-200 / Non-return valve Ø 200 mm
0000115683	Dustbin
0000117546	CART-O/PTFE/20 / Filter cartridge
0000117871	Star knob M8x50
0000117872	Star knob M8 + cord

WallPro 2.0	Spare parts
0000117875	Wing knob M6
0000117900	Sealing material for bag frame
0000117901	Sealing material for hopper
0000118185	Hopper fastening bracket (set of 2)
0000118194	Hinge (set of 2)
0000305118	Air hoses for HyperClean system (set of 4 pcs)
0000306226	Magnetic valves for HyperClean system
0000306227	Rod assembly for HyperClean system
7900030800	NRV-160 / Non-return valve Ø 160 mm

Fig. X Exploded view control panel



ControlGo	Spare parts
0000102289	Relay MC2A
0000113561	PCB slave board
0000301059	NTR-2.3/3.1A / Thermal relay
0000303395	PCB main board ControlGo/WP2.0
0000305157	Power supply 24VDC 36W
0000306229	Pilot light yellow 24V
0000306362	Buzzer ControlPro/Go
0000306363	Push button green ControlPro/Go
0040900180	Main switch 25A
0040900230	Transformer UL 65 VA
0324000300	Pilot light white 24V
0324000310	Pilot light green 24V
0324000320	Pilot light red 24V
0328050210	Push button black

ControlPro	Spare parts
0000102289	Relay MC2A
0000112777	ControlPro/HMI (complete)
0000113559	PCB main board ControlPro
0000113560	Dust cap for ControlPro/HMI
0000113561	PCB slave board
0000301059	NTR-2.3/3.1A / Thermal relay
0000301060	NTR-3.1/4.2A / Thermal relay
0000301061	NTR-4.2/5.7A / Thermal relay
0000305157	Power supply 24VDC 36W
0000306362	Buzzer ControlPro/Go
0040900180	Main switch 25A
0040900230	Transformer UL 65 VA

