

Healthy Business

Dustcontrol

®

PUMP TRUCK
CHARGING POINT

Compact Vacuum Systems

Substantial savings can be realised by installing a compact central vacuum system from Dustcontrol. For example, all grinders and finishing tools in an production facility are equipped with suction casings and connected to a central vacuum system. Capture of the dust at source contributes to an improved working environment, higher productivity, shorter clean-up, cleaner process and improved product quality.

About Compact Vacuum Systems

1 Vacuum Producer

The vacuum producer is a direct driven turbo pump. It is highly durable and has minimal service requirements. The characteristic of this type of vacuum producer makes it excellent for use with a VFD. With the frequency converter option the performance capacity will be optimised.

2 Filter Unit

The filter unit separates the larger particles in the cyclone and the finer dust in the pleated conical filter. The filter is cleaned very effectively with reverse pulse. The filter unit separates everything from fine dust to chips and fluids.

3 Control Panel

The electrical function is built into the machine. The unit is started manually with a start button, automatically when any of the extraction points are opened and microswitches are used or by clock control. Filter cleaning is automatic after shutdown of the vacuum. With the DC Green System option you get on-demand control for saving energy. You can also choose if the unit should be a fixed installation or mobile and be delivered with a Euro connection.

4 HEPA Filters

The fine filter separates a large quantity of the fine dust, but has a limited efficiency on the smallest particulate. In order to capture this particulate, the unit should be equipped with a HEPA filter. We always recommend that a HEPA filter be used when the system air is returned to the plant environment. With designated or hazardous dust we recommend the use of a HEPA filter even if the system air is to be vented out of the plant. (Note: Always be aware of and comply with local regulations.).



5 Outlet/Exhaust

For fixed installed extraction systems it is always recommended to exhaust the air out of the building if a HEPA is not used. In doing that, all residual particulate and any gases extracted are expelled from the building. With the help of a HEPA filter, almost all the particles can be eliminated. In a large plant, exhausting to atmosphere can sometimes be difficult. In these cases exhaust directly at the unit can be considered. Extra duct work and optional silencing is available to suit the installation.

6 Discharge of Material

Discharge of dust, fluids and heavy material is done under the cyclone. A number of different solutions can be chosen. The most common is plastic bag or container. Containers are available with a variety of volumes.

7 Mobile Unit

The DC 11-Module is designed with a pallet format chassis so it can easily be moved with a fork truck or pallet jack. By choosing to equip the unit with wheels and handle, a mobile unit is created that even with its large size and weight, is possible to move easily by hand on the production floor. There is also the possibility to create a semi-mobile unit where the unit is configured as a portable but docked to an installed tubing system. When it is required elsewhere, un-dock it, and wheel it away.

Compact Vacuum Systems

DC 11-Module

The DC 11-Module is a complete central unit for source extraction and industrial cleaning. The unit can manage just about every kind of dust and chip you can imagine, and when properly equipped, your coolants and emulsions too. With the DC 11-Module, we deliver a complete central unit from the factory, plug and play – easy to install. We tailor it exactly to your specific needs. This is possible due to an options based selection process. The DC 11-Module has been designed to produce more capacity/Hp and service up to six normal extraction points or several cleaning outlets at a time. We've worked hard to get the standard sound level to just 65 dB(A).

Need a HEPA filter? – Just select it as an optional extra. The discharge system can be chosen in accordance with the material to be handled, making it easy for your people to maintain their equipment. The DC 11-Module is also suitable for source extraction and general cleaning in smaller production areas. Note that the unit can connect to many extraction points, as long as the number of users does not exceed the maximum capacity.

For energy saving and reliable remote activation of operation, the DC 11-Module is also available with the DC Green System.



Visit www.dustcontrol.com search **DC Green System** – for further info regarding your energy savings.



Optimised Stand-Alone Unit

The design of a source extraction system is always based on the specific need at each work place. It is then possible to design and install a central unit for several, or many, extraction points. Alternatively, maybe a stand-alone unit for a particular area is the best choice.

The advantage with stand-alone solutions is that you attain cleaner production one step at a time – as production requires it and as budget allows it. The DC 11-Module becomes part of the work cell or production machine and can be part of the flexibility of modern lean manufacturing and fast change-overs from part to part.

The DC 11-Module is developed to fulfil the demands of a local solution.

Compact Vacuum Systems

DC 11-Module



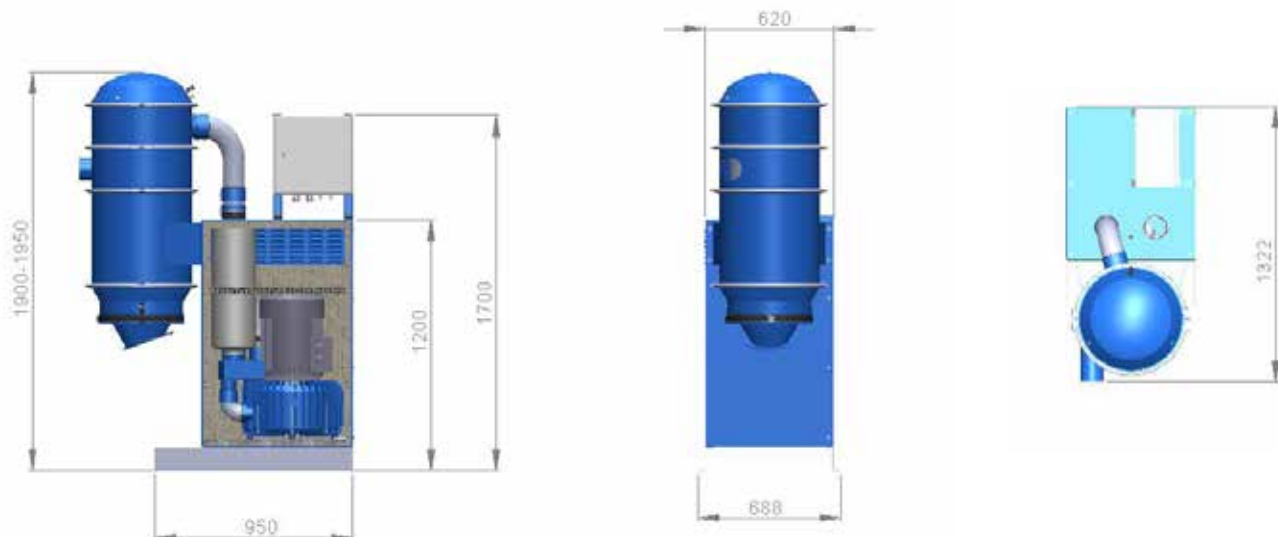
Standard functions

	Without system control 141xx6x, 141xx9x, 141xxAx	With direct start control 141xxfx	With motor controller soft start 141xxGx	With frequency inverter constant speed 141xxLx	DC Green System 141xxNx
Direct driven three phase turbopump - long life time	x	x	x	x	x
Sound absorbent around vacuum producer	x	x	x	x	x
Filter unit with separation of particles in cyclone and fine fraction particles in pleated filter	x	x	x	x	x
Main switch on panel*		x	x		
Soft start for turbopump			x		
Frequency inverter for start/stop and speed control				x	x
Constant rpm set from display				x	
Demand control according to DC Green System					x
Manual start and stop from panel front		x	x	x	
Programmable clock start/stop		x	x		option
Prepared for remote start with micro switches		x	x	x	x
Control for filter cleaning with air pulse		x	x	x	x
Prepared for filter cleaning during operation		x	x	x	x
Solenoid valve for filter cleaning in filter unit	24V DC	24V DC	24V DC	24V DC	24 VDC
Alarm indication		x	x	x	x
Timers adjusted from display		x	x	x	x
Pressure level adjusted from display					x
Thermal protection	x**		x**	x	x
Vacuum valve	x	x	x	x	
Roof hood	x***		x***	x***	x***

*) Please note that when main switch is not included it should always be assembled on the supply on the wall beside the unit.

**) Not for 5.5 kW

**) Only 5.5 kW and 7.5 kW



DC 11-Module Standard

Standard filter. Output in plastic bag (Discharge cone 4706), outlet, compressed air filter cleaning.

Part No	DC 11-Module standard
14123G00110	DC 11-Module 5.5 kW, 400V/50 Hz, with Softstart Control
14124L00110	DC 11-Module 7.5 kW, 380-480V, 50/60 Hz, with Frequency Converter constant speed
1412FA00110	DC 11-Module 10 hp, 230/460V/60 Hz, USA/CAN, without Control System
14146G00110	DC 11-Module 11 kW, 400V/50 Hz, with Softstart Control
1414P900110	DC 11-Module P 15 hp, 460V/60 Hz USA/CAN, without Control System
14136G00110	DC 11-Module S11 kW, 400V/50 Hz, with Softstart Control
1413P900110	DC 11-Module S 15 hp, 460V/60 Hz, USA/CAN, without Control System

Please contact your sales representative for further options and combinations.



Air pulse filter cleaning

Air consumption	4 l/s, 4 bar
Hose connection	6 mm



Filter material in pleated polyester All models

Part No	4292
Total filter surface	8.4 m ²
Degree of separation EN 60335-2-69 part 1	> 99.9%

Electric connection for all units is 24V DC.



Technical data

	5.5 kW	7.5 kW	10 hp	11 kW P	15 hp P	11 kW S	15 hp S
Motor	50 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
rpm	3000	3000	3600	3000	3600	3000	3600
Inlet/Outlet	Ø108/100	Ø108/100	Ø108/100	Ø108/100	Ø108/100	Ø108/100	Ø108/100
Max dp	22 kPa	22–18 kPa	22 kPa	22 kPa	20 kPa	40 kPa	43 kPa
Nominal pressure	18 kPa	18–17 kPa	18 kPa	18 kPa	18 kPa	30 kPa	32 kPa
Max Q	450 m ³ /h	450–550 m ³ /h	500 m ³ /h/295 cfm	800 m ³ /h	850 m ³ /h/500 cfm	450 m ³ /h	560 m ³ /h/330 cfm
Weight	200 kg	225 kg	225 kg	260 kg	260 kg	250 kg	250 kg
Sound level 1 m	60 dB(A)	63 dB(A)*	63 dB(A)*	63 dB(A)	64 dB(A)	63 dB(A)	64 dB(A)
Sound level with frequency inverter		60-65 dB(A)*		61-67 dB(A)		61-67 dB(A)	

*) Sound level with extra silencer on the outlet 5 dB(A) lower the given figure.

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DC 11-Module XL

The DC 11-Module XL provides you with the same plug-and-play approach as its smaller sisters. It is equipped with the renowned S11000X filter unit and for the vacuum provider you can choose between the 15 kW (20 hp) TPR40 or the 18.5 kW (25 hp) TPR43. Discharge is optionally into a bag or 40 l container.



Part No DC 11-Module XL

151100	DC 11-Module XL 15 kW, 400V/50 Hz, bag, without control panel
151110	DC 11-Module XL 15 kW, 400V/50 Hz, bag, with control panel
151120	DC 11-Module XL 15 kW, 400V/50 Hz, bag, Green System
151200	DC 11-Module XL 15 kW, 400V/50 Hz, 40 l, container, without control panel
151210	DC 11-Module XL 15 kW, 400V/50 Hz, 40 l, container, with control panel
151220	DC 11-Module XL 15 kW, 400V/50 Hz, 40 l, container, Green System
152100	DC 11-Module XL 20 hp, 460V/60 Hz, bag, without control panel
152200	DC 11-Module XL 20 hp, 460V/60 Hz, 40 l, container, without control panel
153100	DC 11-Module XL 18,5 kW, 400V/50 Hz, bag, without control panel
153110	DC 11-Module XL 18,5 kW, 400V/50 Hz, bag, with control panel
153120	DC 11-Module XL 18,5 kW, 400V/50 Hz, bag, Green System
153200	DC 11-Module XL 18,5 kW, 400V/50 Hz, 40 l, container, without control panel
153210	DC 11-Module XL 18,5 kW, 400V/50 Hz, 40 l, container, with control panel
153220	DC 11-Module XL 18,5 kW, 400V/50 Hz, 40 l, container, Green System
154100	DC 11-Module XL 25 hp, 460V/60 Hz, bag, without control panel
154200	DC 11-Module XL 25 hp 460V/60 Hz, 40 l, container, without control panel



Technical data

	15 kW	20 hp	18.5 kW	25 hp
Motor, Hz	50	60	50	60
rpm	4000	4000	4300	4300
Inlet/Outlet Ø mm	108/160	108/160	108/160	108/160
Max dp (kPa)	26*	26	28*	28
Nominal pressure, kPa	20	20	20	20
Air flow, max Q m³/h	1000	1000	1000	1000
Sound level 1 m, dB(A)	66	66	66	66

* DC Green System max 22 kPa



Filter material in pleated polyester

All models

Part No	4284
Total filter surface	12 m²
Degree of separation EN 60335-2-69 part 1	> 99.9%

Electric connection for all units is 24V DC.



Compact Vacuum Systems

Options DC 11-Module

Part Numbers	Example				
14123 6	1	0Q	1	0	
↑	↑	↑	↑	↑	
Base unit	Filter	Discharge	Design	Options	

C 11-Module	Base Unit	Filter	Discharge	Configuration	Special equipment
5.5 kW 400 V 50 Hz without any panel	141236				
5.5 kW 400 V 50 Hz with soft start panel	14123G				
7.5 kW 400 V 50 Hz without any panel	141246				
10 HP 230/460 V 60 Hz without any panel	1412FA				
10 HP 600 V 60 Hz without any panel	1412CA				
7.5 kW 380-480 V 50/60 Hz Frequency inverter Constant speed	14124L				
7.5 kW 380-480V 50/60 Hz Green System	14124N				
11 kW P 400 V 50 Hz without any panel	141466				
15 HP P 460 V 60 Hz without any panel	1414P9				
15 kW P 600 V 60 Hz without any panel	1414CA				
11 kW P 400 V 50 Hz with softstart panel	14146G				
11 kW P 380-480 V 50/60 Hz Frequency inverter Constant speed	14146L				
11 kW P 380-480 V 50/60 Hz Green System	14146N				
11 kW S 400 V 50 Hz without any panel	141366				
15 HP S 460 V 60 Hz without any panel	1413P9				
11 kW S 400 V 50 Hz with softstart panel	14136G				
11 kW S 380-480 V 50/60 Hz Frequency inverter Constant speed	14136L				
Filter Options					
Standard		0			
With HEPA		1			
PTFE		3			
Discharge					
Output in plastic sack (discharge cone 4706)			01		
Container 40 l; steel, blue			0 H		
Container 55 l; steel blue			0 Q		
Container 75 l; with plastic bag and wheel			21		
Design					
Compressed air filter cleaning				1	
Options					
Standard					0
Euro connection*					1

* Not for 11 kW/15 HP



Compact Vacuum Systems

DC 3800 Stationary 3-phase

The DC 3800 Stationary Package is intended for installations in (for example) industrial premises, garage workshops and schools. The dust separator and turbopump are mounted on a common chassis.

The DC 3800 Stationary Package has flow capacity for one work place at a time, for example a 6" cup stone or cleaning with 38 mm attachments. The filter is cleaned manually with a patented reverse pulse mechanism. The unit can be equipped with a vacuum relief valve to allow cooling air to the pump if all outlets are closed. The package is complete with tubing in three metre lengths, bends, branch pipes and connection joints.

Installation is simple and the tubing system is easily adaptable to most sites. Starting and stopping of the central unit occurs automatically. Starting occurs when any of the outlets are opened. The central unit will shut down when all the outlets are closed.

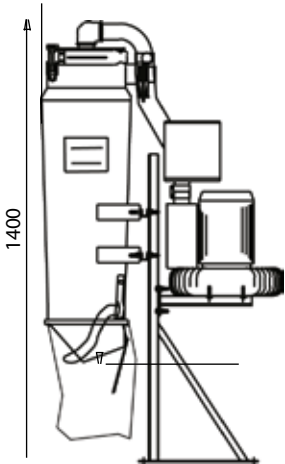
Part No	Description
114700	DC 3800 STAT, 2.2 kW, 220/ 380V, Package, EU 
117400	DC 3800 STAT, 2.2 kW, 220/ 380 V, EU 
117408	DC 3800 STAT, 4 hp, 460V/ 60 Hz, UL,USA
118500	DC 3800 STAT, 2.2 kW, Automatic filter cleaning, 220/ 380 V
118504	DC 3800 STAT, Automatic filter cleaning, 460V/ 60 Hz, UL,USA
4314	Plastic Bag 30 l, 50 pcs



Technical data

	50 Hz	60 Hz
Height mm	1400	1400
Width mm	400	400
Length mm	860	860
Weight	50 kg	110.2 lbs
Inlet/outlet	Ø 50 mm	Ø 2"
Flow at open inlet	260 m³/h	188.3 cfm
Negative pressure	20 kPa	21 kPa
Power motor	2.2 kW	4 hp
Filter area, fine filter	1.8 m²	1.8 m²
Degree of separation	> 99.9%	> 99.9%
Collection bag	30 l	30 l
Sound level	< 75 dB(A)	< 75 dB(A)

860





Central unit DC 3800 Stationary

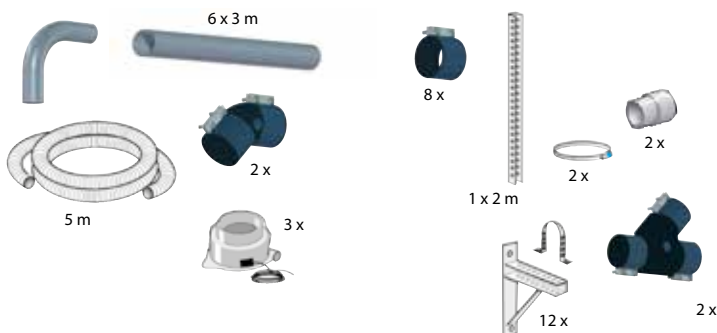
Part No

Qty

DC 3800 Stationary 230 /400V /50 Hz /2.2 kW	117400	1
DC 3800 Stationary 230 /460V /60 Hz /4 hp	117408	1
Control systems		
Control Panel 400V /50 Hz /2.2 kW	8117	1
Control Panel 230V /50 Hz /2.2 kW	8119	1
Connection Point		
Flap Valve Ø 50 with micro switch	8433	3
Tubing system		
Pipe Ø 50 (L=3 m)	3071	6
Bend Ø 50, 90°	3310	4
Bend Ø 50, 45°	307311	2
Joint Ø 50	3077	8
Branch pipe 50/50	307411	2
Coupling socket 50/50	2107	2
Hose Ø 50 (L=5 m)	2401	1
Hose clamp 50-65	4219	2
Bracket 300	3008	12
Clamping band Ø 50	3107	12
Ceiling attachment (L=2 m)	9622	1

The two conductor cable for 24 V is not included in the package (electrical and connection schematic are included with the panel).

The package consist of



Accessories (Part No)

3195 Silencer 80 mm 300/180. Used for exhaust silencing and also silencing of 50 mm vacuum valve.

42024 HEPA Filter DC 3800/3900

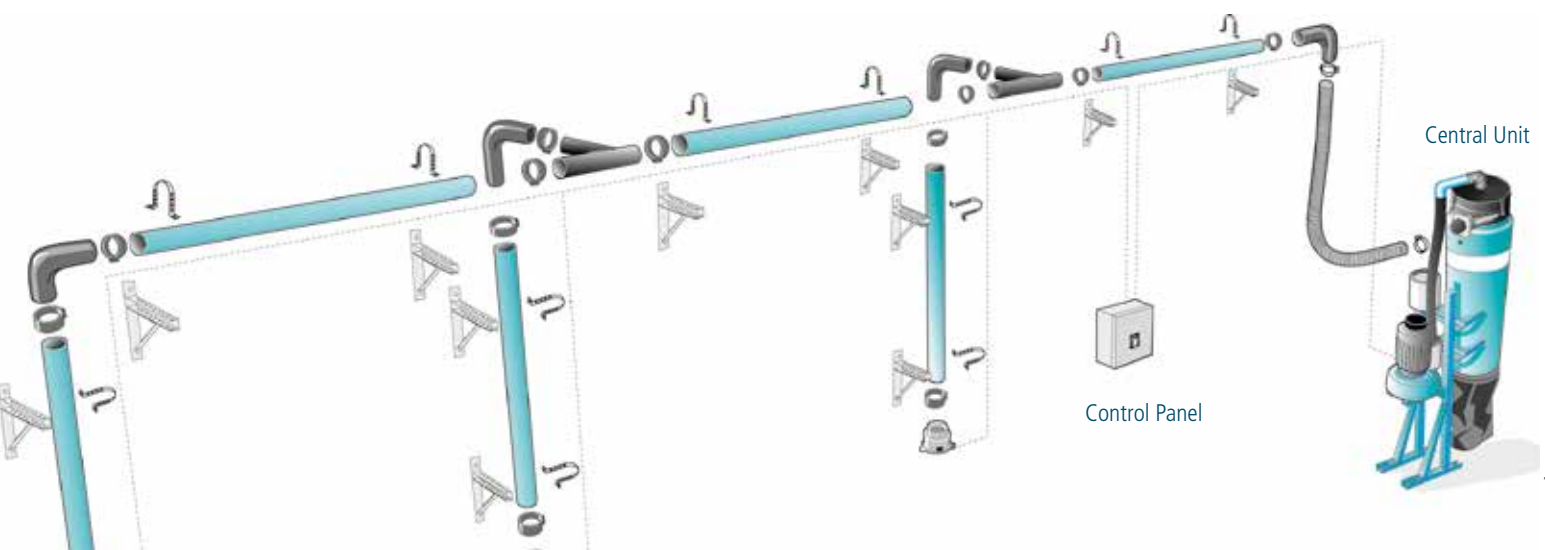
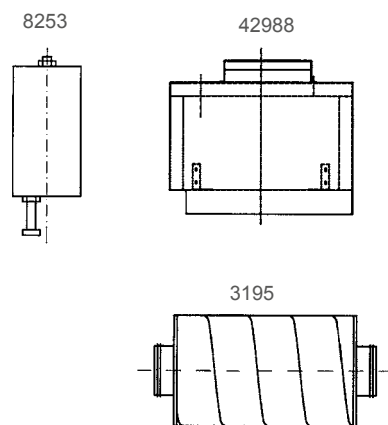
42988 Silencing Cover. Suitable for 2.2 kW model only. The silencing cover will reduce the sound level 4 dB.

8132 Panel for remote start auto filter cleaning

8253 Vacuum Relief Valve 50 mm

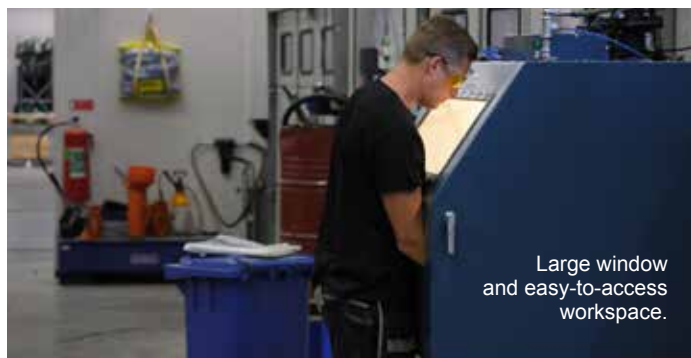
The vacuum relief valve is installed on the tubing system (inlet side) on a branch tube. This delivers cooling air to the turbopump and can be adjusted for the desired vacuum level in the system.

8132 Starter DC 3800 Stationary 2.2 kW400V



Compact Vacuum Systems

DC Box



Large window and easy-to-access workspace.



Compressed air connection and blow gun nozzle. Suction hose for easy cleaning inside the cabinet.



Rotatable, sliding workbench.

The DC Box is a specially designed dust extraction cabinet that protects against hazardous dust during decontamination and cleaning before servicing or repairing machines and tools. The DC Box is equipped with a blow gun and a suction hose for vacuum cleaning. Larger particles and debris fall down into a plastic bag attached to the bottom of the cabinet.

The DC Box is easy to work with. Tools and machines are placed onto the rotating worktable and slid in through the side door. These are then cleaned either by vacuuming or using compressed air. The fine dust is vacuumed up and transported away via a tubing system to a complete central unit located either in or outdoors. The size of the central unit and dimensioning of the tubing system is tailored to the needs of the customer. The system can be expanded so that it can also be used as a central extraction system with connections that are easily accessible across the entire worksite.

The DC Box is available in three versions: small, medium and large.

The DC Box Small uses the DC AirCube 500 air cleaner as its vacuum source and it is easy to use in cramped premises where there is no room for tubing and a central dust extractor.

The DC Box Medium is the ideal solution for most users. Equipped with a pre-separator and DC 11-Module 11kW p/15 hp central unit.

DC Box Large. If you want to be able to roll taller equipment directly into the cabinet for decontamination, then the DC Box Large is the solution for you. DC Box Large is customized after your requirements.

Customized after your requirements



DC Box



DC F Mobile



DC 11-Module



The DC Box Medium Package is supplied with (Part No)

7470	DC Box
42014	Trolley
7074	DC F Mobile Pre-Separator
	DC 11-Module 11 kW P central unit tubing system

Contact your sales representative for correct dimensioning and a quotation for DC Box Packages.



Technical data DC 11-Module 11 kW P/15hp

H x W x D (cm/inch)	180x100x130 / 71"x40"x51"
Weight	260 kg / 573 lbs
Inlet/Outlet	Ø180 mm / 7"
Filter cleaning compressed air	4 l/s / 3 804 gph
Flow	800 m³/h / 28 250 ft³/h
Negative pressure, max	22 kPa / 88 inwg
Filter area	8.4 m² / 90.4ft²
Degree of separation	>99.9%
Sound level	60-63 dB(A)



DC Box Medium
7470 DC Box standard



DC Box Small Complete
with DC AirCube 500, 50 Hz
74701 230V EU, 74702 230V UK



DC Box Large
Customised to your requirements



Technical data DC AirCube 500

H x W x D (mm/inch)	380x340x495 / 15"x13"x20"
Weight	13 kg/29 lbs
Inlet/Outlet	Ø380x340x495 mm
Max flow 230/115V	500 m³/h / 470 m³/h



Technical data DC Box Medium and Small

H x W x D (cm/inch)	180x120x80 / 71"x48"x32"
Weight	160 kg / 353 lbs
Inlet/Outlet	Ø76 mm / 3"
Hose length	2 m / 6.5ft

