

Healthy Business

Dustcontrol®

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 a 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 belt/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 (Variable Frequency Drive). With the VFD 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 and service up to six normal extraction points or several cleaning outlets at a time.

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.



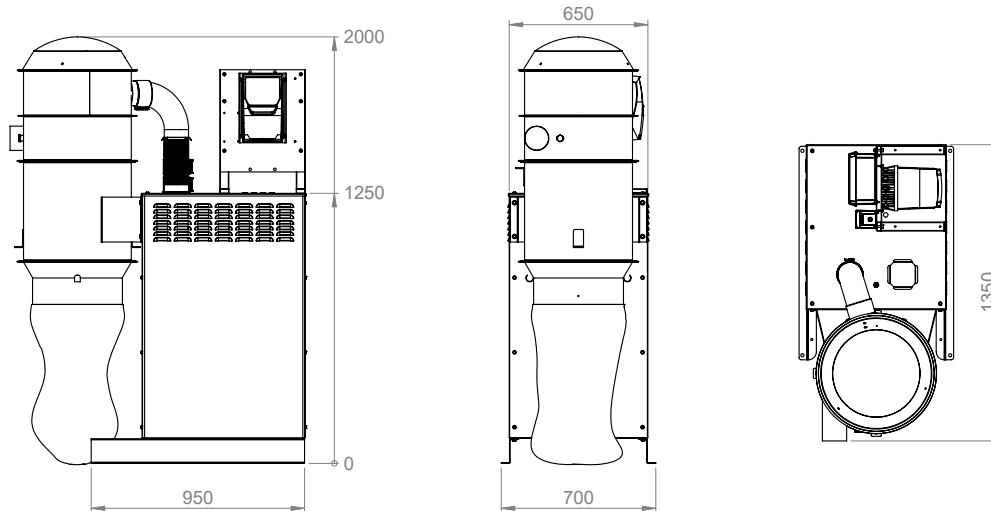
Dustcontrol
DC 11-Module



Dustcontrol Part no 4613

DC 11-Module Standard

Dimensions, installation examples, DC 11-Module Standard



Air pulse filter cleaning

Air consumption [l/s /bar]	4 l/s, 4 bar
Hose connection [mm/in]	6/0.23



Filter material in pleated polyester All models

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

DC 11-Module Standard Models

TECHNICAL DATA	5.5 kW	7.5 kW	10 hp	11 kW P	15 hp	11 kW S	15 hp
Motor [Hz]	50	50	60	50	60	50	60
Pump [rpm]	3000	3000	3600	3000	3600	3000	3600
Inlet Ø [mm/in]	108/4.2	108/4.2	108/4.2	108/4.2	108/4.2	108/4.2	108/4.2
Outlet Ø [mm/in]	100/3.9	100/3.9	100/3.9	100/3.9	100/3.9	100/3.9	100/3.9
Max dp [kPa]	22	22-18	22	22	20	40	43
Nominal pressure [kPa]	18	18-17	18	18	18	30	32
Flow [m ³ /h/cfm]	450/265	450-550/265-324	500/295	800/470	850/500	450/265	560/330
Weight [kg/lb]	200/441	225/496	225/496	260/573	260/573	250/551	250/551
Sound level 1 m [dB(A)]	65	65*	65*	65	65	65	65
Sound level with frequency inverter [dB(A)]		60-65**		61-67**		61-67**	

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

** At 50 Hz the sound level is 67 dB(A).

Options DC 11-Module

Part Numbers Example

14123 6 1 0Q 1 0

↑ ↑ ↑ ↑ ↑

Base unit Filter Discharge Design Options

DC 11-Module

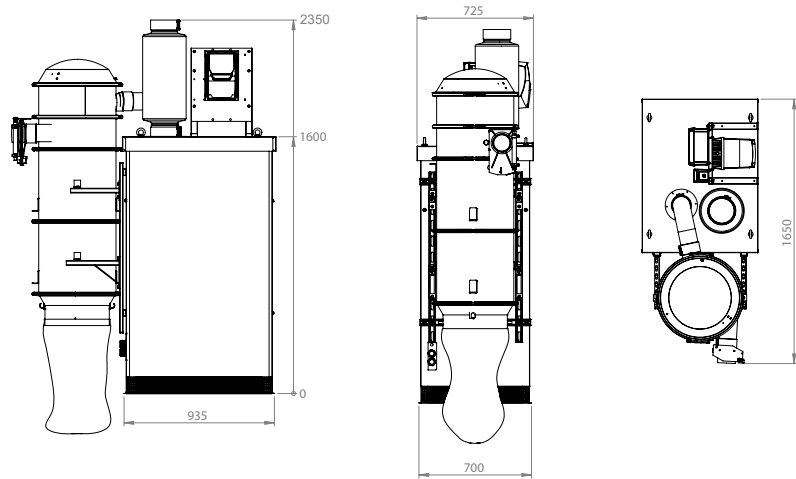
TECHNICAL DATA	BASE UNIT	FILTER	DISCHARGE	CONFIGURATION	SPECIAL
DC 11-Module 5.5 kW 400 V 50 Hz without any panel	141236				
DC 11-Module 5.5 kW 400 V 50 Hz VFD	14123B				
DC 11-Module 7.5 kW 400 V 50 Hz without any panel	141246				
DC 11-Module 7.5 kW 400 VFD	14124B				
DC 11-Module 7.5 kW 380-480 V 50/60 Hz Green System	14124N				
DC 11-Module 10 hp 230/460 V 60 Hz without any panel	1412FA				
DC 11-Module 10 hp 600 V 60 Hz without any panel	1412CA				
DC 11-Module 11 kW P 400 V 50 Hz without any panel	141466				
DC 11-Module 11 kW P 380-480 V 50/60 Hz VFD	14146B				
DC 11-Module 11 kW P 380-480 V 50/60 Hz Green System	14146N				
DC 11-Module 11 kW S 400 V 50 Hz without any panel	141366				
DC 11-Module 11 kW S 380-480 V 50/60 Hz VFD	14136B				
DC 11-Module 15 hp P 460 V 60 Hz without any panel	1414P9				
DC 11-Module 15 hp S 460 V 60 Hz without any panel	1413P9				
DC 11-Module 15 kW P 600 V 60 Hz without any panel	1414CA				
FILTER OPTIONS					
Standard		0			
With HEPA		1			
PTFE		3			
DISCHARGE					
Output in plastic bag (discharge cone 4706)			0 1		
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

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 S 11000X 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.

Dimensions, installation examples, DC 11-Module XL



Part No DC 11-Module XL

151100	DC 11-Module XL 15 kW, 400V/50 Hz, bag, without control panel	153100	DC 11-Module XL 18,5 kW, 400V/50 Hz, bag, without control panel
151130	DC 11-Module XL 15 kW, 400V/50 Hz, bag, with control panel	153130	DC 11-Module XL 18,5 kW, 400V/50 Hz, bag, with control panel
151120	DC 11-Module XL 15 kW, 400V/50 Hz, bag, Green System	153120	DC 11-Module XL 18,5 kW, 400V/50 Hz, bag, Green System
151200	DC 11-Module XL 15 kW, 400V/50 Hz, 40 l, container, without control panel	153200	DC 11-Module XL 18,5 kW, 400V/50 Hz, 40 l, container, without control panel
151230	DC 11-Module XL 15 kW, 400V/50 Hz, 40 l, container, with control panel	153230	DC 11-Module XL 18,5 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	153220	DC 11-Module XL 18,5 kW, 400V/50 Hz, 40 l, container, Green System
152100	DC 11-Module XL 20 hp, 460V/60 Hz, bag, without control panel	154100	DC 11-Module XL 25 hp, 460V/60 Hz, bag, without control panel
152200	DC 11-Module XL 20 hp, 460V/60 Hz, 40 l, container, without control panel	154200	DC 11-Module XL 25 hp 460V/60 Hz, 40 l, container, without control panel

DC 11-Module XL

TECHNICAL DATA	15 kW	20 hp	18.5 kW S	25 hp
Motor [Hz]	50	60	50	60
Pump [rpm]	4000	4000	4300	4300
Inlet Ø [mm/in]	108/4.2	108/4.2	108/4.2	108/4.2
Outlet Ø [mm/in]	160/6.2	160/6.2	160/6.2	160/6.2
Max dp [kPa]	26*	28	28*	28
Nominal pressure [kPa]	20	20	20	20
Flow [m³/h/cfm]	1000/589	1000/589	1000/589	1000/589
Sound level 1 m [dB(A)]	66	66	66	66

* DC Green System max 22 kPa

Compact Central Units

AIR FLOW* [m³/h/cfm]	Vacuum level required	Select unit
≤ 200/118	normal	DC 3800 Stationary
600-800/353-470	normal	DC 11-Module 5.5/7.5 kW
200-400/118-235	large	DC 11-Module 11 kW S

* Always consider dust type and filter loading as above.



Filter material in pleated polyester All models

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

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 workplace 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.

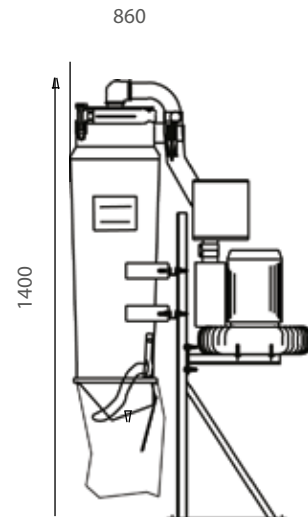


Part No Description

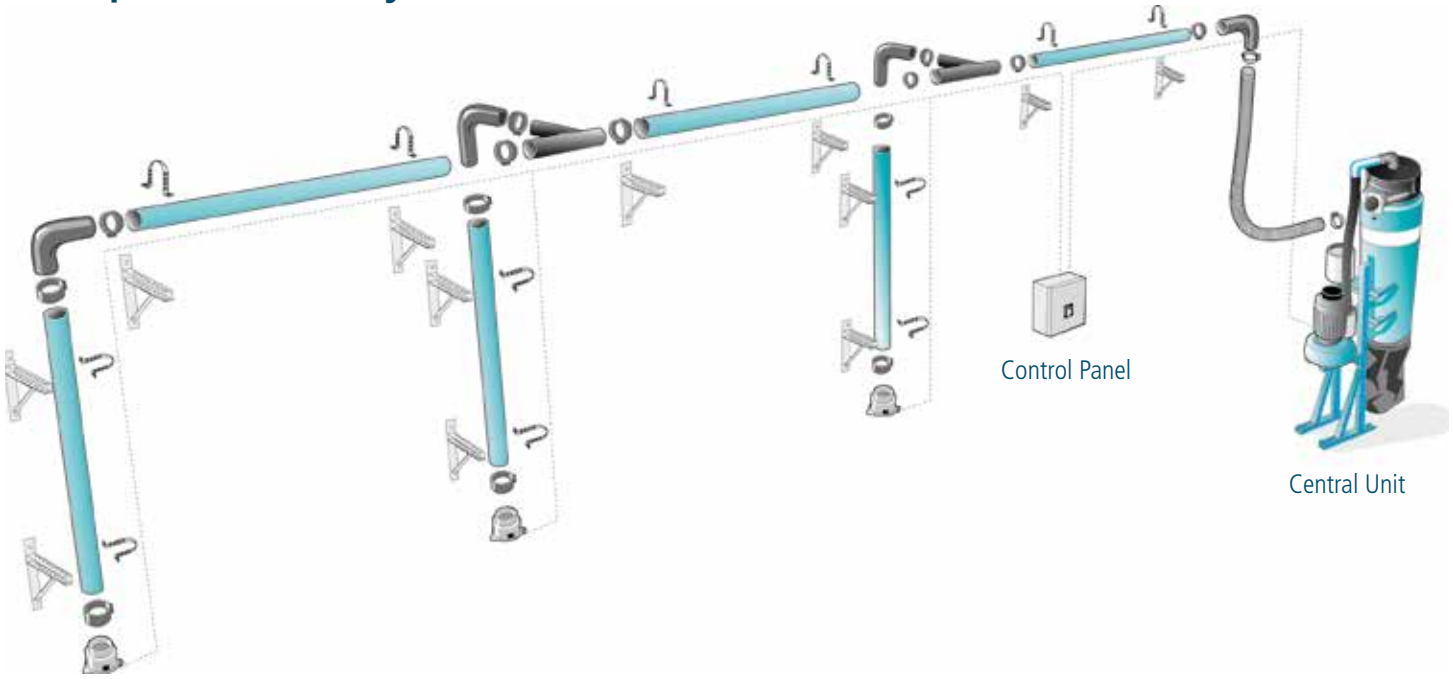
114700	DC 3800 STAT, 2.2 kW, 220/ 380V, Package, EU	☒
117400	DC 3800 STAT, 2.2 kW, 220/ 380 V, EU	☒
117408	DC 3800 STAT, 4 hp, 460V/ 60 Hz, UL,USA	
118500	DC 3800 STAT, 2.2 kW, Automatic filter cleaning, 220/ 380 V	
118504	DC 3800 STAT, Automatic filter cleaning, 460V/ 60 Hz, UL,USA	
4314	Plastic Bag 30 l, 50 pcs	

DC 3800 Stationary

TECHNICAL DATA	50 Hz	60 Hz
Height [mm/in]	1400/55.1	1400/55.1
Width [mm/in]	400/15.7	400/15.7
Length Ø [mm/in]	860/33.8	860/33.8
Weight [kg/lb]	50/110.2	50/110.2
Inlet/outlet Ø [mm/in]	50/2	50/2
Flow max, open inlet [m³/h/cfm]	260/153	320/188.3
Negative pressure, max [kPa]	20	21
Power [kW/hp]	2.2/2.9	3/4
Filter area, fine filter [m²]	1.8	1.8
Degree of separation [%]	> 99.9	> 99.9
Collection container [l/gal]	30/7.9	30/7.9
Sound level [dB(A)]	< 75	< 75



Compact Vacuum Systems



DC 3800 Stationary Package, Part No 114700

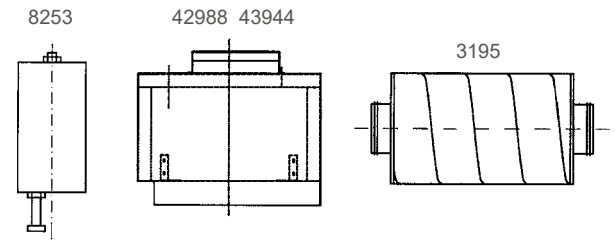
TECHNICAL DATA	Part No	Qty
DC 3800 Stationary 230 /400V /50 Hz /2.2 kW 117400	117400	1
Control systems		
Control Panel 400V /50 Hz /2.2 kW	8117	1
Connection Point		
Flap Valve Ø50 with micro switch	8433	3
Tubing system		
Pipe Ø50 (L=3 m)	3071	6
Bend Ø50, 90°	3310	4
Bend Ø50, 45°	307311	2
Bend Ø50, 45°	3312	2
Joint Ø50	3077	8
Branch pipe 50/50	307411	2
Coupling socket 50/50	2107	2
Hose Ø50 (L=5 m)	240105	1
Hose clamp 50-65	4219	2
Bracket 300	3008	12
Clamping band Ø50	3107	12
Ceiling attachment (L=2 m)	9622	2

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

+ Accessories (Part No)

- 3195 Silencer 80 mm 300/180
- 42024 HEPA Filter DC 3800/3900
- 42988 Silencing Cover for TED 36 3 kW/4 hp
- 43944 Silencing Cover for TED 30 2,5 kW
- 8132 Panel for remote start auto filter cleaning
- 8253 Vacuum Relief Valve 50 mm
- 8132 Starter DC 3800 Stationary 2.2 kW/400V

Accessories (Part No)



The DC 3800 Package consists of

