



Commercial

Central Vacuum Systems

... an unique range of possibilities !



This catalogue mainly describe our range of Commercial Central vacuum systems, and briefly the residential on last pages.
For closer information of Residential units we refer to our separate leaflet.

We manufacture all units ourselves in Sweden, according to the requirements and demands that are normally asked for in an optimized central cleaning system.
The commercial units have all Side-channel blowers (vacuum-pumps) that also could be found in most industrial three-phase vacuum-cleaners and applications, that requires more or less non-stop use.

This type of central vacuum units are normally categorized as Commercial units, or "three-phase units".
The most significant difference to a normal Residential unit, is the power of the units and long-life motors/pumps. Also the capacity of airflow and vacuum are much higher, and allows You to run with up to 6 users at the same time on one unit.

When a central vacuum system is planned, there is a few questions that has to be answered, regarding the required use of the system, before we can choose right unit and tubings etc.:

- Number of users at the same time?
- Could the system be divided into different "cleaning-areas", where one user at the time is connected in the specified area?
- Does two or more user has to be able to use the system, unregarded were on the system they are connected?
- What type of dust or material is to be cleaned ? Normal household-cleaning, or industrial waste-material etc?
- Type of service-functions needed, as filter alarm/indicator, level-indicator, automatic filtercleaning system etc. ?

By answering above questions, we can now decide best suitable unit and type of tubing.

Guideline for choice of unit.

Size and type of central unit, or pump-unit are depending of number of simultaneous users. Units where "F" are included are equipped with programmable speed controllers that adjust speed and power according to number of users connected to the system.

Below find some simple guidelines for choosing unit:

- Up to 2 users - **CE3E-350** (3,0kW)
- Up to 3 users - **CE3F-350** (3,0kW)
- Up to 3 users - **CE5,5E-510** (5,5kW)
- Up to 6 users - **CE5,5F-510** (5,5kW)
- Up to 6 users - **CE13E-510** (13kW)
- Up to 9 users - **CE13F-510** (13kW)

All units calculated no. of users with Ø32mm cleaning hose.

For other functions, equipment and accessories -see description for each unit.

Shaping and planning of tubing system

We have several types of tubing in our program, such as PVC, PP, PEH and Steel (galvanized or inox), to be able to meet every requirement.

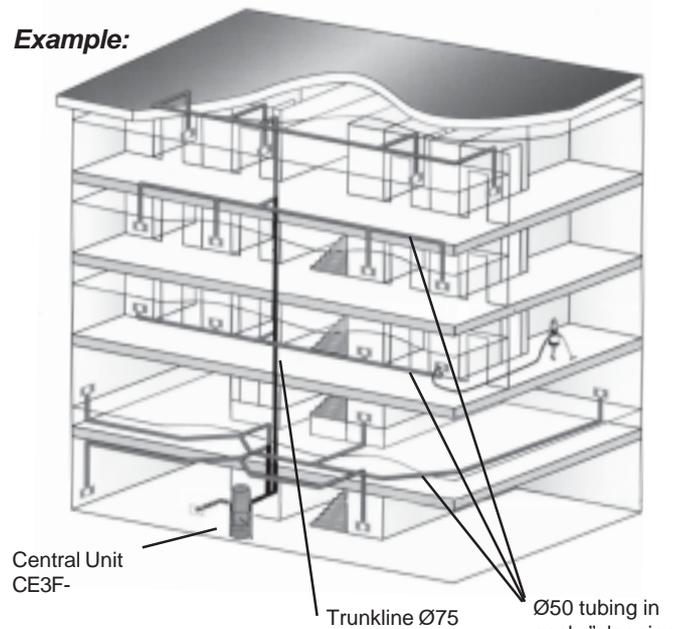
Tubing and details in Ø50/51mm are to be used to connect valves and inlets for Ø32mm hose. Standard-tubing and details are made in PVC-plastic. PVC is most competitive in price! Also tubing in PP, PE and steel are available in Ø50mm.

For trunk-lines (Ø75-110) normally PVC or PP are used for domestic or -office-cleaning.
Where You can expect severe wear of the system, You could choose steel-tubings. Also in systems to be used for industrial wastematerial or dust that could cause electrostatic discharge, You should use steel-tubing (correctly grounded according to local instructions).

Use following dimensions of tubing where Ø32mm hoses are used (appr. 100-120m³/h/user):

- One hose /one user /one cleaning area - **Ø50mm**
- 1-2 users at common trunkline - **Ø63mm**
- Max. 3 users at common trunkline - **Ø75mm**
- 4-5 users at common trunkline - **Ø110mm**

Example:



In above example we let each floor become a "cleaning-area". Here can one user be connected at each floor, and not more than 3 users/floors at the same time.

Valves, hoses and accessories.

The most common size of hoses, wands, accessories and valves are Ø32mm, for domestic and office use. Suitable lengths are 9-10,5m.

In industry also Ø38-50mm hoses are used, where larger air-volumes are wanted to transport larger quantities of dust and material quickly.

Vacuum-sockets/valves are available in several different shapes, material and colours, such as plastic, steel (coated or copper/inox), with lock etc..

See page no. 7.

Series 350 are available in 2 different types, and are suitable for up to 3 simultaneous users.

The units have a high-efficient cyclonic section with a 4,8 m2 reinforced cartridge filter. Units are supplied in standard with manual backflush valve for easy and comfortable filter-cleaning.

Dust are collected in an excentric supported 35L dustcan. Can fits with a plastic-bag of 50L, kept in place by vacuum in bottom of the Can. -Just move the handle down and "swing out" the dustcan! Remove the plastic bag with dust, and replace with a new. -Close and move up handle, and now ready to clean again! (see picture below).

CE3E-350 are equipped with electric box (IP 54) with normal contactors and relay for low-voltage remote cable. CE3E-350 is suitable for 1-2 users. Also equipped with vacuum reliefvalves to prevent overload of motor.

Type CE3F-350 (3 users) have built-in speed controller (inverters), in electric box (IP-44), that automatically adjust speed/suctionpower to number of user connected to the system.



All these units have a sidechannel blower with a direct coupled 3-phase motor, and are built on compact stands.

Complete unit made in epoxycoated steel, also with cover/soundbox around motor and pump.

All units have low-voltage connection for remote-start from valves, and are prepared for permanent electrical power connection supply.

Accessories:

Filterindicator, levelindicator, automatic filtercleaning system.



Unit type	CEE3-350	CE3F-350
Motor max power	3,0 kW	3,0kW
Voltage	3x 230/400V	3x 400V
Current	13,5/8,1 A	12 A
Airflow max.	98 l/s	132 l/s *
Vacuum max	28 kPa **	28 kPa**
Filter-area	4,8 m2	4,8 m2
Soundlevel	72 dB (A)	74 dB (A)
Weight	87 Kg	87 Kg

* Airflow automatically regulated according to no. of users (1-3).

** Max. vacuum for continous run.

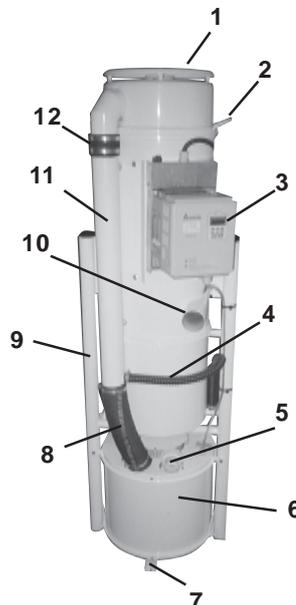
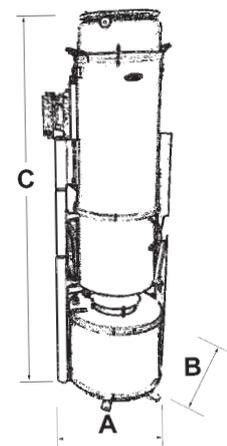
Example of description

"Central vacuum unit type AirVac CE3F-350 for indoor installation adaptable for up to 3 simultaneous users. Cyclonic separation with secondary polyester cartridge filter of 4,8m2. Halfmanual "back-flush" filtercleaning system. Excentermounted "swing-out" dustcan to be fitted with 50L plastic bag. Speedcontrolled (inverter) and selfregulating vacuum pump, in soundbox, with low-voltage remote start connection.

"Tubing in PVC with inlets/valves in stainless steel...."...

Measurements

- A = 600 mm (width)
- B = 650 mm (dept)
- C = 1750 mm (height)



Components-description

1. Cover to airinlet for "back-flush"
2. Handles for top section
3. Controll-panel for speed controller
4. Vacuumhose for plastic bag holder
5. Outlet Ø75mm to exhaust pipe
6. Motor/pump with soundbox
7. Mounting feet (3pcs)
8. Flexibel hose, cyclonic separator-pump
9. Stand for separator-motor-dustcan
10. Inlet Ø75mm -Vacuumside
11. fixed tube between cyclon and pump
12. Flexible coupling to top section

Type CE-5,5E-510 are for up to three users simultaneously and CE-5,5F for up to six users. The units have a high-efficient cyclonic section with a 10,4 m² reinforced cartridge filter. Units are supplied in standard with semi-automatic backflush valve for easy and comfortable filter-cleaning.



Dust are collected in an excentric supported 50L dustcan. Can fits with a plastic-bag of 100L, kept in place by vacuum in bottom of the Can. -Just move the handle down and "swing out" the dustcan! Remove the plastic bag with dust, and replace with a new.
-Close and move up handle, and now ready to clean again! (see picture below).

CE5,5E-510 are equipped with electric box and normal contactors and relay for low-voltage remote cable. Also equipped with vacuum reliefvalves to prevent overload of motor. CE5,5F-510 have integrated speed controller (inverter) that automatically adjust speed/suctionpower to number of users connected to the system.



All these units have a sidechannel blower with a direct coupled 3-phase motor, and are built on compact stands. Complete unit made in epoxycoated steel. All units have low-voltage connection for remote-start from valves, and are prepared for permanent electrical power connection supply.

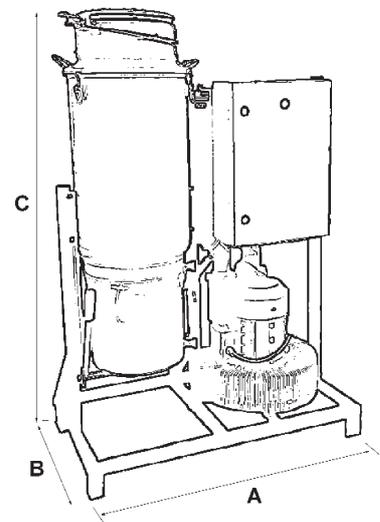
Accessories:

Filterindicator, levelindicator, automatic filtercleaning system.

Unit type	CE5,5-510	CE5,5F-510
Motor max power	5,5 kW	5,5kW (50hz)
Voltage	3x 400/690V	3x 400/690V
Current	26,5/15,3 A	15,6 A
Airflow max.	155 l/s	220 l/s *
Vacuum max	28 kPa**	28 kPa**
Filter-area	10,4 m ²	10,4 m ²
Soundlevel	75 dB	77 dB (A)
Weight	155 kg	155 Kg
A mm (widht)	1200	1200
B mm (dept)	600	600
C mm (height)	1950	1950

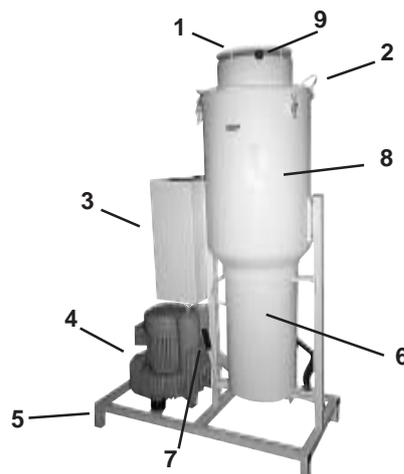
* Airflow automatically adepted to no. of users (1-6).

** Max. vacuum for continous run.



Example of description

"Central vacuum unit type AirVac CE5,5F-510 for up to 6 simultaneous users, with cyclonic separation and secondary polyester cartridge filter (10,4m²). Halfmanual "back-flush" filtercleaning system. Excentermounted "swing-out" dustcan to be fitted with 100L plastic bag. Speedcontrolled (inverter) and selfregulating vacuum pump with low-voltage remote start connection.



Components-description.

1. Cover to airinlet for "back-flush"
2. Handles for top section
3. Electric box
4. Vacuum pump
5. Floorstand
6. Dustcan
7. Handle for unlock/opening dustcan
8. Cyclon with filter
9. Backflush handle

Type CE 13E-510 are for up to five-six users simultaneously and CE 13F-510 for up to nine users.

The units have a high-efficient cyclonic section with a 10,4 m² reinforced cartridge filter. Units are supplied in standard with semi-automatic backflush valve for easy and comfortable filter-cleaning.



Dust are collected in an excentric supported 50L dustcan. Can fits with a plastic-bag of 100L, kept in place by vacuum in bottom of the Can. -Just move the handle down and "swing out" the dustcan! Remove the plastic bag with dust, and replace with a new.

-Close and move up handle, and now ready to clean again! (see picture below).

CE13E-510 are equipped with electric box and normal contactors and relay for low-voltage remote cable. Also equipped with vacuum reliefvalves to prevent overload of motor. CE13F-510 have integrated speed controller (inverter) that automatically adjust speed/suctionpower to number of users connected to the system.



All these units have a sidechannel blower with a direct coupled 3-phase motor, and are built on compact stands.

Complete unit made in epoxycoated steel.

All units have low-voltage connection for remote-start from valves, and are prepared for permanent electrical power connection supply.

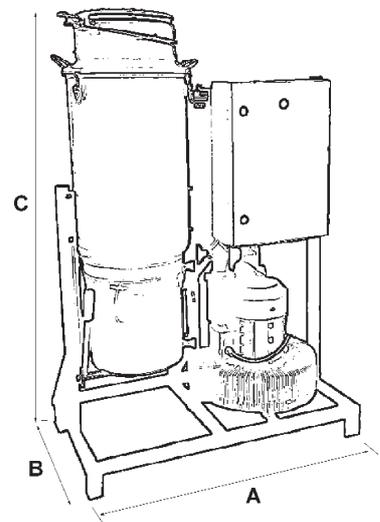
Accessories:

Filterindicator, levelindicator, automatic filtercleaning system.

Unit type	CE13E-510	CE13F-510
Motor max power	13,0 kW	13,0 kW
Voltage	3x 400/690V	3x 400V
Current	27 A	27 A
Airflow max.	310 l/s	400 l/s *
Vacuum max	30 kPa**	30 kPa**
Filter-area	10,4 m ²	10,4 m ²
Soundlevel	75 dB	78 dB (A)
Weight	155 kg	215 Kg
A mm (widht)	1200	1200
B mm (dept)	600	600
C mm (height)	1950	1950

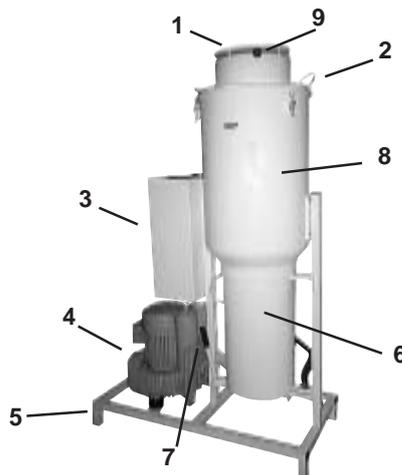
* Airflow automatically adepted to no. of users (1-9).

** Max. vacuum for continous run.



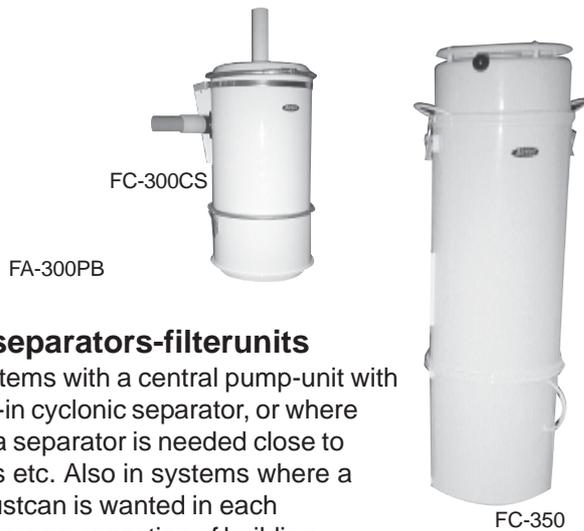
Example of description

"Central vacuum unit type AirVac CE13F-510 for up to 9 simultaneous users, with cyclonic separation and secondary polyester cartridge filter (10,4m²). Halfmanual "back-flush" filtercleaning system. Excentermounted "swing-out" dustcan to be fitted with 100L plastic bag. Speedcontrolled (inverter) and selfregulating vacuum pump with low-voltage remote start connection.



Components-description.

1. Cover to airinlet for "back-flush"
2. Handles for top section
3. Electric box
4. Vacuum pump
5. Floorstand
6. Dustcan
7. Handle for unlock/opening dustcan
8. Cyclon with filter
9. Backflush handle



Dust separators-filterunits

For systems with a central pump-unit with no built-in cyclonic separator, or where an extra separator is needed close to process etc. Also in systems where a local dustcan is wanted in each cleaning-area or section of building.. Type FC-350 is separator made for up to 3 simultaneous users, and is supplied with floor stand, or for wall-mounting. Type FA-300PB and FC-300CS could be used as cleaning-area separators, for maximum one (1) user at the same time per separator. These types are for wall mount. Type FC are a cyclonic separator with a secondary cartridge-filter of re-inforced polyester, with a dustcan of 15L below. Type FA-300PB are a cheaper alternative, with a 20L wastebale paper-bag. All units are made in white epoxy-coated sheet steel.

PE -Central Pumpunits

-For up to 9 simultaneous users, in combination with external dust-separation, such as FA/FC units. Pump units are equipped with connection for low-voltage wire (12 or 24V), for start of system. Units have so called side channel blowers with 3-phase motors. Pumps (on anti-vibration feets) and electrical equipment are fixed on a floor stand.



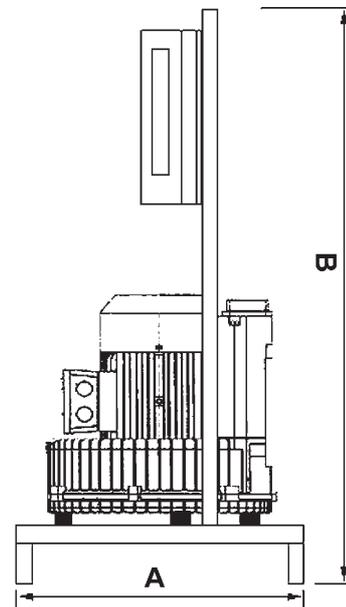
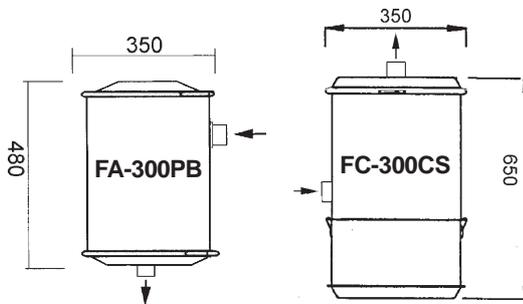
Choose between a pump-unit with a standard electrical box for 50Hz drive, or with an self-regulating speedregulator (Type "F" =inverter). All units have a vacuum relief valve as standard, to prevent overload of the pump/motor. All units supplied for permanent electrical installation.

PE-3E, -3F, -5,5E, -5,5F, -13E and -13F.

Technical specifications - see complete units

Accessories:

Sound-box with outside coated steel-sheet.



Example of description

"Central vacuum pump/motor-unit type AirVac PE3F for indoor installation adepcted for up to 3 users simultaneously, in combination with cyclonic separator type FC-300CS placed on each floor. Speedcontrolled (inverter) and selfregulating vacuumpump, with low-voltage remote start connection. "Tubing in PVC with inlets/valves for floor mount in aliminum type PA-510...."