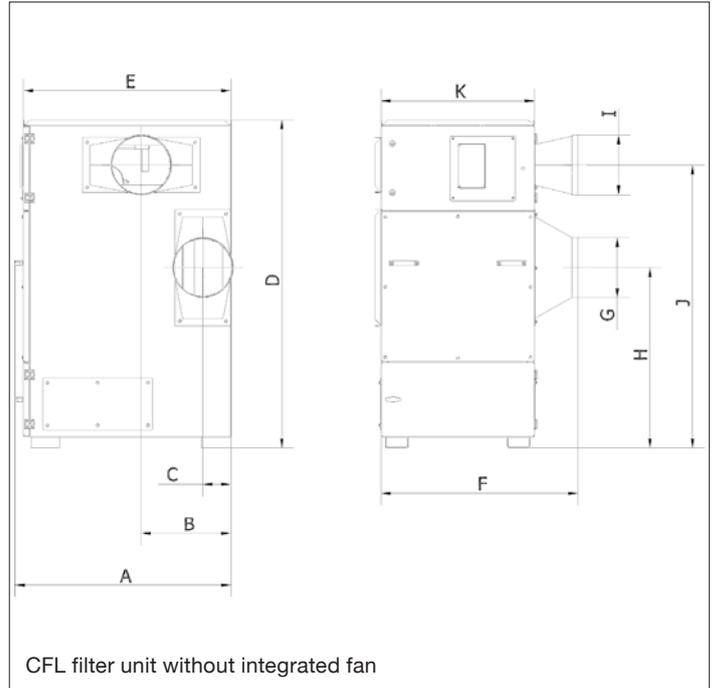


CFL Plug & Play cartridge filters



CFL filter unit without integrated fan

Complete and space-saving "Plug & Play" compressed-air cleaned filter unit with or without integrated fan to be used for air filtration from processes that form limited dust volumes (welding, cutting, grinding and similar).

Air volume : Up to 8200 m³/h
 Vacuum : Up to 5000 Pa
 Filter surface : 26 to 168 m²

Description fan :

Unit can be equipped with a fan type VE or RVH, 3x400 VAC, 50 Hz, 2800 rpm. Both fans are equipped with closed fan wheel with backward-curved straight self-cleaning blades, static/dynamic balanced according to ISO 14694 (BV3 G 6.3). Fan delivers air in fan enclosure, where air noise is dampen by sound absorbing material, before it is led out through bolted-on connection.

Unit delivered ready for use. Equipped with fork pockets and crane lifting points for easy transport and installation. Integrated motor starter and CEE-plug on front make connection quick and easy. Unit is also available for operation with external frequency converter. In that case motor is delivered with built-in thermo sensor. Compressed-air supply is connected on unit by Cejn-coupling incl. ø10mm hose nipple. Easily accessible differential pressure reading in digital display of filter control placed countersunk on unit front. Quick-lock-adjustable dust container on 4 wheels ensures user-friendly dust container service.

Can be used for room ventilation/air cleaning and is available with W3-certificate

For cleaning of slightly polluted room air containing e.g. welding smoke Filterline CFL 52 and CFL 104 can be delivered with mounted air distribution modules that effects extraction of polluted air in top and returning clean filtered air at floor level (recirculation). Filter units with/without selected Airtower modules (CPFL) are available with W3-certificate.

Functioning :

- Polluted air is led in through the lowest connection on unit side, wherein preseparator is integrated.
- Air is filtered through vertical-placed filter cartridge with internal filter core, which optimizes cleaning effect.
- Differential pressure controlled cleaning of filter cartridges through integrated compressed-air system incl. automatic after-cleaning for optimized regeneration of filter cartridges.
- Clean air is led out through connection in unit side.
- Dust is collected in dust container in unit bottom. Dust container mounted in Quicklock-adjustable dust container suspension.

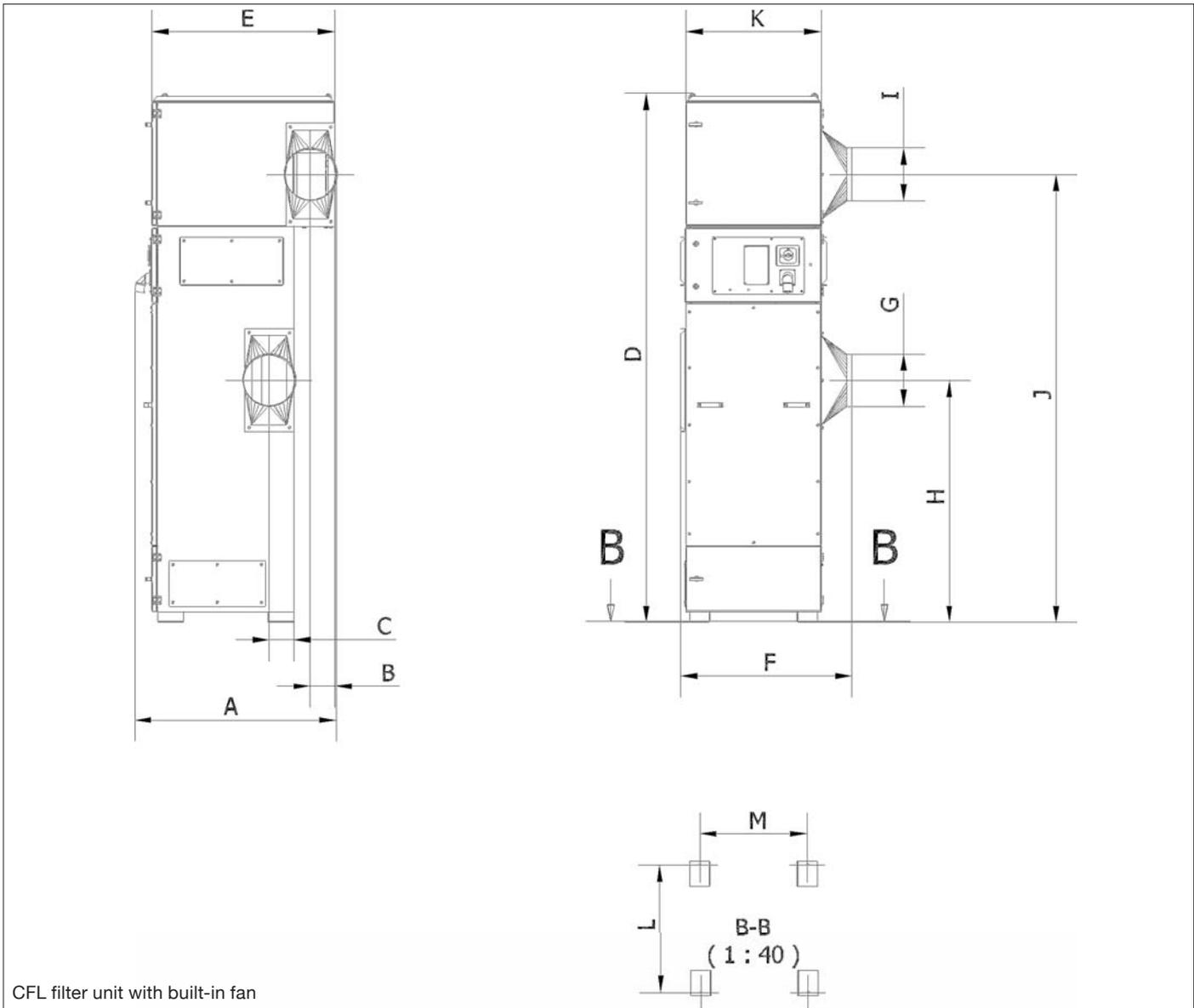
Filter control :

- Differential pressure control type ECO-S with automatic after-cleaning. 230V AC (constant)
- Compressed-air: 5.5 - 6.0 bar dry compressed-air by cejn-coupling incl. ø10mm hose nipple.
- Differential pressure can be seen in digital display, placed countersunk on front.
- 1"-jet valves connected to central compressed-air tank in clean air chamber.

Filter change :

Cartridge replacement made easily and dust-reduced by filter bayonet suspension that is loosened from clean air chamber and inserted into sack. Access by front door.

CFL Plug & Play cartridge filters



CFL filter unit with built-in fan

Dimensions :

Type	ØA (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	ØG (mm)	H (mm)	ØI (mm)	J (mm)	K (mm)	L (mm)	M (mm)
CFL 26	884	369	147	1728	842	981	250	948	315	1489	800	-	-
CFL 26/VE2200	945	159	147	2494	842	1014	250	948	315	2010	800	762	636
CFL 26-VE3000	945	159	147	2494	842	1014	250	948	315	2010	800	762	636
CFL 26/RVH35	1199	145	147	2493	1084	1013	250	948	315	2010	800	762	636
CFL 52H	845	367	145	2398	840	1012	315	1480	315	2159	800	-	-
CFL 52	1128	469	147	1728	1084	1026	315	948	315	1489	800	-	-
CFL 52/VE4000	1194	145	147	3159	1082	1012	315	1488	315	2676	800	762	636
CFL 52/VE5500	1194	145	147	3159	1084	1012	315	1448	315	2676	800	762	636
CFL 52/RVH45	1202	145	147	3279	1085	1013	315	1448	315	2798	800	762	636
CFL 52/VE4000	1197	145	147	2489	1084	1012	315	948	315	2006	800	1004	620
CFL 52/VE5500	1197	145	147	2489	1084	1012	315	948	315	2006	800	1004	620
CFL 52/RVH45	1201	147	145	2611	1085	1012	315	948	315	2130	800	1004	636
CFL 104	1128	482	292	2389	1084	1133	500	1263	500	1985	800	-	-
CFL 104/VE5500	1187	287	282	3270	1085	1195	500	1264	500	2787	800	1004	616
CFL 104/VE7500	1187	287	284	3270	1187	1195	500	1264	500	2787	800	1004	616
CFL 104/RVH45	1190	287	282	3270	1085	1195	500	1264	500	2787	800	1004	616
CFL 104/RVH50	1189	287	282	3270	1085	1195	500	1264	500	2787	800	1004	616

CFL Plug & Play cartridge filters

Technical data of CFL unit without built-in fan :

Type	Filter area G102 (m ²)	Filter area G105 (m ²)	# of cartridges	# of valves	Comp. air (l/min.)	Delta start/stop ³⁾ (Pa)	Dust bucket (L)	weight (kg)
CFL 26	26	42	2 ¹⁾	2	30	200/2000	35	260
CFL 52H	52	84	2 ²⁾	2	30	200/2000	57	300
CFL 52	52	84	4 ¹⁾	4	30	200/2000	57	350
CFL 104	104	168	4 ²⁾	4	30	200/2000	57	420

Technical data of CFL unit with built-in fan :

Type	Filter area G102 (m ²)	Filter area G105 (m ²)	# of cartridges	# of valves	Comp. air (l/min.)	Delta start/stop ³⁾ (Pa)	Dust bucket (L)	weight (kg)
CFL 26/VE2200 ^{4) 6)}	26	42	2 ¹⁾	2	30	200/2000	35	385
CFL 26-VE3000 ^{4) 6)}	26	42	2 ¹⁾	2	30	200/2000	35	395
CFL 26/RVH35/2S ^{4) 6)}	26	42	2 ¹⁾	2	30	200/2000	35	430
CFL 52/VE4000 ^{5) 6)}	52	84	4 ¹⁾	4	30	200/2000	57	480
CFL 52/VE5500 ^{5) 6)}	52	84	4 ¹⁾	4	30	200/2000	57	490
CFL 52/RVH45 ^{5) 7)}	52	84	4 ¹⁾	4	30	200/2000	57	500
CFL 52H/VE4000 ^{5) 6)}	52	84	2 ²⁾	2	30	200/2000	35	420
CFL 52H/VE5500 ^{5) 6)}	52	84	2 ²⁾	2	30	200/2000	35	430
CFL 52/RVH45 ^{5) 7)}	52	84	2 ²⁾	2	30	200/2000	57	566
CFL 104/VE5500 ^{5) 6)}	104	168	4 ²⁾	4	30	200/2000	57	540
CFL 104/VE7500 ^{5) 7)}	104	168	4 ²⁾	4	30	200/2000	57	550
CFL 104/RVH45 ^{5) 7)}	104	168	4 ²⁾	4	30	200/2000	57	560
CFL 104/RVH50 ⁵⁾	104	168	4 ²⁾	4	30	200/2000	57	566

¹⁾ Filter cartridge ø325 x 660 mm/ø13.5 mm, 13 m², G102

²⁾ Filter cartridge ø325 x 1320 mm/ø13.5 mm, 26 m², G102

³⁾ Pressure drop stated over filter cartridge

⁴⁾ Supply plug 16A

⁵⁾ Supply plug 32A

⁶⁾ Delivered with hand-operated motor protection

⁷⁾ Delivered with star-delta-starter

⁸⁾ Increased efficiency

Technical data of integrated fan on CFL units :

Fan type *	Volt (V)	Speed (rpm)	Power (kW)	Max. Amp.	Start current [I _L /I _N]
VE2200	3 x 400	2800	2.2	4.7	34.3
VE3000	3 x 400	2800	3.0	6.2	51.5
VE4000	3 x 400	2800	4.0	7.7	65.5
VE5500	3 x 400	2800	5.5	10.1	88.9
VE7500	3 x 400	2800	7.5	13.2	112.2
RVH35	3 x 400	2910	5.5 ⁸⁾	10.3	93.8
RVH45	3 x 400	2800	7.5	13.2	112.2
RVH50	3 x 400	2930	11.0 ⁸⁾	19.5	156.0

* None of fans are subject to ERP 2013/2015 according to EU327/2011. Motor data > 0.75 kW, 3x400 V, according to IE2-motors.



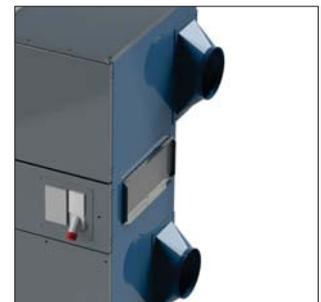
Automatic compressed air filter and motor control with CEE-plug on front. 5.5-6.0 bar dry com-pressed-air connected by Cejn-coupling ø10mm hose nipple.



Dust container Quicklock with 35 L or 57 L dust bucket is placed behind bottom front door for easy disposal.



Easy filter replacement performed by bayonet suspension, which is loosened from clean air chamber with limited dust generation and inserted into sack.



Connections Air is sucked in by lower connection and leaves unit by upper connection. Inlet connection can be mounted right or left.

CFL Plug & Play cartridge filters

Options:

- Hot-galvanized, enamelled steel plates for outdoor mounting
- Backdraft damper type KTR for piping placement
- ½"-water separator with manometer and pressure reducing valve
- Remote start/stop by magnetic operated motor protection 230VAC-coil voltage
- Channel silencer for noise damping in outlet air
- Leak detector type DTC/TC 30
- Precoat unit type PCA
- Precoat 11.5 kg in sack
- Unit with mounted Airtower air distribution modules (only CFL 52/VE 5500 and CFL 104/VE 7500) - see data sheet for Airtower modules type CPFL
- Unit designed for filtration of welding smoke class W3 - see datasheet for W3-version

Construction :

Filter unit type CFL is constructed according to :

- Machine directive 2006/42/EU
- EMC-directive 2014/30/EU
- Directive 2014/68/EU about pressure equipment
- Low voltage directive 2014/35/EU
- Harmonized standards :
EN 349, EN 4414, EN 12100, EN 60204-1, EN ISO 13857
- Further standards: ISO 3746

Surface :

The filter cabinet is made in 2 mm black steel plate. Surface powder enamelled RAL 5007/7011.

Filter media :

Standard filter cartridge ø325 mm. Length 660/1320 mm.

Model	Type	Material	Application
G102	Standard	Polyester flake	Dry not-static loaded or hygroscopic dust particles > 0.2 µm
G105	Optional	Cellulose/Polyester	Welding/soldering
G107	Optional	Cellulose/Polyester nano	Smoke and soot particles
G113	Optional	Polyester flake with PFPT-coating, antistatic	Static-loaded or hygroscopic particles
G115A	Optional	Polyester flake with teflon membrane	Finer dust sorts, e.g. cutting smoke from plasma, flame and laser cutting
G116A	Optional	Polyester flake with teflon membrane, antistatic	Finer static-loaded dust sorts

The cartridge filters meet demands for extraction degree for dust class M according to DIN EN 60335-2-69 Appendix AA (extraction degree > 99.9%).



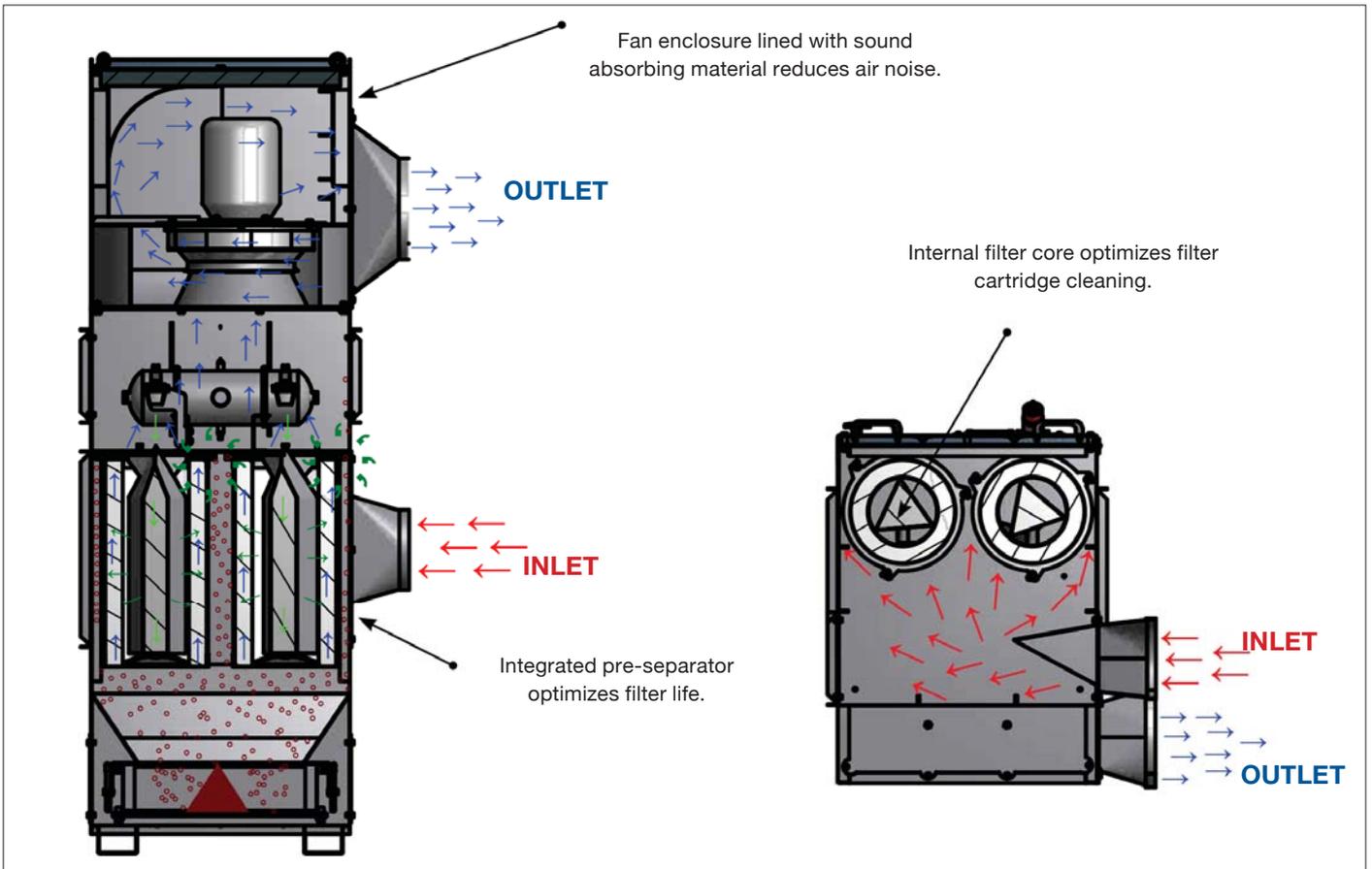
CFL 26/VE3000 with channel silencer



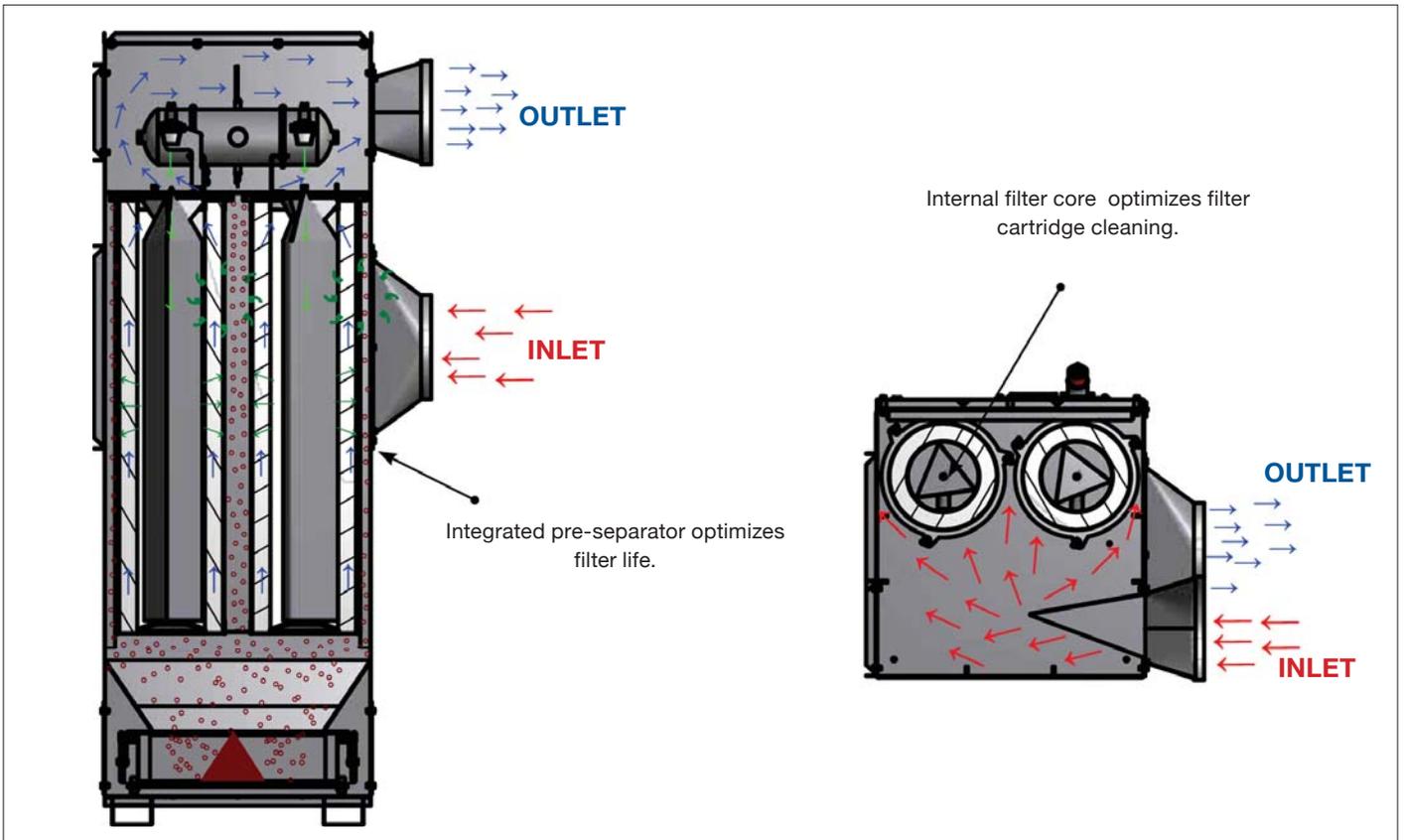
Airtower type CPFL 52/VE5500

CFL Plug & Play cartridge filters

Working principle of fow through Filter type CFL with built-in fan :

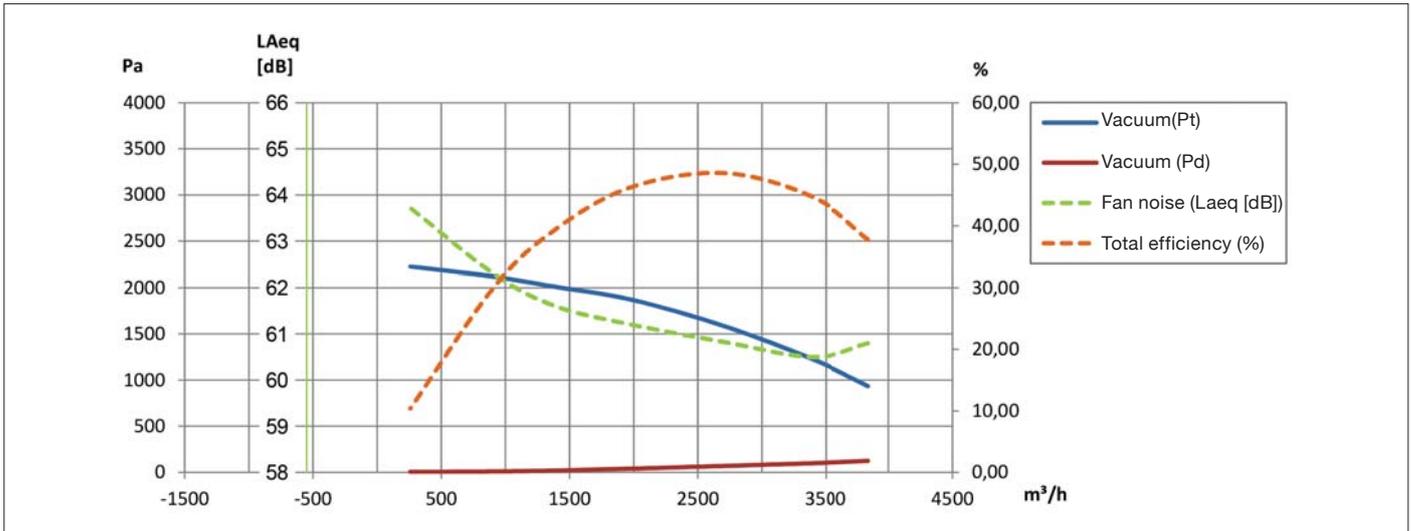


Working principle of fow through Filter type CFL without built-in fan :

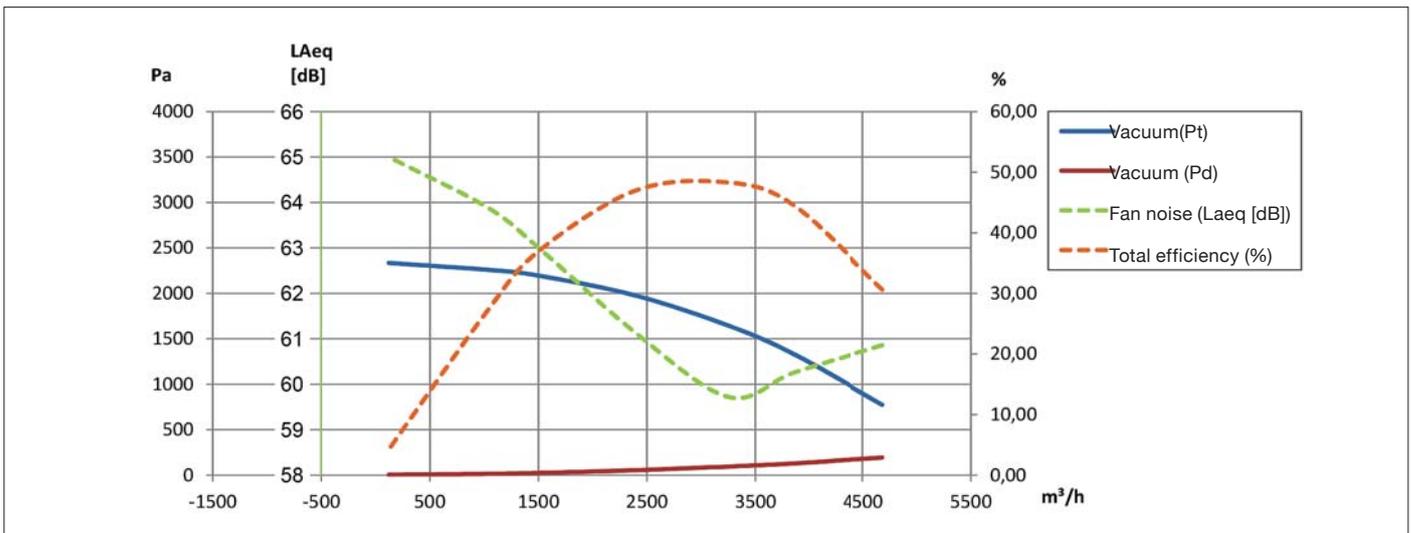


CFL Plug & Play cartridge filters

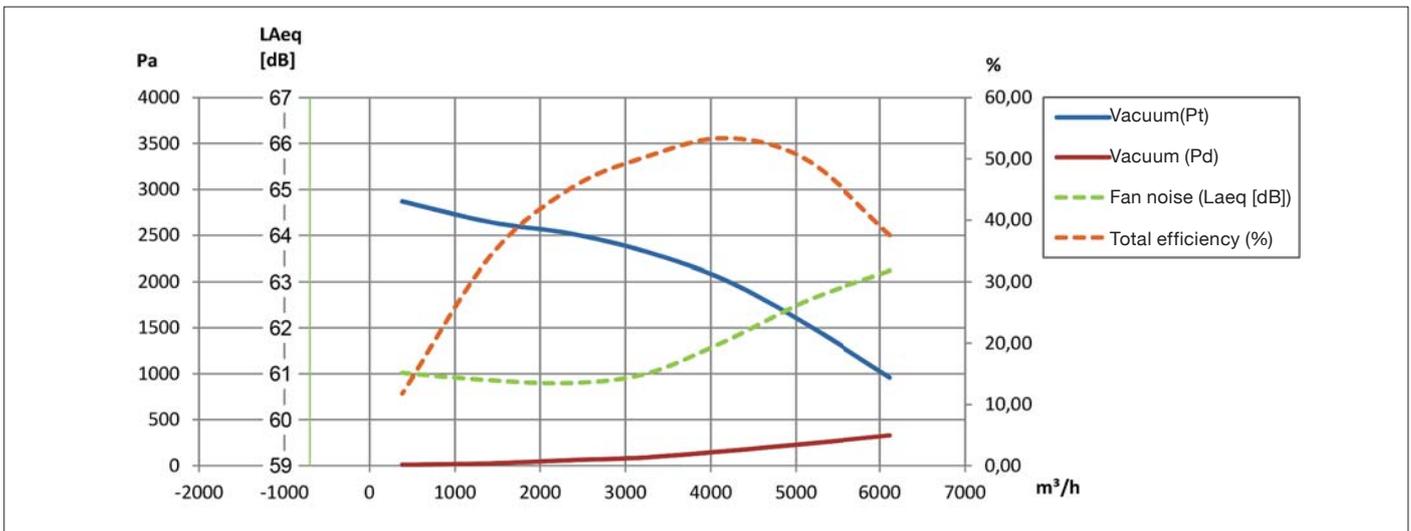
Fan type VE2200 functioning curves at 2800 rpm



Fan type VE3000 functioning curves at 2800 rpm

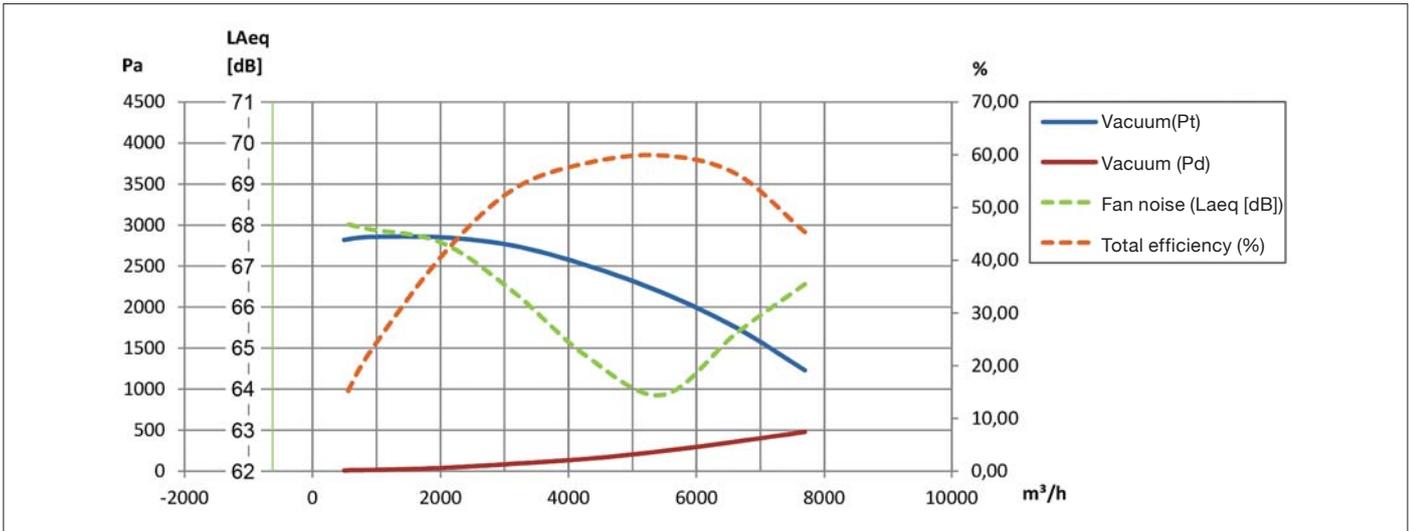


Fan type VE4000 functioning curves at 2800 rpm

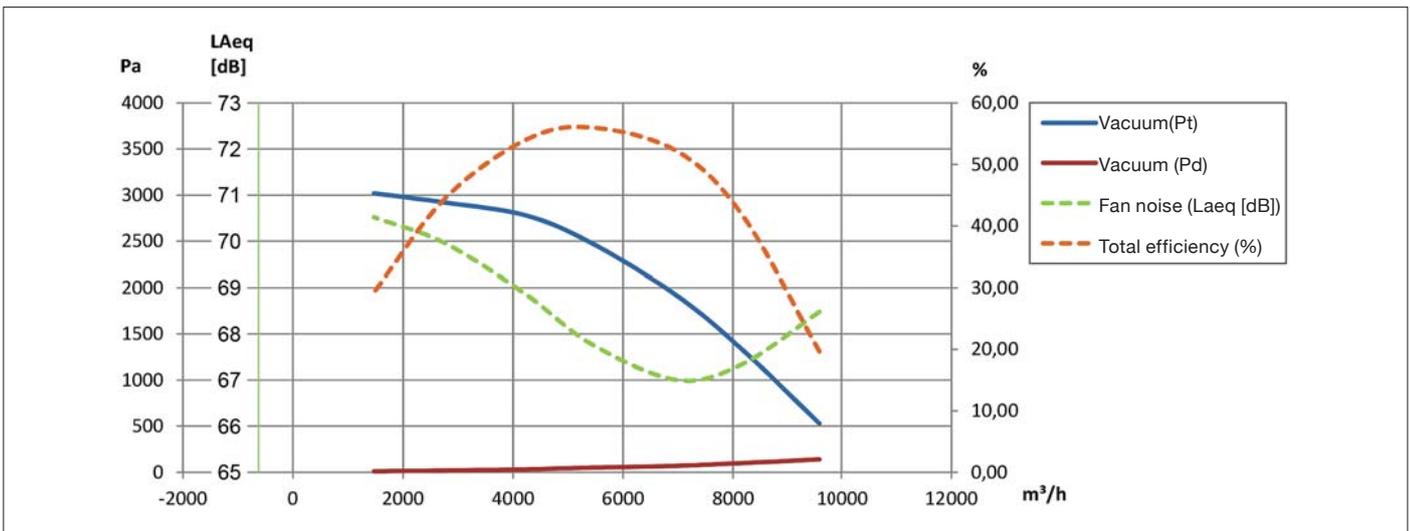


CFL Plug & Play cartridge filters

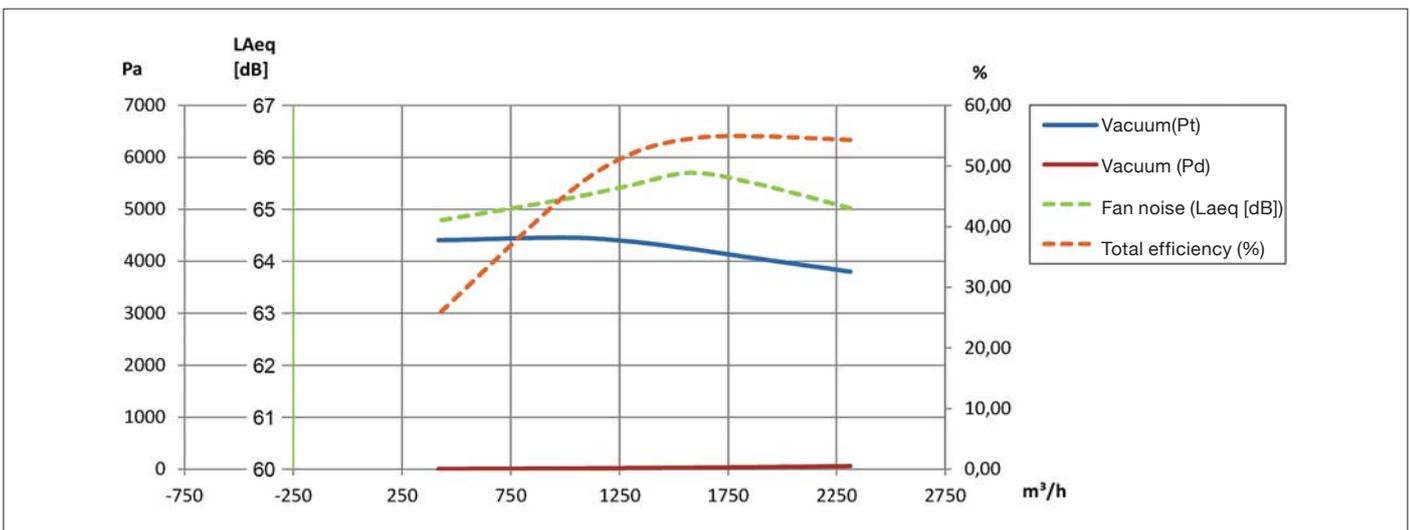
Fan type VE5500 functioning curves at 2800 rpm



Fan type VE7500 functioning curves at 2800 rpm

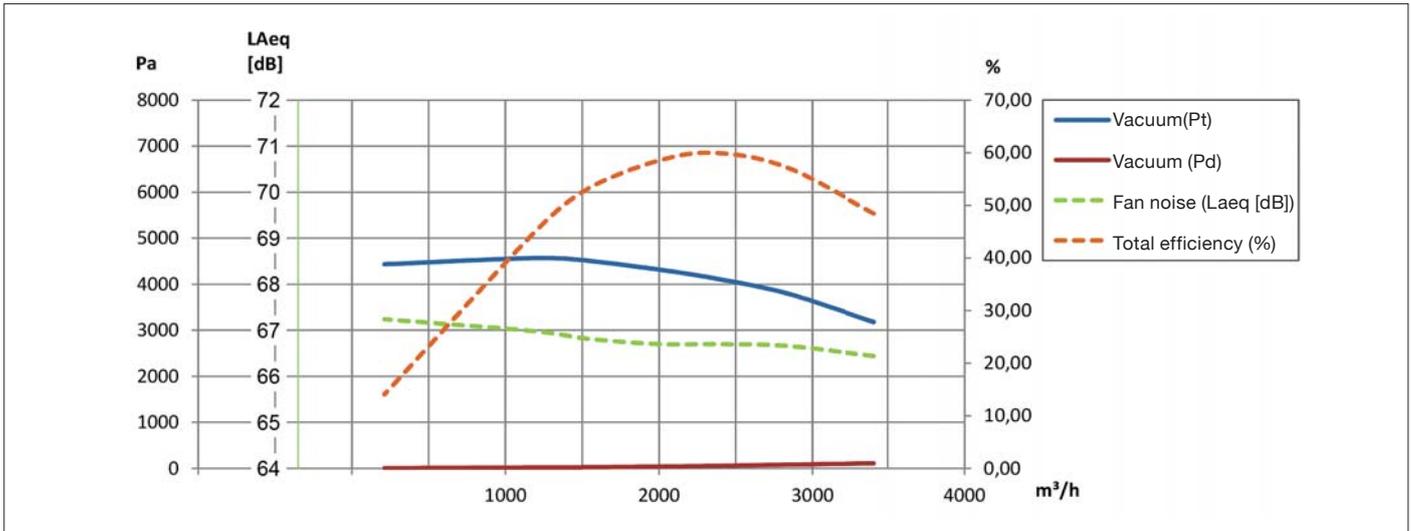


Fan type RVH35/2 functioning curves at 2800 rpm

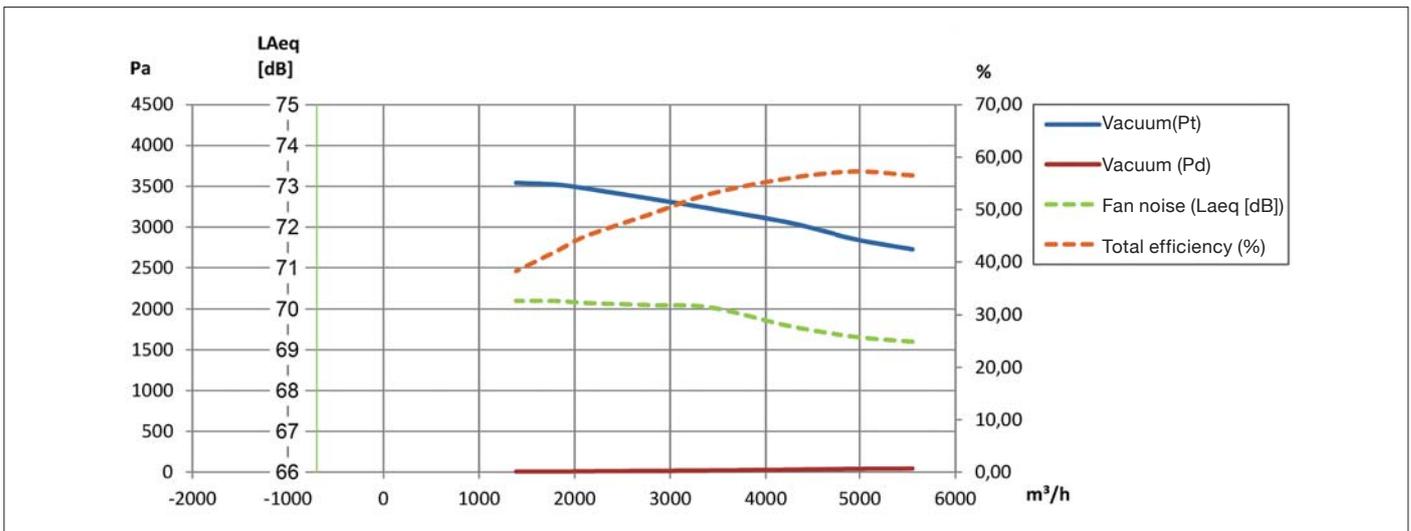


CFL Plug & Play cartridge filters

Fan type RVH35/3 functioning curves at 2800 rpm



Fan type RVH45 functioning curves at 2800 rpm



Fan type RVH50 functioning curves at 2800 rpm

