



Ventilation systems and
heat recovery units

SUVT-R-FE

CAD-FE



ECOLOGY UNIT

F400 certified with electrostatic filtration
and integrated fan



F400 certified fan
and filters



Electrostatic filters



Low noise level



Easy installation
and maintenance



Extreme robustness



Automatic control
via Wi-Fi

SISTEVEN, S.L.U. is engaged in the manufacture of ventilation systems and heat recovery units. Backed by ISO 9001 quality certification and approvals according to standard EN 12101-3, SISTEVEN is primarily recognised for the manufacture of low-pressure centrifugal fans and heat recovery units.



In 2022, SISTEVEN invested in a new production plant in Azuqueca de Henares. This investment has given it greater manufacturing capacity and has allowed the company to expand its markets and consolidate the brand.



SISTEVEN is constantly working to develop new products in order to satisfy the demand from the most exacting global markets.

Equipment for smoke extraction in commercial kitchens

The F400 certified ventilation units with electrostatic filtration have been designed for the continuous extraction of smoke, grease and odours in commercial kitchens and environments with high operational demands.

Their main function is to ensure:

- The **safe smoke extraction** at high temperature.
- The **effective reduction of suspended grease particles**.
- **Improved air quality**.
- **Compliance with regulations** in force for commercial kitchen facilities.



Protection of the environment by reducing pollutants



Treated air before being exhausted outside



Regulatory compliance in commercial kitchen facilities

Applications

Smoke extraction in commercial kitchens is key for guaranteeing a safe, hygienic and comfortable working environment, as well as for correct functioning of the installation.

Effective removal of the smoke, grease and vapours generated during cooking activities maintains air quality and protects the surrounding areas.

- Restaurants and restaurant chains
- Hotels
- Central kitchens and catering facilities
- Hospitals and health centres
- Shopping centres
- Commercial kitchens

Certifications



F400 certified fan and filter assembly

The ventilation box and the filtration system have been tested together. This means that the equipment works as a single verified solution, thereby ensuring real safety and performance.

Certified for 400°C/2h

It is adapted to regulations for commercial kitchens and allows smoke extraction in case of fire. Under normal conditions, the equipment works as a continuous extract system, and in the event of a fire it continues operating.



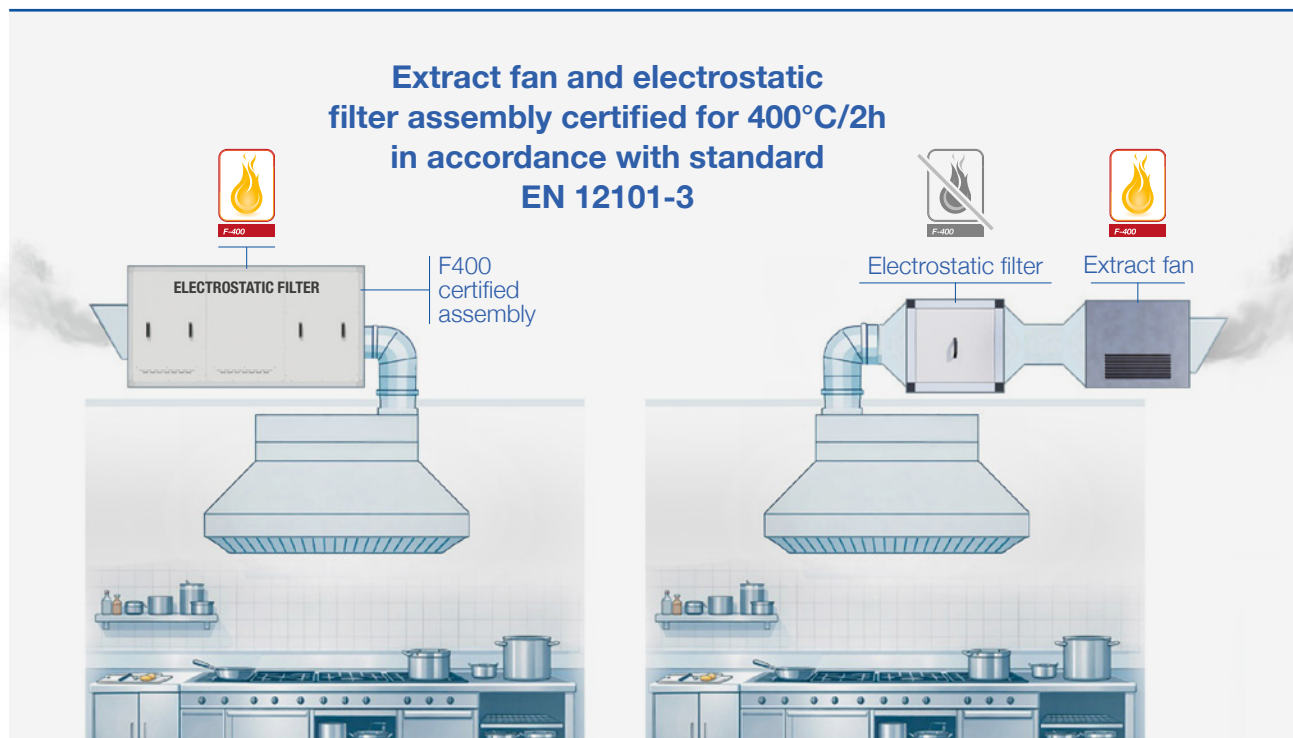
All components have been tested working together.	Compliance with regulations for commercial kitchens.
Prevents unverified combinations.	The safety of the installation is ensured.
Complies with standard EN 12101-3.	Smoke extraction in the event of fire.
Performance is certified under real conditions.	

F400 certified system for smoke extraction in commercial kitchens

In commercial kitchens, the correct extraction and treatment of smoke, grease and odours is essential to ensure the safety of the installation, proper functioning of the ventilation system and compliance with regulations in force.

SISTEVEN's SUVT-R-FE has been designed to:

- Continue **operating in the event of a fire**.
- Ensure **smoke extraction** at high temperature (400°C / 2h).
- **Protect the facility** against critical situations.
- Contribute to the **safety of people**.



Reduction of emissions and odours outside

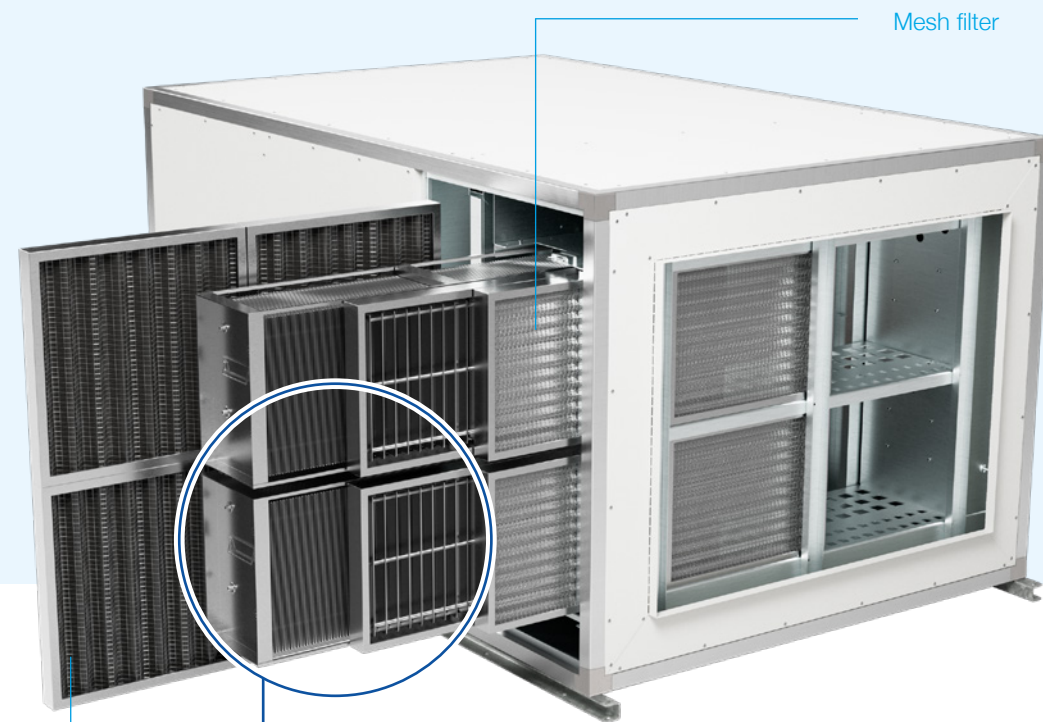
SISTEVEN's ECOLOGY UNITS with electrostatic filters capture grease particles before air is exhausted, thereby reducing odours, minimising nuisance in the surrounding environmental and improving air quality.



Reduced maintenance costs

Electrostatic filters facilitate the cleaning of the extract system, thereby reducing operating costs and maintenance interventions and extending the useful life of the installation.

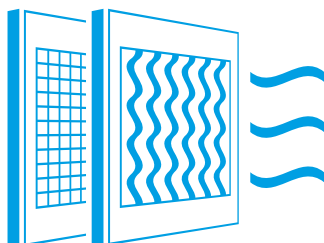
Advanced filtration technology for commercial kitchens



Mesh filter

Active carbon filter

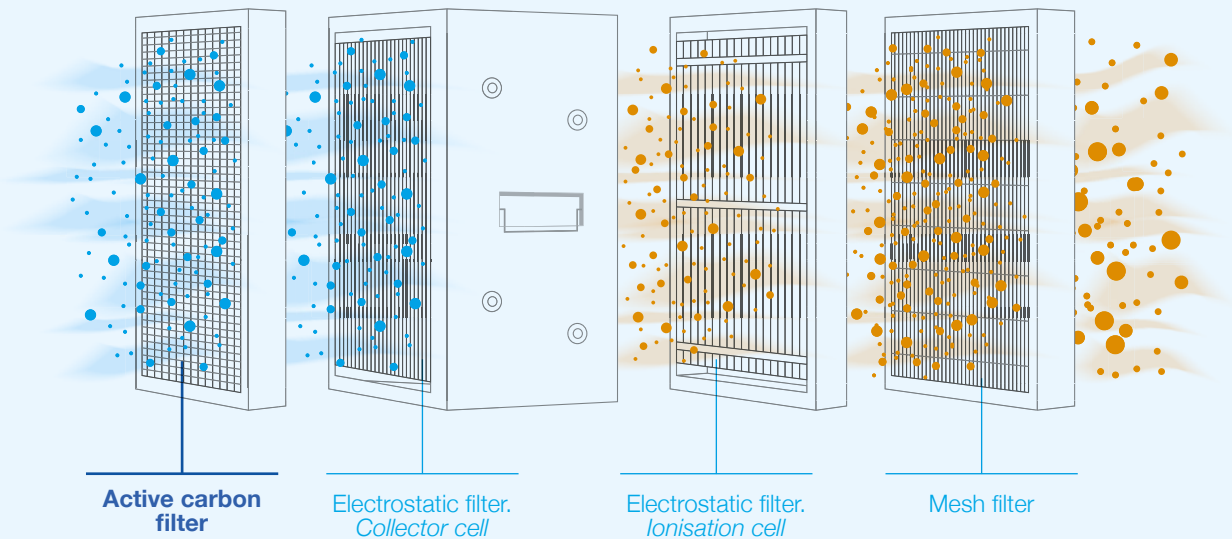
Unlike traditional systems based solely on metallic filters, SISTEVEN's ECOLOGY UNITS incorporate a **multistage filtration system** designed to effectively treat smoke, grease particles and odours generated in commercial kitchens.



Electrostatic Filters

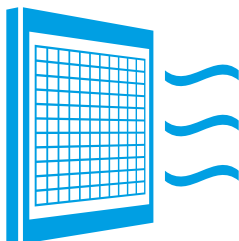
Electrostatic filtration systems are designed to remove grease, smoke and odours from the air. They achieve efficiencies of up to 95% in capturing particles, thereby significantly improving air quality.

Electrostatic filtration process



This process allows removing 95% of grease, smoke and microparticles, while ensuring consistent performance and significantly improved air quality

1. Stale internal air passes through the ionisation cell, where a high-voltage electric field charges the suspended particles of grease, smoke and dust.
2. The ionized particles are attracted to the collector cell and are retained by the electrostatic effect.
3. Clean, filtered air is exhausted to the outside.



Active Carbon Filter

When more demanding odour removal is required, SISTEVEN can incorporate an active carbon filter. This filter allows the retention of odours, gases and other compounds generated by the activity in commercial kitchens. Its high absorption capacity significantly improves the quality of the air exhausted to the outside.

Construction aspects



Environmentally friendly

Highly efficient filters that reduce the environmental impact by purifying air before being exhausted outside.



Straightforward installation and maintenance

Optimised design to simplify installation and allow quick access to the interior of the equipment.



Certified for 400°C/2h (F400)

F400 certified fan and filter assembly according to EN 12101-3, suitable for smoke extraction in case of fire.



Electrostatic filtration

Up to 95% effective in capturing grease, smoke and dust particles.



Extreme robustness

Reinforced structure to ensure durability and strength under demanding conditions.



Safety switch

Immediate electrical disconnection in case of emergency to protect the installation and people.



Centralised control panel

Connection to a centralised control platform via Wi-Fi.



Low noise level

Panels that absorb the noise generated during operation.

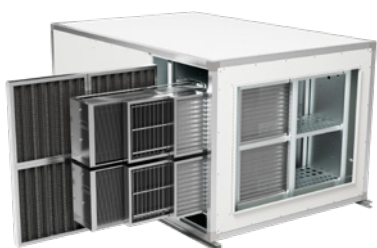
External control panel

Designed for the efficient management of ventilation systems by allowing simple integration, precise regulation and maximum operational reliability.

It is supplied as an accessory and allows automatic management of the system, with the fan speed adjusted according to the reading of probes and the target CO₂ value.

Time programming.	Continuous data monitoring.
Safe operating environment.	Safe operating environment.
Control of temperature and filter status.	Communication compatible with MODBUS RTU.
Manual or automatic regulation using optional sensors (PM2.5 + VOC).	Connection to a centralised control platform via Wi-Fi.





SUVT-R-FE



Belt driven Ecology unit certified for 400 °C/2h, with highly robust backward curved impeller and high-efficiency electrostatic filters

Ecology unit with high-efficiency electrostatic filters, F400 certification, equipped with a backward curved impeller and belt driven, acoustically insulated, with the option of adding an activated carbon filter stage. Suitable for commercial kitchen hoods where the removal of grease particles and odours is required.

Characteristics:

- Self-cleaning backward curved impeller.
- 25 mm rockwool insulation in panels.
- Inspection hatch for maintenance.
- Access panels for filter removal for maintenance.
- Grease-collection tray.
- Integrated connection box.
- High efficiency (95% ePM1) 230 V (+/-7.5%) 50 Hz electrostatic filter.
- Approved according to EN 12101-3, for operation outside the fire zone.

Fan:

- Highly robust backward curved impeller with double inlet.
- Maximum temperature of air to be carried: S1 continuous operation +5 °C +75 °C. S2 operation: 400 °C/2h.

Filtration stages:

- G2 washable filter: Retains large grease particles.
- Electrostatic filter: Removes medium and small ionized grease particles.
- Activated carbon filter (optional): Removes low concentrations of odour particles.

Motor:

- Class F motors with ball bearings and IP55 protection.
- IE3 efficiency motors.
- Three-phase 230/400 V 50 Hz (up to 4 kW) and 400/690 V 50 Hz (powers greater than 4 kW).
- Working temperature: -25 °C +50 °C.

Finish:

- Structure in aluminum profiles and pre-lacquered outer sheet.

On request:

- Particle sensor for automatic control.
- Possibility of adapting the transmission assembly to the left or right.
- Special windings for different voltages and frequencies.
- KF-CONTROL:**
- Motor speed control by manual selection or by optional external sensors (SP-PM2.5+VOC).
- Integrated control system compatible with MODBUS RTU.
- Built-in temperature sensor.
- Filter status check.
- WiFi.

Filter characteristics

ELECTROSTATIC FILTER	ePM1				
	95%	90%	80%	70%	
Filtration class EN 779	-	F9	F8	F7	
Air speed (m/s)	1	2.5	3	4	
Air flow capacity (%)	40	65	75	100	
Pressure drop (Pa)	10	24	37	64	

Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)			Installed power (kW)	Maximum filter flow rate ¹ (m ³ /h)	Maximum flow rate (m ³ /h)		Sound pressure level ² dB(A) Inlet	Approx. weight (Kg)	
		230V	400V	690V			FE	FE + FCA		FE	FE + FCA
SUVT-R-FE-450-1 IE3	950	2.82	1.62		0.75	5000	7740	6735	70	535	540
SUVT-R-FE-450-1.5 IE3	1105	4.07	2.34		1.10	5000	9165	8110	73	535	540
SUVT-R-FE-450-2 IE3	1220	5.41	3.11		1.50	5000	10250	9170	75	540	545
SUVT-R-FE-450-3 IE3	1435	7.93	4.56		2.20	5000	12235	11115	79	550	555
SUVT-R-FE-500-1.5 IE3	910	4.07	2.34		1.10	7500	10665	9405	72	685	690
SUVT-R-FE-500-2 IE3	1030	5.41	3.11		1.50	7500	12195	10905	75	685	690
SUVT-R-FE-500-3 IE3	1195	7.93	4.56		2.20	7500	14330	13000	78	695	700
SUVT-R-FE-500-4 IE3	1280	10.70	6.15		3.00	7500	15405	14055	79	700	705
SUVT-R-FE-630-3 IE3	805	7.93	4.56		2.20	15000	19550	17900	68	760	765
SUVT-R-FE-630-4 IE3	915	10.70	6.15		3.00	15000	22390	20720	71	765	770
SUVT-R-FE-630-5.5 IE3	1025	13.90	8.00		4.00	15000	25205	23520	73	770	775
SUVT-R-FE-630-7.5 IE3	1115		10.30	5.97	5.50	15000	27410	25715	75	785	790

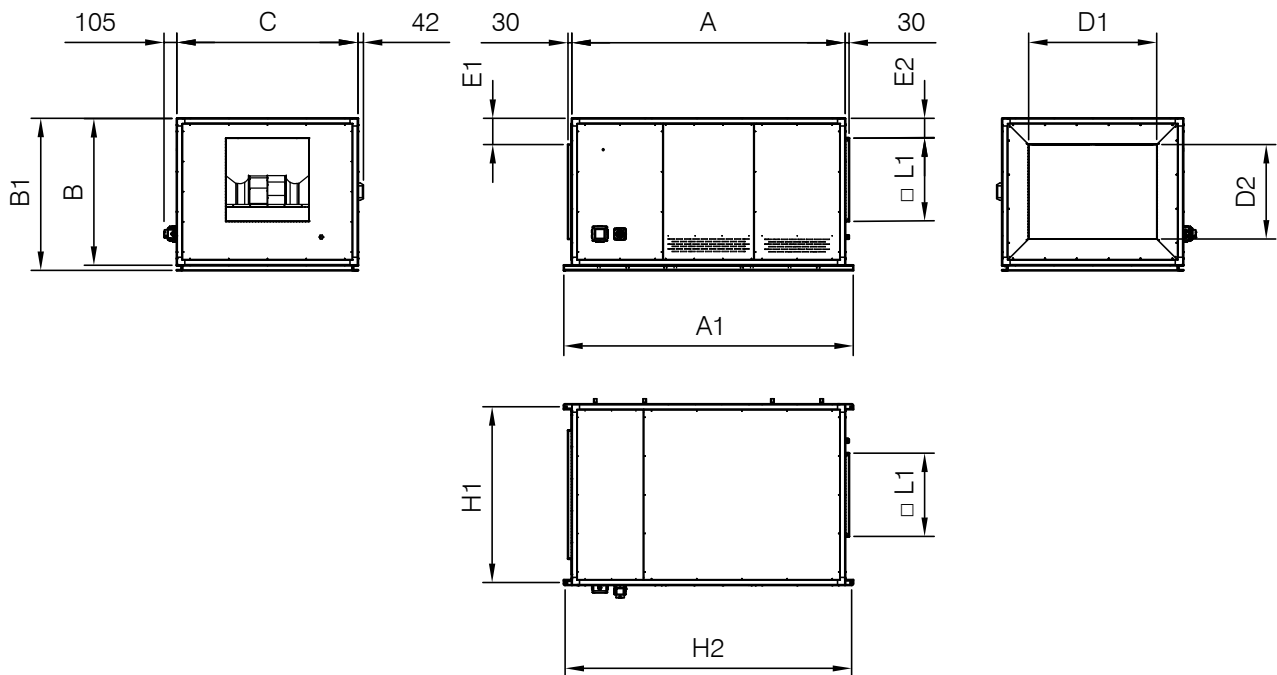
1. Maximum flow rate at 100% of the efficiency of the filters.
2. Sound pressure level in dB(A) at a distance of 3 m and at maximum flow rate.



Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SISTEVEN website or the Selector programme.

Dimensions mm



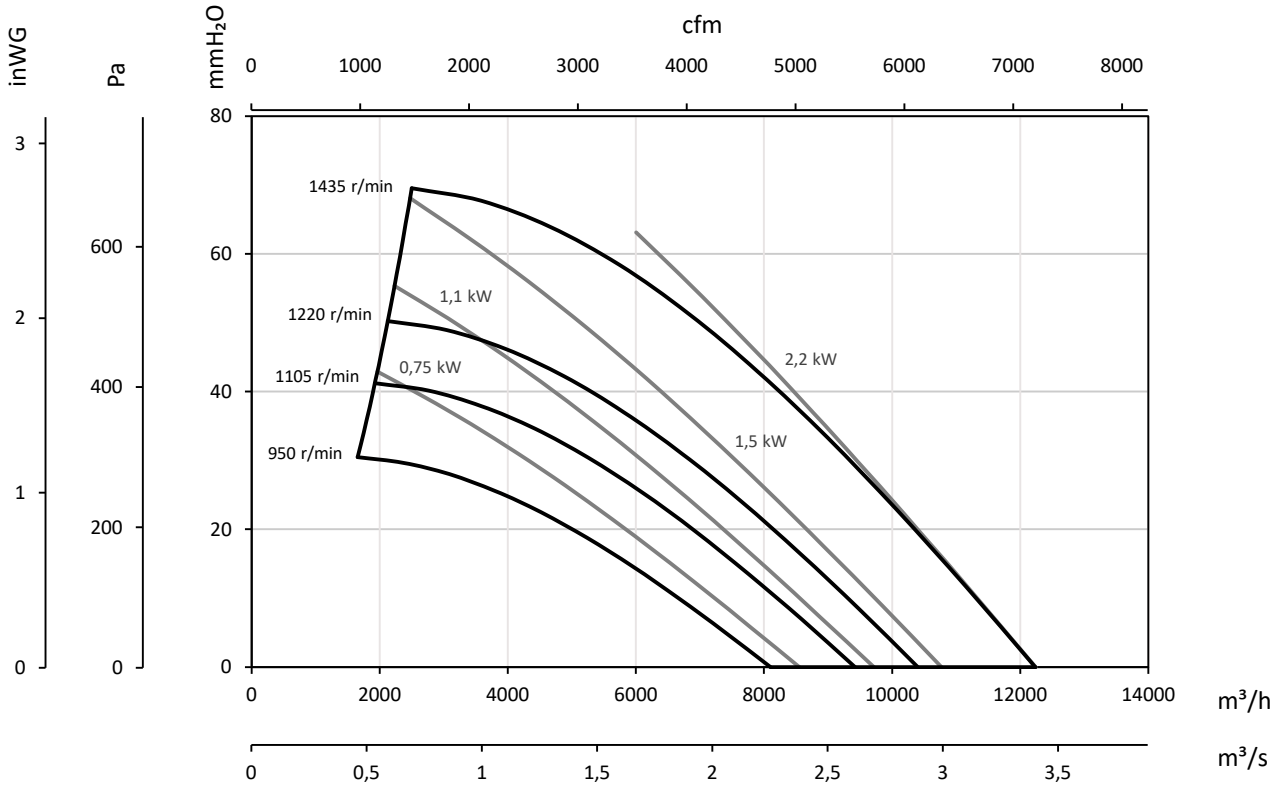
	A	A1	B	B1	C	D1	D2	E1	E2	H1	H2	L1
SUVT-R-FE-450	1882	2002	951	991	1392	1067.4	629	83.8	161	1352	1969	571.2
SUVT-R-FE-500	2104	2224	1129	1169	1392	1067.4	807	152.4	161	1352	2191	641.2
SUVT-R-FE-630	2221	2341	1461	1501	1831	1506.4	1139	240.4	161	1791	2308	801.2

Characteristic curves

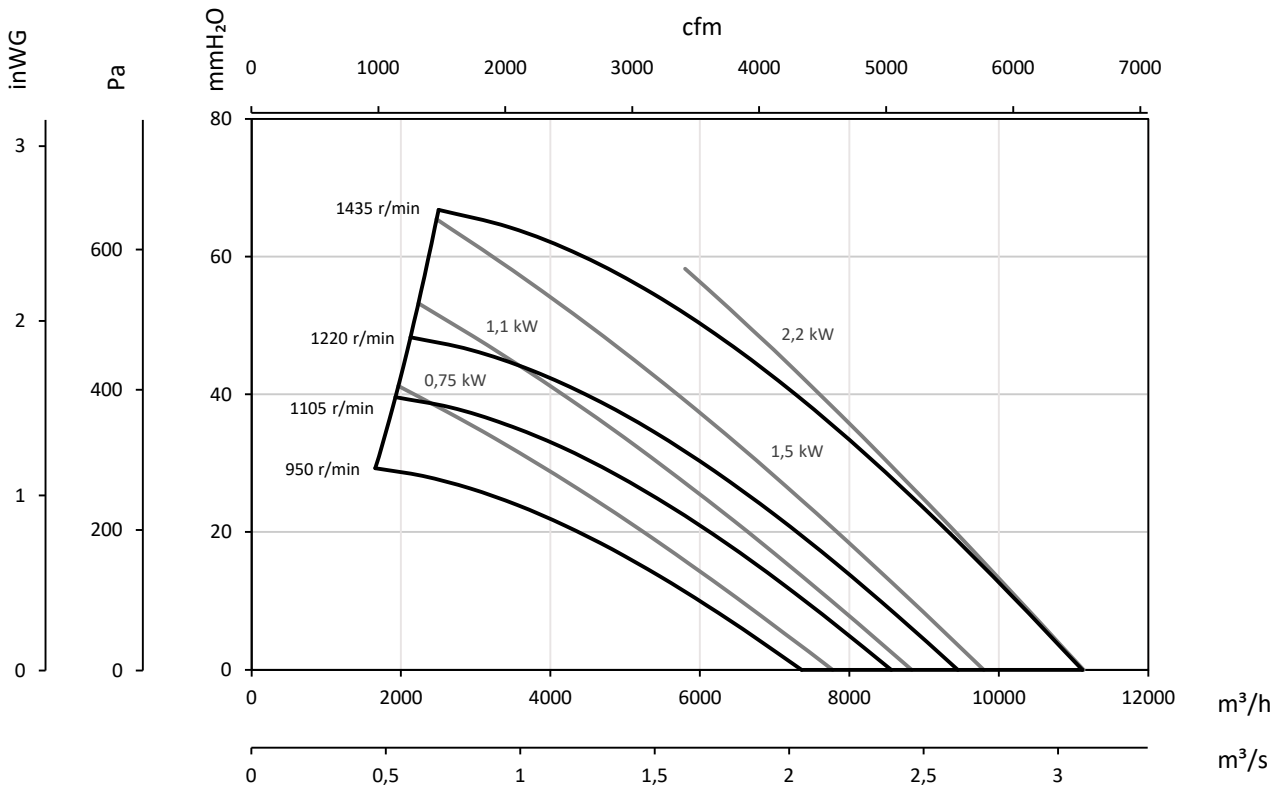
Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg

SUVT-R-FE-450



SUVT-R-FE-450-FCA

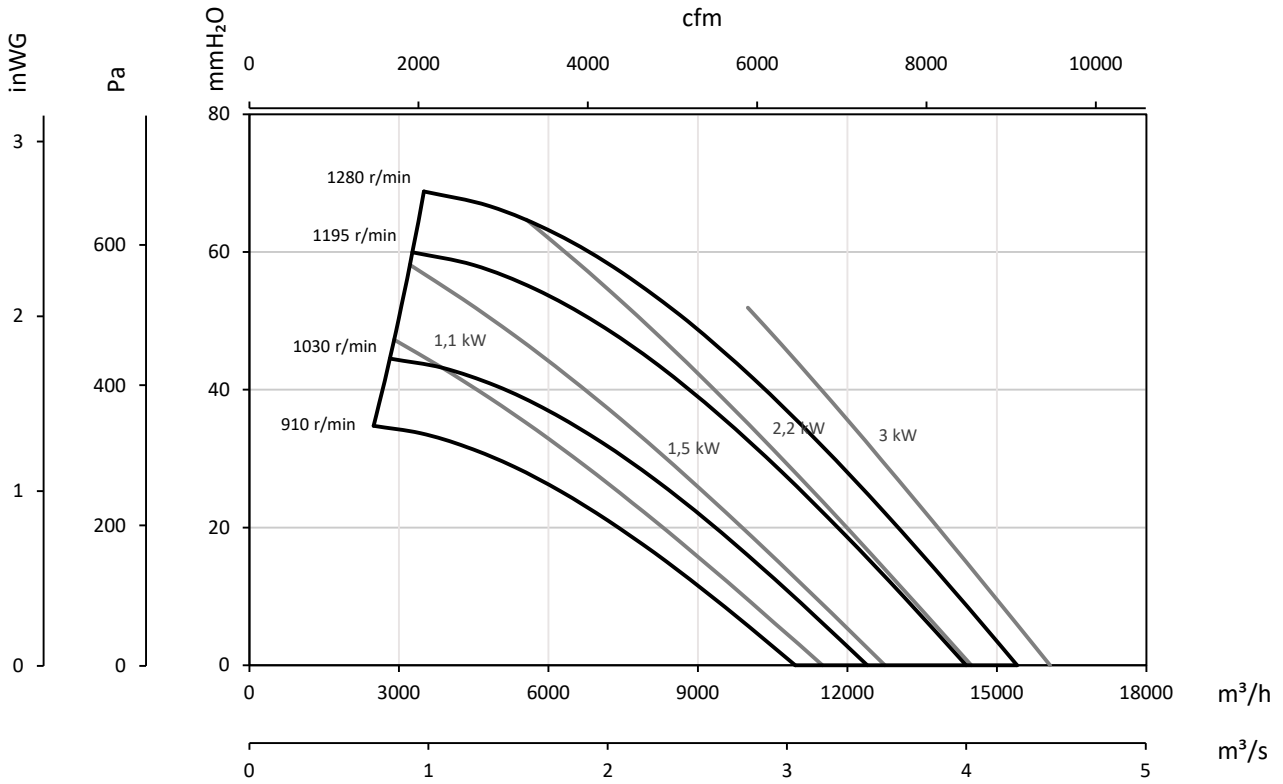


Characteristic curves

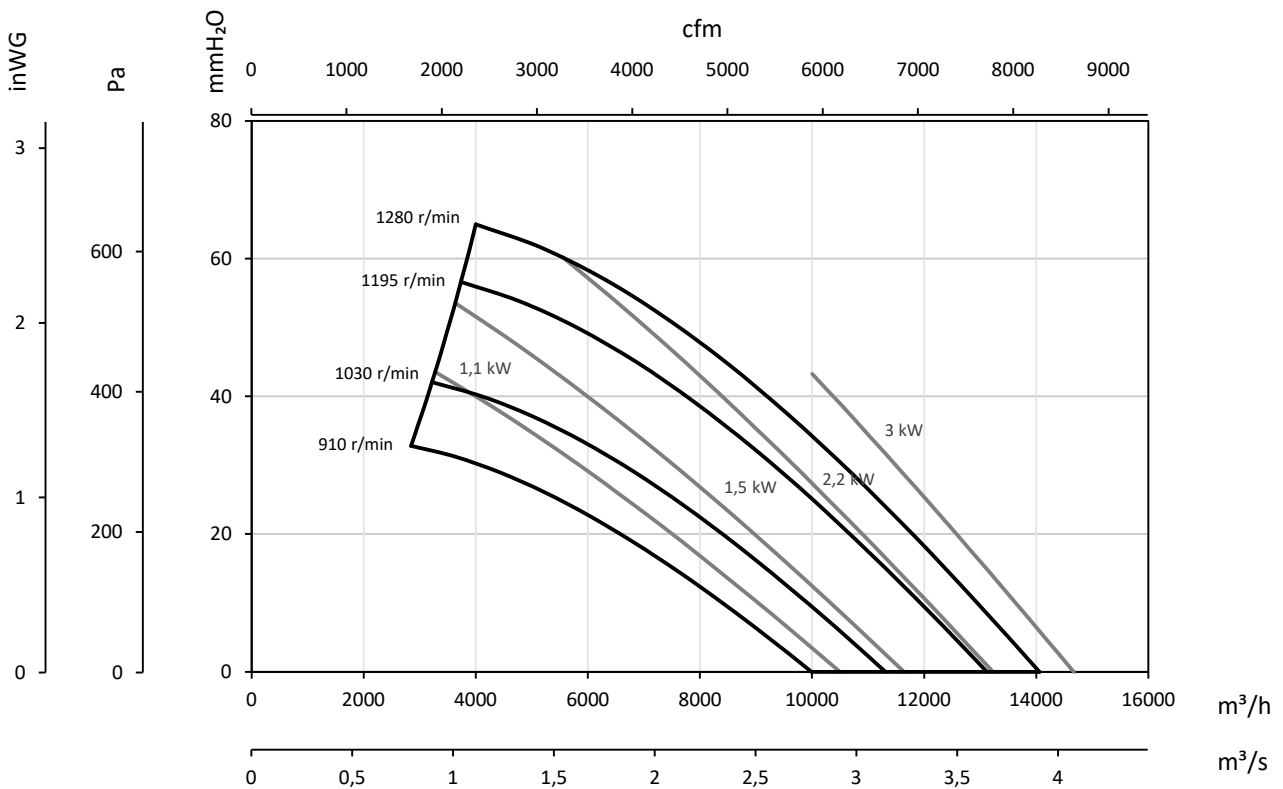
Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inWG

SUVT-R-FE-500



SUVT-R-FE-500-FCA

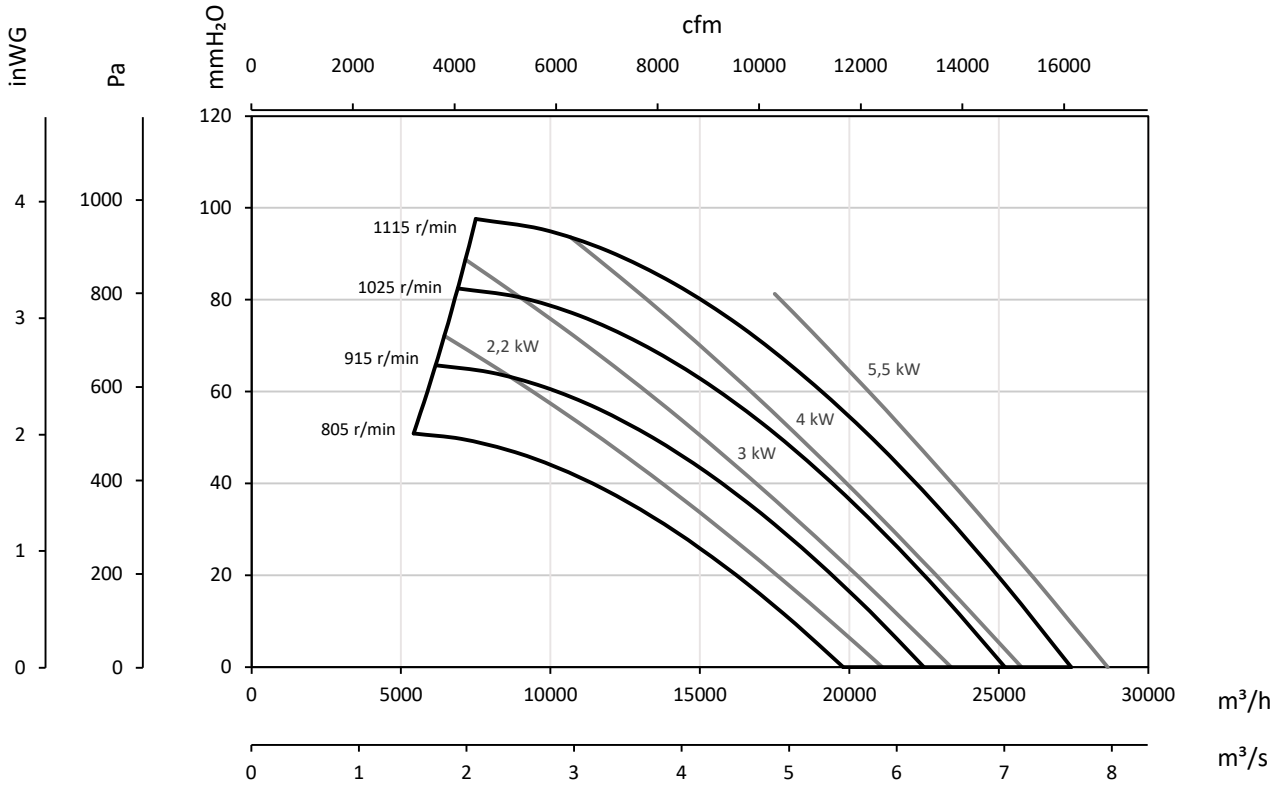


Characteristic curves

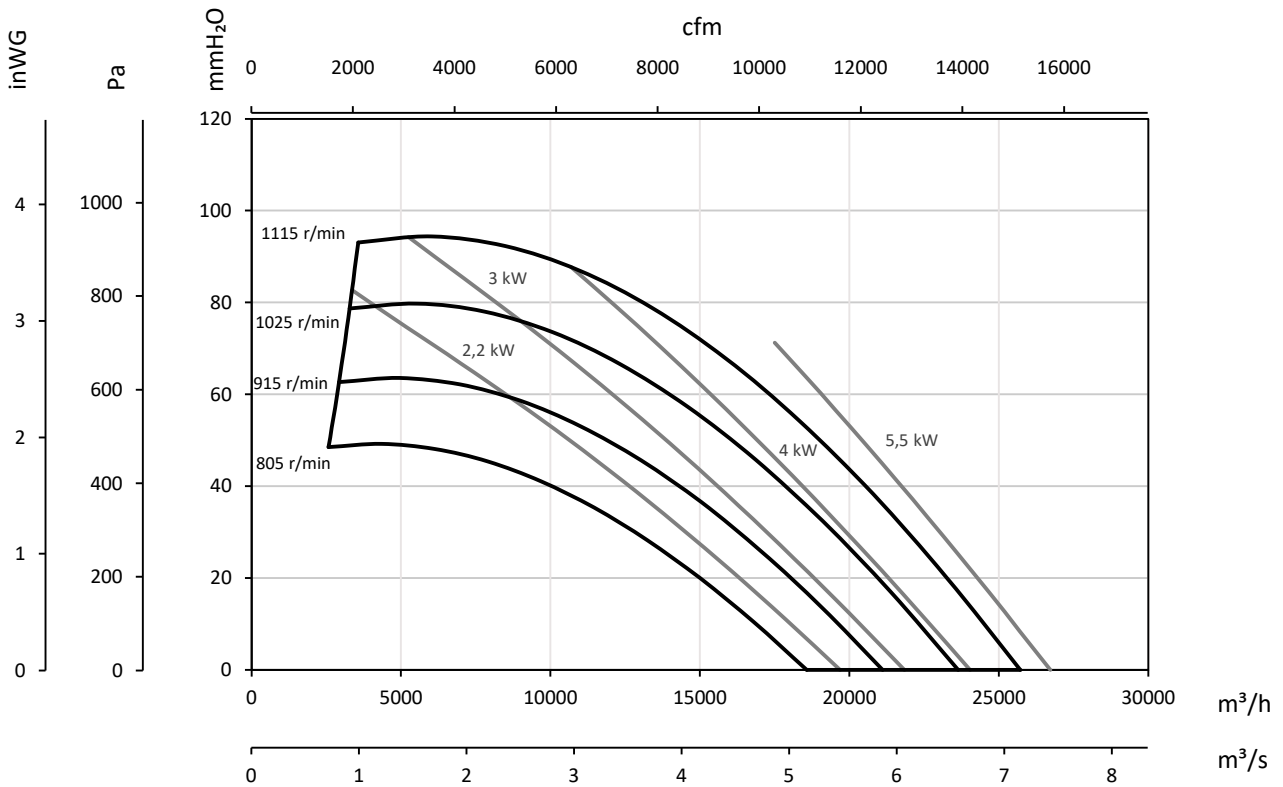
Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg

SUVT-R-FE-630



SUVT-R-FE-630-FCA





CAD-FE



Ecology unit with direct drive motor, certified for 400 °C/2h, double insulating wall, double inlet, and high-efficiency electrostatic filters

Ecology unit with high-efficiency electrostatic filters certified F400, equipped with a double inlet direct drive fan, acoustically insulated with double insulating wall, and with the possibility of adding an activated carbon filter stage.

Characteristics:

- Forward curved impeller in galvanised sheet steel.
- Structure in aluminum profiles and pre-lacquered outer sheet.
- 25 mm rockwool insulation in panels.
- Inspection hatch for maintenance.
- Access panels for filter removal for maintenance.
- Grease-collection tray.
- Integrated connection box.
- High efficiency (95% ePM1) 230 V (+/-7.5%) 50 Hz electrostatic filter.
- Ventilation system with filtration approved according to the EN 12101-3 standard.
- Maximum temperature of air to be carried: S1 continuous operation -20 °C +45 °C. S2 operation: 400 °C/2h.

Motor:

- Class H motors for S1 continuous operation and S2 emergency use. With ball bearings, IP55 protection and 1 or 2 speeds, depending on model.
- Single-phase 230 V 50 Hz and three-phase 230/400 V 50 Hz (up to 3 kW) and 400/690 V 50 Hz (powers greater than 3 kW).
- Working temperature: -20 °C +50 °C.

Filtration stages:

- Electrostatic filter: Removes medium and small ionized grease particles.
- Activated carbon filter (optional): Removes low concentrations of odour particles.
- Maximum temperature of air to be carried: -30 °C +45 °C.

On request:

- Circular outlet.
- Fans with vertical outlet.
- Particle sensor for automatic control.

KF-CONTROL:

- Motor speed control by manual selection or by optional external sensors (SP-PM2.5+VOC).
- Integrated control system compatible with MODBUS RTU.
- Built-in temperature sensor.
- Filter status check.
- WiFi.

Filter characteristics

ELECTROSTATIC FILTER	ePM1				
	95%	90%	80%	70%	
Filtration class EN 779	-	-	F9	F8	F7
Air speed (m/s)	1	2	2.5	3	4
Air flow capacity (%)	40	50	65	75	100
Pressure drop (Pa)	10	17	24	37	64

Technical characteristics

Model	Speed (r/min)	Maximum admissible current (A)		Installed power max. (kW)	Maximum flow rate (m ³ /h)		Sound pressure level ¹ dB(A) Inlet	Approx. weight (Kg)	
		230V	400V		FE	FE + FCA		FE	FE + FCA
CAD-FE-10/10-4M-0.75	1410	4.10		0.55	3025	2650	57	105	110
CAD-FE-12/12-6T-1.5 IE3	945	6.40	3.70	1.10	4845	4095	55	140	145
CAD-FE-15/15-6T-3 IE3	950	10.30	5.90	2.20	8225	8225	59	225	230

1. Sound pressure level in dB(A) at a distance of 3 m and at maximum flow rate.



Erp. (Energy Related Products)

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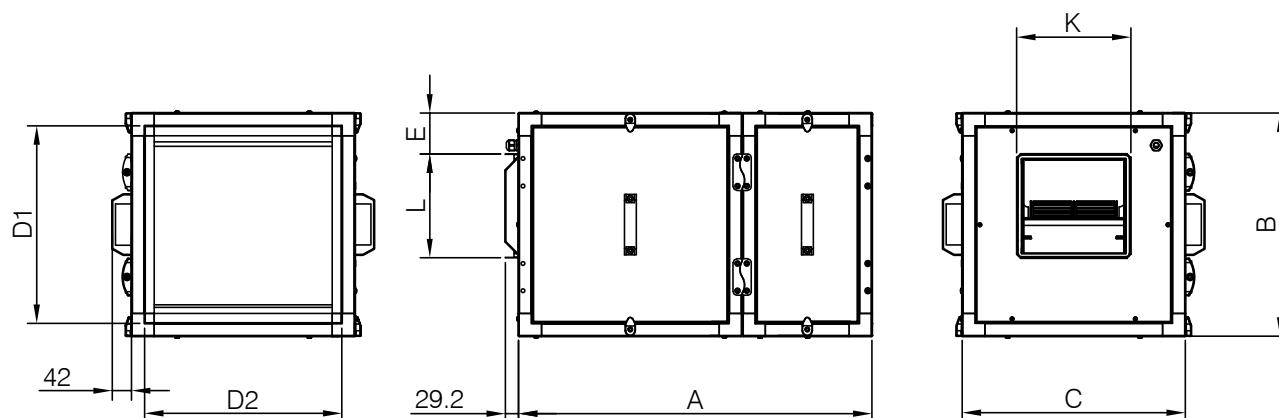
Acoustic characteristics

The values given are obtained under laboratory conditions according to ISO 3744.

Sound power spectrum L_w(A) in dB(A) per Hz frequency band
Values measured at inlet with maximum velocity and flow rate

	63	125	250	500	1000	2000	4000	8000
CAD-FE-10/10	54	69	73	72	71	68	68	58
CAD-FE-12/12	52	67	71	70	69	66	66	56
CAD-FE-15/15	63	72	74	76	71	70	64	55

Dimensions mm

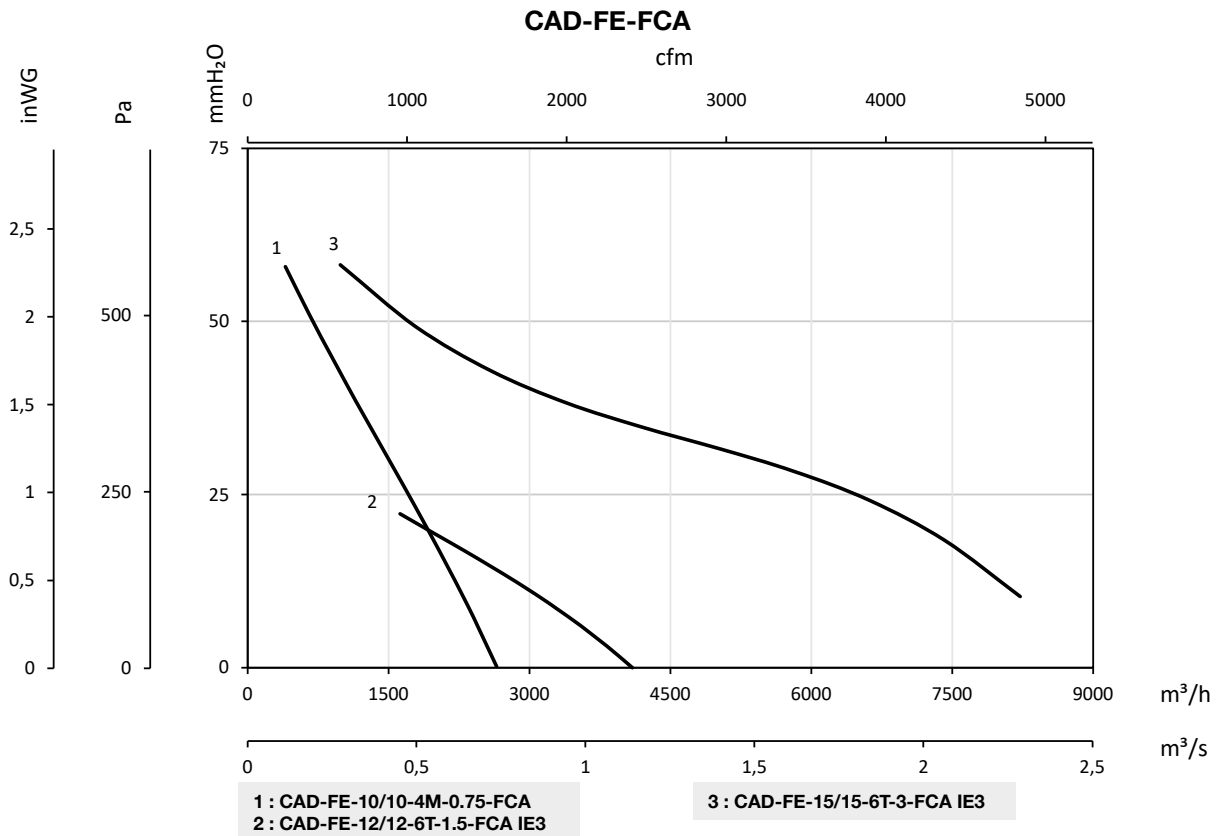
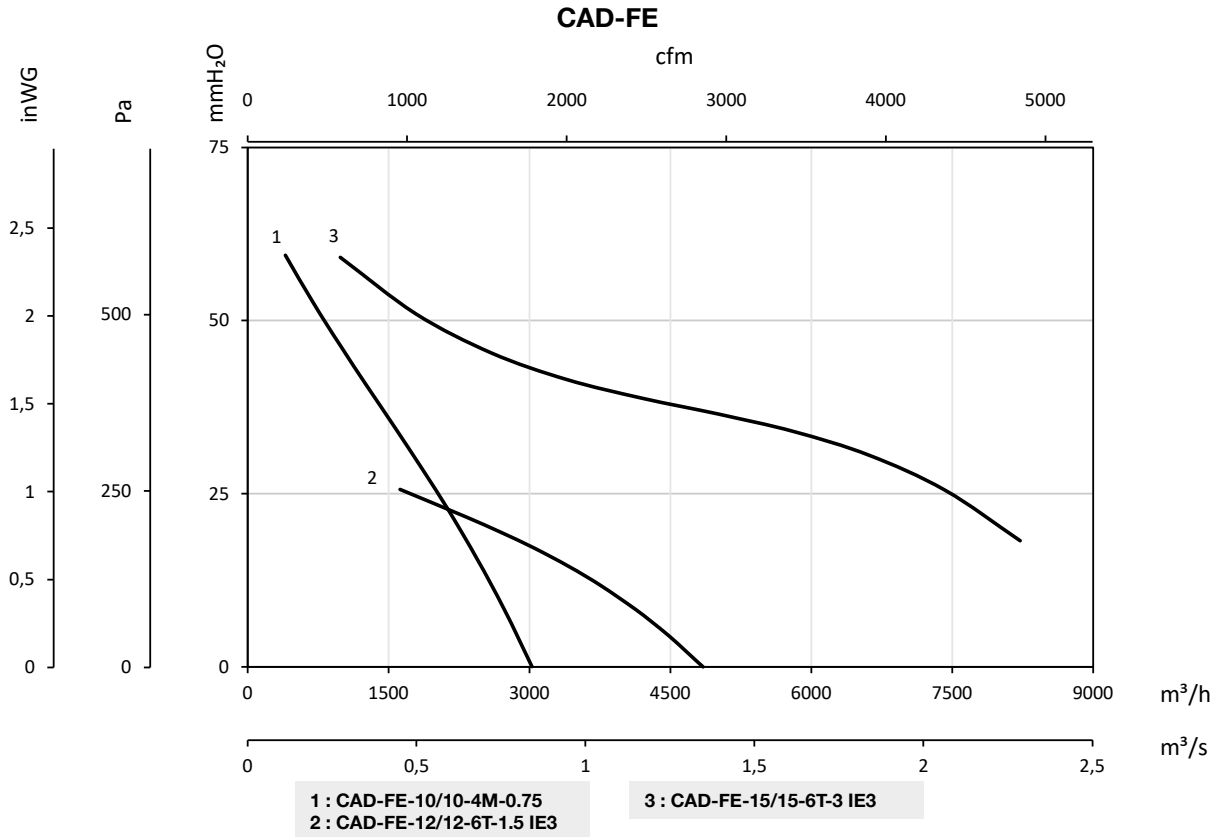


	A	B	C	D1	D2	E	K	L
CAD-FE-10/10	1115	605	605	545	545	88	343	306
CAD-FE-12/12	1190	680	680	618	618	84	404	360
CAD-FE-15/15	1525	855	855	793	793	145	486	419

Characteristic curves

Q= Flow rate in m³/h, m³/s and cfm

Pe= Static pressure in mm H₂O, Pa and inwg





Available on:



Compare the performance and the fan characteristic curves

s selector

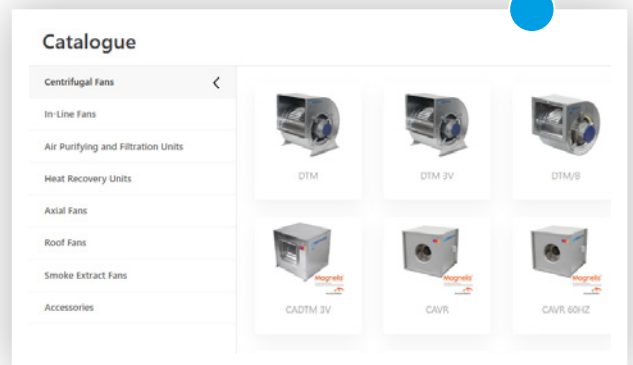
sisteven ventilation selector

A software tool that saves time for **ventilation professionals**

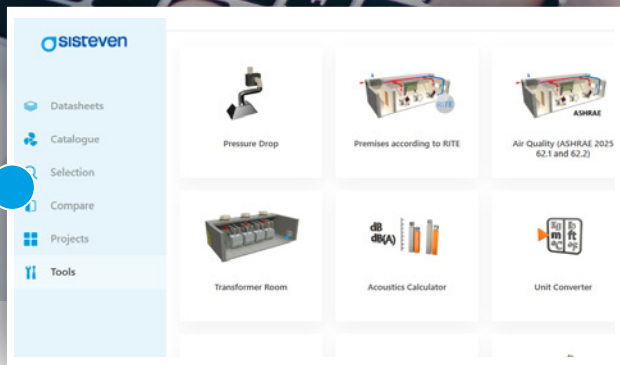


A clear and intuitive selection tool to choose the right ventilation system for each installation

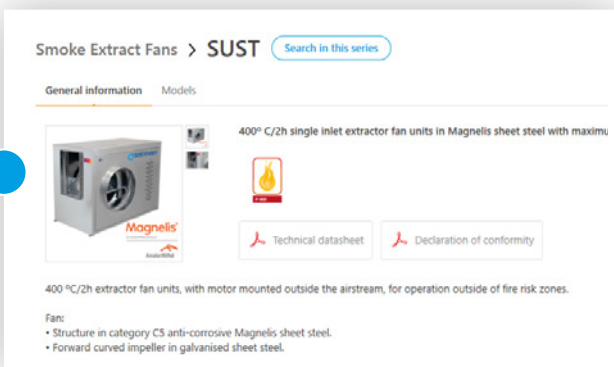
Create ventilation projects with ease. The tool handles complex calculations to save you time and generates complete technical reports in a matter of minutes.



Choose the appropriate ventilation system based on the catalogue or required performance.



Access technical datasheets quickly, with easy and simple navigation through tabs.



View the properties of ventilation systems

Everything you need for your ventilation project, in one place!

An easy-to-use tool with simple navigation that allows you to complete the entire process quickly.

The tool is constantly updated to adapt to current regulations.



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