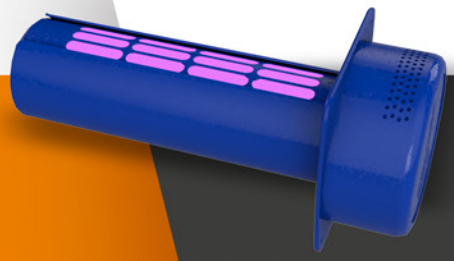
CERTIFIED TECHNOLOGY
100% EFFECTIVE
ACCORDING TO EN 14476 STANDARD

UPC/EC PCO

VENTILATION AND PURIFICATION UNITS WITH PHOTOCATALYSIS TECHNOLOGY AND HEPA FILTER FOR CLEANING AND DISINFECTING AIR AND SURFACES INSIDE DUCTS



- BUILT-IN PHOTOCATALYST DEVICE
- 3 FILTRATION STAGES WITH HEPA FILTER
- EC TECHNOLOGY MOTOR
- AUTOMATIC REGULATION AND CONTROL
- THERMAL AND ACOUSTIC INSULATION
- EASY ACCESS FOR MAINTEANANCE

SODECA

EC TECHNOLOGY

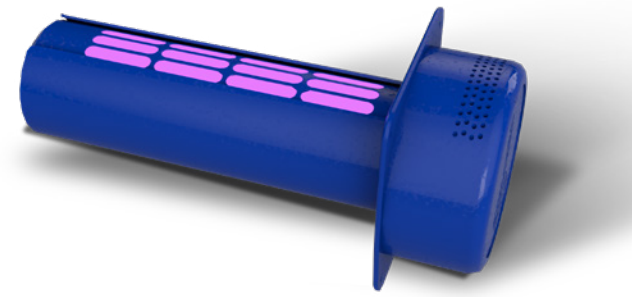
CE ACCORDING ErP

PHOTOCATALYSIS

FILTRATION STAGES G2 + F7 + HEPA H14

UPC/EC PCO

UPC/EC PCO air purification units are designed for disinfecting, cleaning, eliminating odours and purifying air **in high occupancy areas that have stringent soundproofing and versatility requirements.**



ACTIVE DISINFECTING TECHNOLOGY

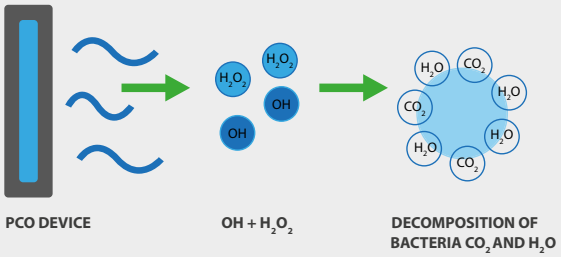
PCO™ technology (Photocatalytic Oxidation) is a powerful tool that is used for purifying air and nearby surfaces, by accelerating the natural decomposition of organic matter through photocatalysis.

Additionally, our equipment has built-in modules with **positive and negative ionisation technology**, which improve their purifying efficacy against ultra-fine dust and odours.

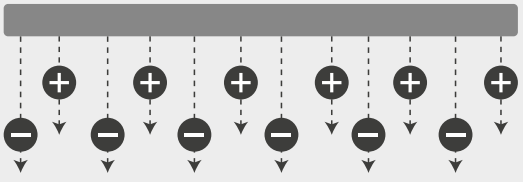
HOW DOES IT WORK?

PCO technology uses a UVc ultraviolet light source to react with a titanium dioxide catalyst in the presence of humidity/water vapour to create hydroxyl radicals (OH) and hydrogen peroxide (H_2O_2), which inactivate airborne microorganisms and harmful chemical substances circulating in the air.

These devices use PCO technology, together with **positive and negative ionisation**, to gather suspended particulate matter, which has not been collected by filters, and make it harmless.



Positive and negative ionisation of particles



APPLICATIONS

Purifying the air by disinfecting it using **PCO technology is ideal for premises where people are continuously entering and exiting**. These premises require a speedy, high efficiency disinfection due to the high rate of pollutants that may be circulating.

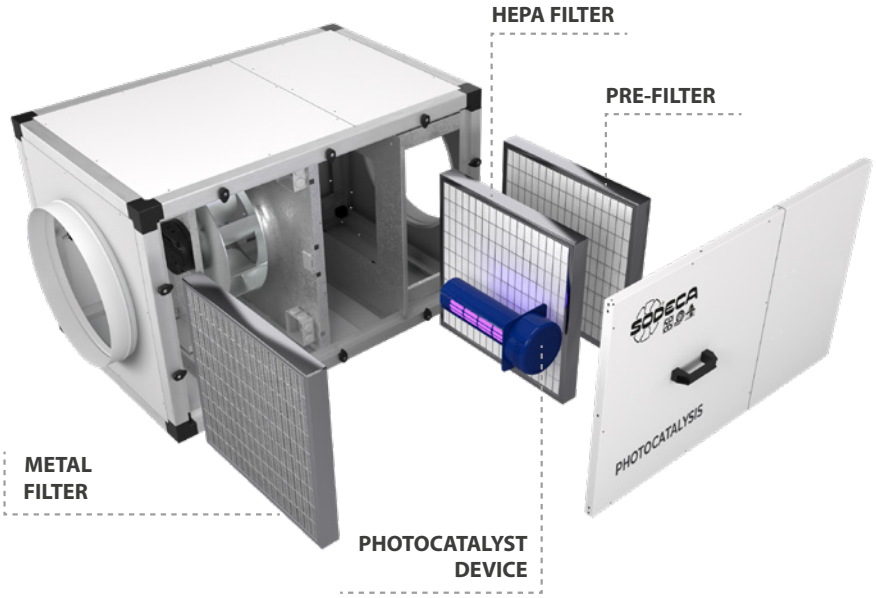
PCO technology is also suitable for use at locations where there is a need to disinfect large material surfaces through the air.

RECOMMENDED FOR

— Hospitals
— Food industry
— Businesses
— Offices
— Waiting rooms
— Clean rooms
— Libraries

BENEFITS

— Eliminates germs, viruses, mould and bacteria
— Does not pollute
— Reduces odours
— Helps alleviate allergies and control asthma
— Effective against all organic pollutants
— Eliminates ultra-fine dust and animal hair
— Eases the cleaning of air ducts



ENERGY SAVINGS

The inlet panel incorporates diffusers to prevent the air flow from swirling, which together with a dynamic pressure balance chamber, increases the unit's performance. **The EC Technology type electric motor as well as the built-in PCO device are high efficiency units** and essential for reducing the electrical consumption.

LOW NOISE LEVEL

The EC Technology motor as well as the 25 mm acoustic casing are made of high-quality insulating material, ensuring that this unit operates at low noise levels.

PHOTOCATALYST DEVICE

Device with PCO technology and ambient air positive and negative ionisation technology. Designed to improve indoor air quality as well as disinfecting air and nearby surfaces to eliminate germs, viruses and bacteria.

DURABILITY

These units are made from prefinished sheet metal and aluminium profiles, providing them with excellent corrosion resistance, increasing their service life.

AUTOMATIC CONTROL SYSTEM

Allows programming of the unit, turning on and off and adjusting airflow.

EASY TO INSTALL AND MAINTAIN

The inside of the unit can be quickly accessed through the inspection panel for cleaning and for filter replacement or to use the UVc ultraviolet light if required.

PRODUCTS WITH CERTIFIED PCO TECHNOLOGY THAT ARE 100% EFFECTIVE IN 10 MINUTES AGAINST MENGOVIRUS

The efficacy of PCO technology has been proven in a laboratory certified by ENAC and APPLUS+ in accordance with standard EN 14476 for the evaluation of virucidal activity in the medical area for antiseptic and disinfectant tests.

Mengovirus is a microorganism of the same family as the SARS-CoV-2, which causes COVID-19.

UPC/EC PCO

Air purification units with technology based on photocatalysis

Ventilation and purification units with photocatalysis technology and HEPA filter for cleaning and disinfecting air and surfaces inside any high occupancy area.

Characteristics:
- 40 mm aluminium profile structure.
- Dirty filter monitoring and alarm.
- Covers made from prefinished sheet, with high quality, 25 mm thick acoustic insulation.
- Backward-curved impeller.
- Built-in photocatalyst device with negative ionisation.
- Filtration stages: F7 + HEPA H14.
- Inspection cover for maintenance and filter replacement.
- Effective for up to 40 linear metres of ducting.

Motor:
- High efficiency EC Technology motors, outer rotor adjustable via 0-10 V signal.
- Single-phase 200-240 V 50/60 Hz and three-phase 380-480 V 50/60 Hz.
- Carried air temperature range: -25 °C to +60 °C.

Finish:
- Aluminium profile and prefinished sheet, with 25 mm thick double-wall thermal and acoustic insulation panels..

On request:
- Particulate matter sensor for automatic control SI-PM2,5+VOC or SI-CO2+VOC.

Order code

UPC/EC PCO **400**

UPC/EC PCO: Air purification units with technology based on photocatalysis.

Impeller diameter in mm

Characteristics of the filters

STANDARD FILTERS

	EN 779	EN 1822	ISO 16890 ISO ePM_1	ISO $ePM_{2.5}$	ISO ePM_{10}	ISO COARSE
F7	90%	-	>50%	>65%	>85%	-
H14	-	>99.995%	-	-	-	-

Technical characteristics

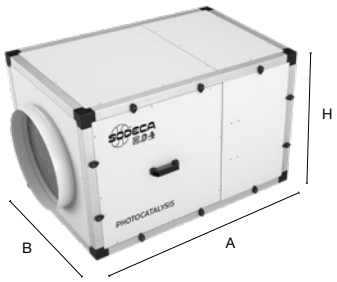
Model	Recommended working surface* (m^2)	Speed (r/min)	Power (W)	Power supply	Sound pressure level at 50% of max. speed.** dB(A)	Maximum flow rate (m^3/h)	Approx. weight (kg)
UPC/EC PCO-310	100	2377	450	200-240 V 50/60 Hz 1 Ph	55	800	56
UPC/EC PCO-400	160	1550	460	200-240 V 50/60 Hz 1 Ph	47	1300	98
UPC/EC PCO-500	240	1250	1150	380-480 V 50/60 Hz 3 Ph	51	1950	166

* Recommended surface in an area with a 3 metre high ceiling.
** Irradiated sound pressure level in dB(A) at a distance of 3 m.

Erp. (Energy Related Products)

Information on Directive 2009/125/EC can be downloaded from the SODECA website or the QuickFan selector programme

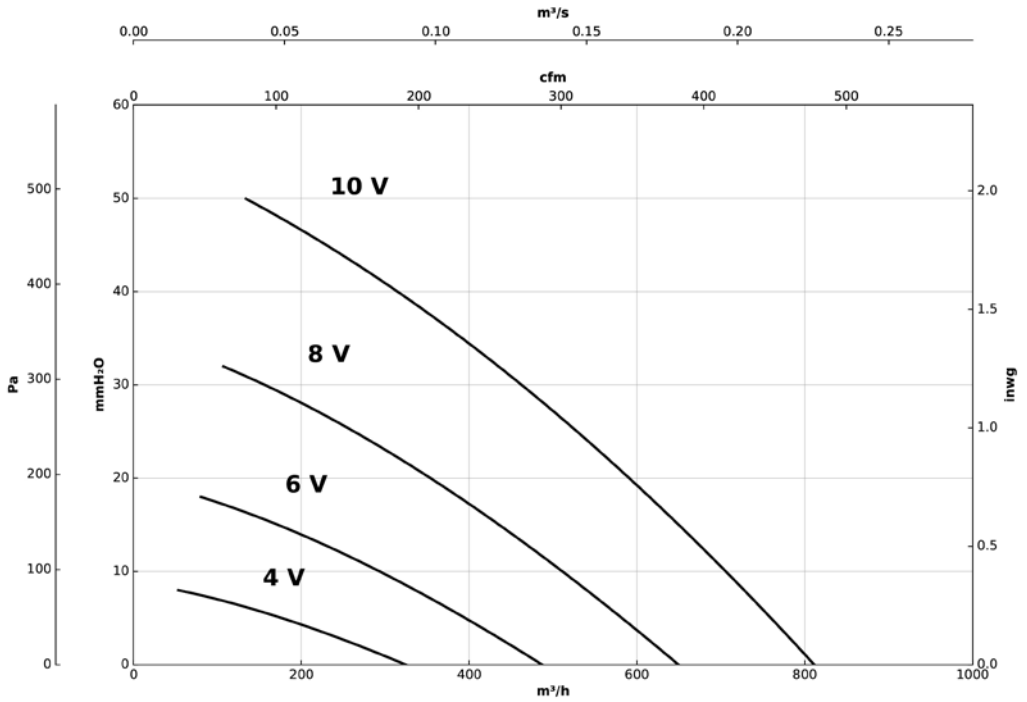
Dimensions mm



Model	A	B	H
UPC/EC PCO-310	500	500	960
UPC/EC PCO-400	700	700	1210
UPC/EC PCO-500	900	900	1550

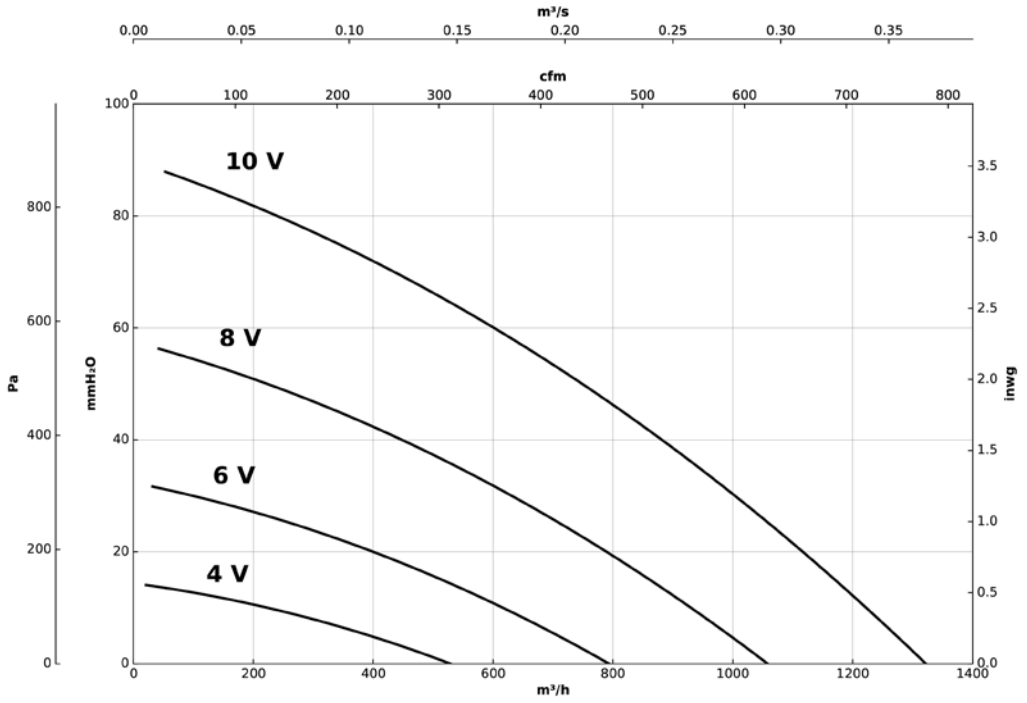
Characteristic curves

UPC/EC PCO-310

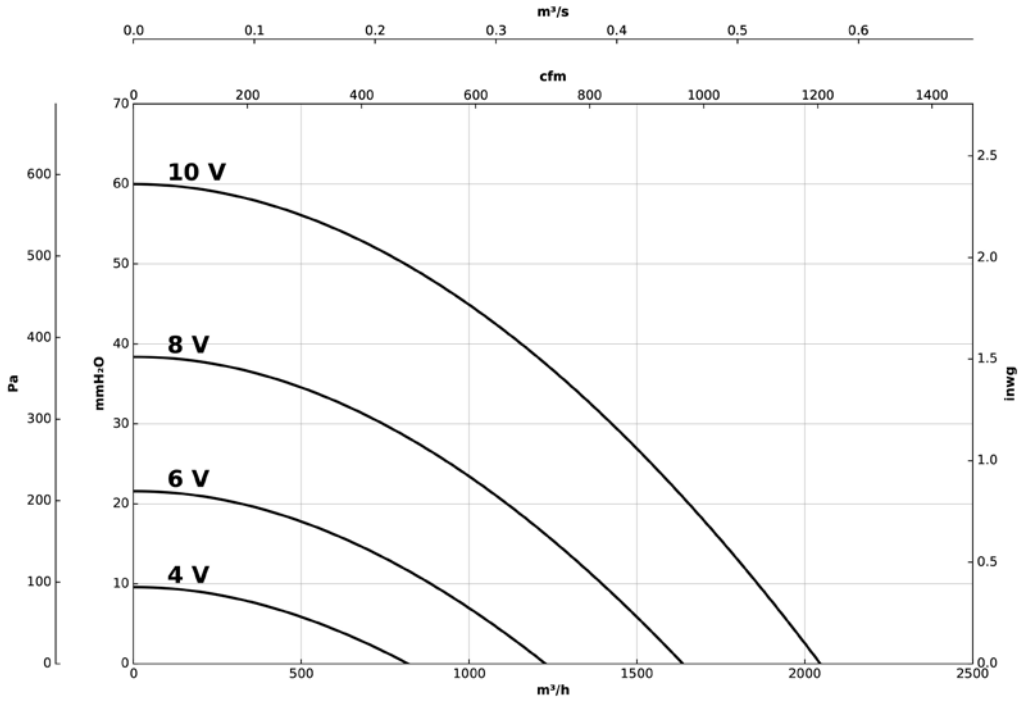


Characteristic curves

UPC/EC PCO-400



UPC/EC PCO-500



Ref. 05/2021

HEADQUARTERS
Sodeca, S.L.U.

Pol. Ind. La Barricona
Carrer del Metall, 2
E-17500 Ripoll
Girona, SPAIN
Tel. +34 93 852 91 11
Fax +34 93 852 90 42
General sales: comercial@sodeca.com
Export sales: ventilation@sodeca.com

PRODUCTION PLANT
Sodeca, S.L.U.

Ctra. de Berga, km 0,7
E-08580 Sant Quirze de Besora
Barcelona, SPAIN
Tel. +34 93 852 91 11
Fax +34 93 852 90 42
General sales: comercial@sodeca.com
Export sales: ventilation@sodeca.com

SODECA Group

EUROPE

FINLAND
Sodeca Finland, Oy

HUITTINEN
Sales and Warehouse
Mr. Kai Yli-Sipilä
Metsälinnankatu 26
FI-32700 Huittinen
Tel. + 358 400 320 125
orders.finland@sodeca.com

HELSINKI
Smoke Control Solutions
Mr. Antti Kontkanen
Vilppulantie 9C
FI-00700 Helsinki
Tel. +358 400 237 434
akontkanen@sodeca.com

HYVINKÄÄ
Industrial Applications
Mr. Jaakko Tomperi
Niinistönkatu 12
FI-05800 Hyvinkää
Tel. +358 451 651 333
jtomperi@sodeca.com

ITALIA
Marelli Ventilazione, S.R.L.

Viale del Lavoro, 28
37036 San Martino B.A.
(VR), ITALY
Tel. +39 045 87 80 140
vendite@sodeca.com

PORTUGAL
Sodeca Portugal, Unip. Lda.

PORTO
Rua Veloso Salgado
1120/1138
4450-801 Leça de Palmeira
Tel. +351 229 991 100
geral@sodeca.pt

LISBOA
Pq. Emp. da Granja Pav. 29
2625-607 Vialonga
Tel. +351 219 748 491
geral@sodeca.pt

ALGARVE
Rua da Alegria, 33
8200-569 Ferreiras
Tel. +351 289 092 586
geral@sodeca.pt

UNITED KINGDOM
Sodeca Fans UK, Ltd.

Mr. Mark Newcombe
Tamworth Enterprise Centre
Philip Dix House, Corporation
Street, Tamworth , B79 7DN
UNITED KINGDOM
Tel. +44 (0) 1827 216 109
sales@sodeca.co.uk

AMERICA

CHILE
Sodeca Ventiladores, SpA.

Sra. Sofía Ormazábal
Santa Bernardita 12.005
(Esquina con Puerta Sur)
Bodegas 24 a 26,
San Bernardo, Santiago, CHILE
Tel. +56 22 840 5582
ventas.chile@sodeca.com

COLOMBIA
Sodeca Latam, S.A.S.

Sra. Luisa Stella Prieto
Calle7 No. 13 A-44
Manzana 4 Lote1, Montana
Mosquera, Cundinamarca
Bogotá, COLOMBIA
Tel. +57 1 756 4213
ventascolombia@sodeca.co

PERU
Sodeca Perú, S.A.C.

Sr. Jose Luis Jiménez
C/ Mariscal Jose Luis de
Orbegoso 331. Urb. El pino.
15022 , San Luis. Lima, PERÚ
Tel. +51 1 326 24 24
Cel. +51 994671594
comercial@sodeca.pe

RUSSIA

RUSSIA
Sodeca, L.L.C.

Mr. Stanislav Alifanov
Severnoye Shosse, 10 room 201
Business Park Plaza Ramstars
140105 Ramenskoye,
Moscow region, RUSSIA
Tel. +7 495 955 90 50
alifanov@sodeca.com

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www.sodeca.com