

— INDUSTRIAL AIR FILTRATION

CLARIVENT[®]

Next-Generation Solutions in Air Quality

Smart Operation. Low Cost. Superior Performance.



Up to 99%

particle capture rate

<68 dB(A)

operating noise level

Up to 40%

fan energy saving

10–20k m³/h

airflow capacity

ABOUT US

Engineered by Experts

Founded in 2010, ACC Mekanik began operating in HVAC, fire protection and industrial ventilation systems, providing reliable engineering solutions to a range of industrial sectors.

The oil-mist and smoke problems encountered in the foundry sector led the company to develop advanced air-quality solutions; in line with this strategic vision, a comprehensive four-year R&D programme focused on electrostatic filtration technologies was launched.

At the end of this development process, the CLARIVENT product range was designed within ACC Endustri and successfully positioned in the international market. This marked an important milestone in the company's evolution towards advanced industrial air filtration technologies.

2010

ACC Mekanik founded in Istanbul

4 years

Electrostatic filtration R&D programme

CLARIVENT

Developed within ACC Endustri, launched internationally

THE VALUE OF COOPERATION



Full-Scope Engineering Services

From site survey to CFD analysis, from manufacturing to commissioning.



Compliance Guarantee

Systems compliant with international emission and air-quality standards.



Lasting Partnership

Spare parts under warranty, scheduled service support and modular performance-upgrade solutions.



Measurable Return

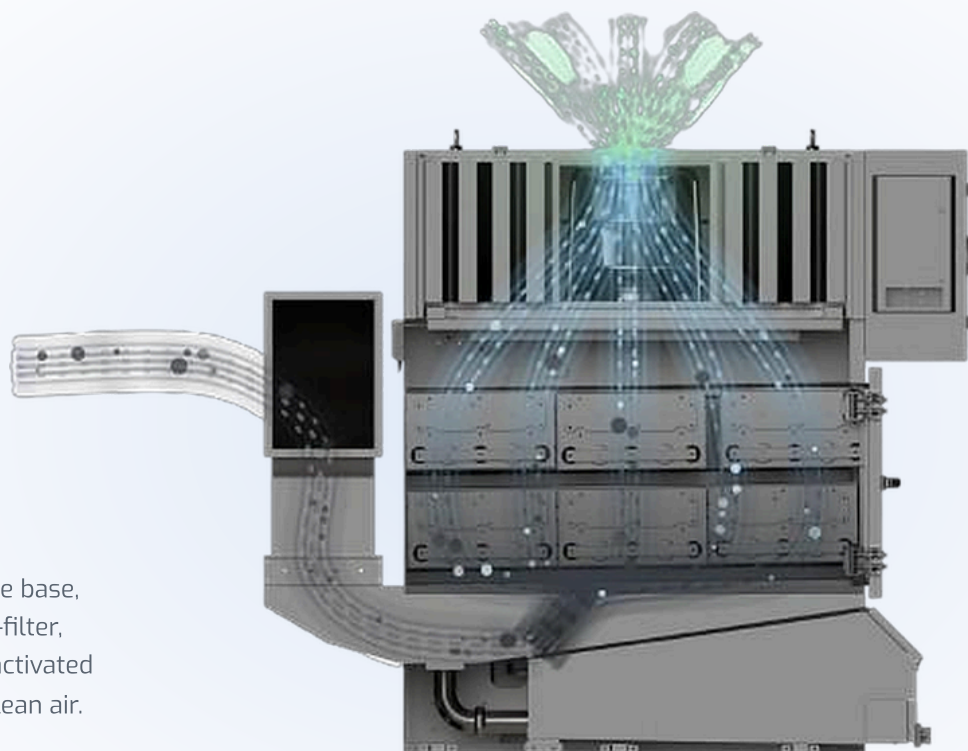
A clear payback plan backed by proven energy, maintenance and compliance savings.



PRODUCT OVERVIEW

Meet CLARIVENT®

CLARIVENT is a complete multi-stage industrial air-cleaning unit. It captures dust, oil mist and smoke, and neutralises odours and volatile organic compounds.

**AIRFLOW**

Polluted air enters at the base, passes through the pre-filter, electrostatic filter and activated carbon, and leaves as clean air.

99%**Multi-Stage Filtration**

Up to 99% particle capture with a metal pre-filter, electrostatic filter and activated carbon filtration.

40%**Energy-Saving EC Fan**

Smart EC motors reduce energy consumption by up to 40%.

68 dB(A)**Low-Noise Operation**

An acoustically insulated housing keeps noise below 68 dB(A).

**Compact Modular Design**

Maximum space efficiency on site, while the modular approach lets the system be scaled easily to your needs.

**Fire Protection**

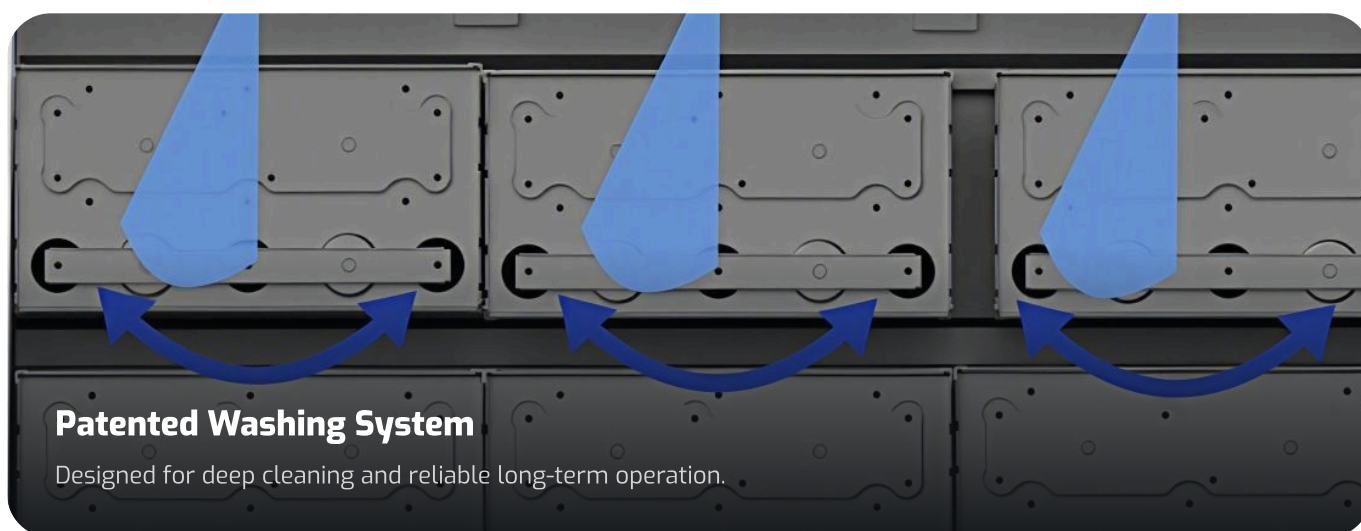
An integrated fire-protection system with fire damper and temperature sensors detects temperature rise, activates the dampers automatically and stops fire from spreading.

PRODUCT OVERVIEW

Patented Self-Washing System



Thanks to its integrated self-cleaning system, CLARIVENT automatically cleans the ESP filter cells in place. Oil, smoke and dust accumulated during filtration are dissolved and flushed out, and the cells are dried. Peak filtration efficiency is restored without removing the unit, interrupting production or replacing filters.



01

High-Performance Cleaning Pump

Delivers an efficient high-pressure water flow for cleaning the ESP cassettes.

02

High-Pressure Nozzles

Precision-engineered spray nozzles fully cover and deep-clean the collection cells.

03

Hot-Water Cleaning

Heated water improves the removal of contaminants, raising cleaning efficiency and reducing residue build-up.

04

Dedicated Cleaning Detergent

Effectively dissolves stubborn oil, grease and particle deposits without damaging ESP components.

05

Self-Washing

PLC-scheduled wash cycles restore cell efficiency and reduce downtime.

06

Automatic Water Tank Refill

Automatically renews the cleaning water to ensure optimal washing performance and hygiene.

FILTRATION TECHNOLOGIES

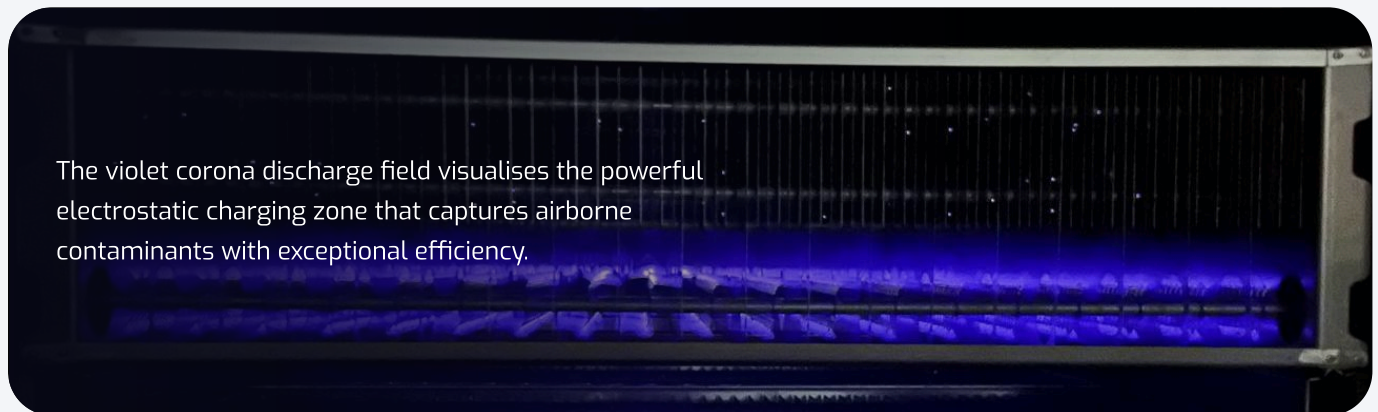
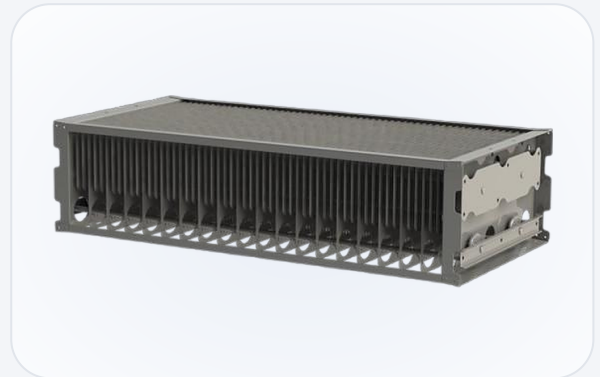
Electrostatic Filter (ESP)

95-99% Efficiency

Low Pressure Drop

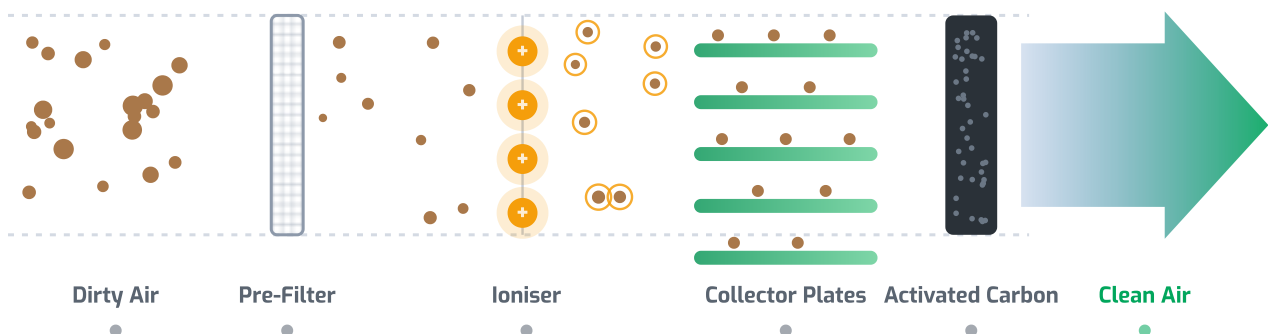
Washable Cassette

A high-voltage ionising field gives fine particles, smoke and oil mist an electrical charge. The charged particles are then drawn to oppositely charged collector plates, where they accumulate and are washed away during the automatic cleaning cycles.



The violet corona discharge field visualises the powerful electrostatic charging zone that captures airborne contaminants with exceptional efficiency.

FILTRATION PRINCIPLE



FILTRATION TECHNOLOGIES

Metal & Activated Carbon Filter

STAGE 01

Metal Mesh Pre-Filtration

Before reaching the electrostatic filter cells, air passes through a durable, multi-layer metal mesh filter that captures large oil droplets, grease particles and coarse contaminants. This extends the service life of the electrostatic filters, reduces maintenance and keeps filtration performance consistent.

Captures Coarse Particles

Protects the ESP Cell

Washable



STAGE 02 Electrostatic Filter (ESP) p. 05



STAGE 03

Activated Carbon Filter

Air passes through a deep activated-carbon bed with an immense internal surface area. Gas molecules the ESP cannot capture (odours, solvents and VOCs) adsorb onto the carbon, leaving the exhaust air clean and odour-free.

Odour Removal

Replaceable Cartridges

~1,100 m²/g surface

FIRE PROTECTION

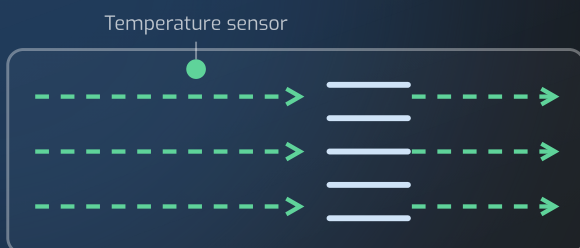
Fire Protection System

Because oil mist and dust are flammable, every CLARIVENT unit is fitted with an automatic fire damper. A thermal sensor in the airstream continuously monitors for sudden temperature rise; when one is detected, the air dampers close to seal the duct, starve the flame of air and isolate the working area from the filtration chamber.



AIR DUCT SECTION

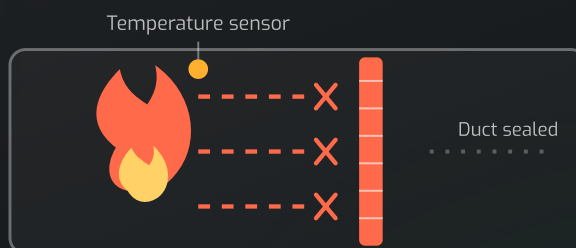
● NORMAL OPERATION



Airflow normal

Fire damper
Damper open

● FIRE DETECTED

**Fire damper**
Damper closed**Temperature Monitoring**

A temperature sensor mounted in the ventilation duct monitors air temperature and detects a fire condition.

**Instant Response**

The air dampers close immediately and the filtration system is shut down.

**Fail-Safe Design**

If power is lost the damper defaults to the closed position; protection never depends on the power supply.

**PLC Alarm and Warning**

The HMI raises an alarm, logs the event and prevents restart until reset.

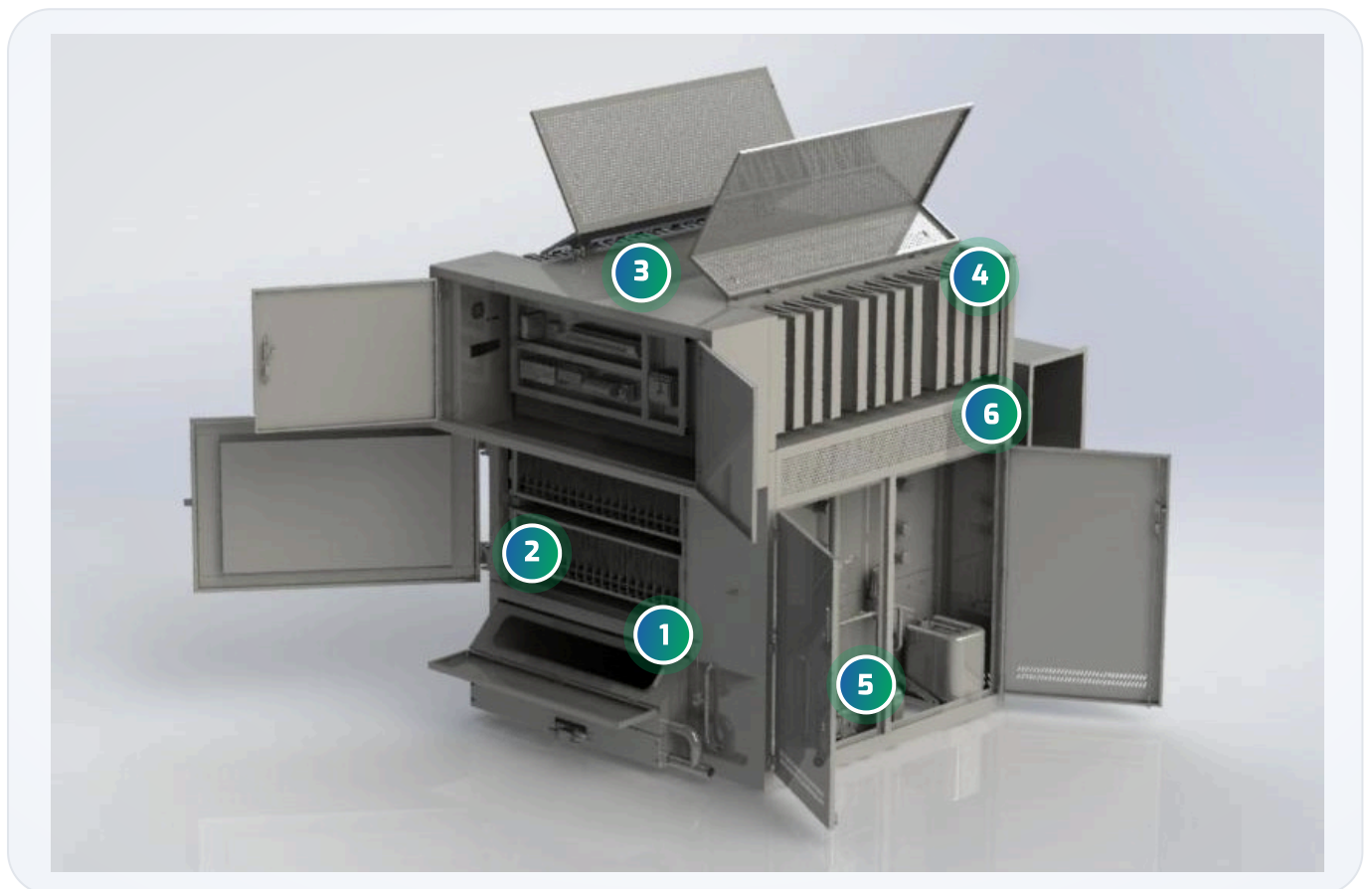


Designed in accordance with EN 16282-7 for commercial kitchen and industrial exhaust systems, and with local fire-safety regulations.

— SYSTEM DIAGRAM

Inside CLARIVENT

Polluted air enters at the base, passes through three filtration stages and leaves as clean, filtered air. Every stage is monitored and controlled by the integrated PLC.

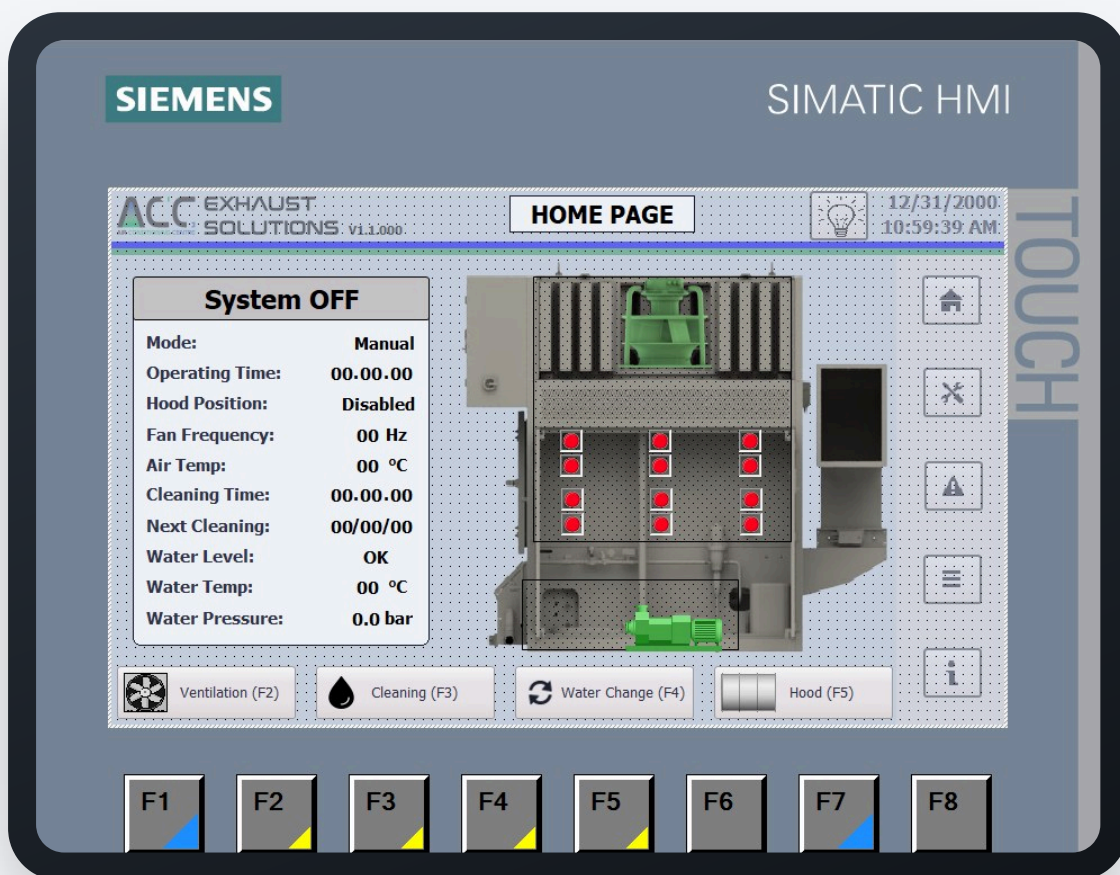


- | | | |
|--|---|--|
| <p>1 Pre-Filter Stage
Captures coarse dust and oil before fine filtration.</p> | <p>2 ESP Cassettes
The high-voltage field captures fine particles and oil mist.</p> | <p>3 EC Fan Section
The energy-saving fan draws the air through the unit.</p> |
| <p>4 Activated Carbon Filters
Absorb odours, volatile organic compounds and gaseous contaminants.</p> | <p>5 Washing System
A high-pressure water system using special cleaning chemicals for deep cleaning.</p> | <p>6 Fire Protection Dampers
Automatically detect heat rise and isolate fire zones to stop flame and smoke spreading.</p> |

— CONTROL & AUTOMATION

PLC Control & HMI Interface

The built-in PLC and touchscreen HMI turn CLARIVENT into a self-managing system that monitors performance, raises alarms and runs cleaning cycles automatically.



Automatic Operation

Start/stop, fan speed and washing are adjusted automatically.



Real-Time Monitoring

Live system tracking with temperature and pressure data on the HMI screen.



Alarm Management

Fault and failure tracking and logging.



Cleaning Schedules

Set the wash programme to clean on planned dates and times.

MODEL SPECIFICATIONS

Technical Data & Model Options

The three standard CLARIVENT models cover an airflow capacity of 10,000 to 20,000 m³/h. Custom configurations are available on request.

CLARIVENT CLV-10000

10,000 m³/h

ESP units **4**

Power **5.0 kW**

A × B × C **205×237×149**

CLARIVENT CLV-15000

15,000 m³/h

ESP units **6**

Power **8.0 kW**

A × B × C **205×237×208**

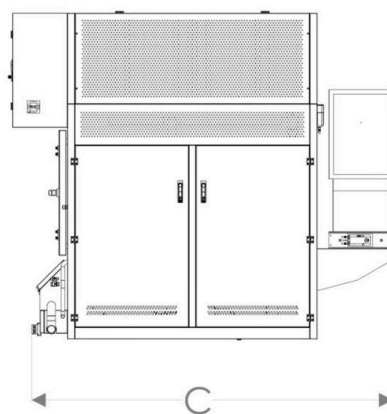
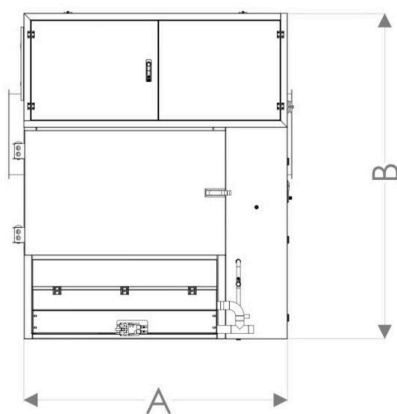
CLARIVENT CLV-20000

20,000 m³/h

ESP units **8**

Power **12.0 kW**

A × B × C **205×237×267**



Model	Airflow (m ³ /h)	ESP Units	Power (kW)	A (cm)	B (cm)	C (cm)
CLARIVENT CLV-10000	10,000	4	5.0	205	237	149
CLARIVENT CLV-15000	15,000	6	8.0	205	237	208
CLARIVENT CLV-20000	20,000	8	12.0	205	237	267

INVESTMENT & ROI

Smart Investment, Lasting Savings

Lower energy consumption, fewer filter replacements and minimal downtime typically repay a CLARIVENT investment within two years — and the savings keep coming long after.

ANNUAL SAVINGS

€48,000

Energy + maintenance

PAYBACK PERIOD

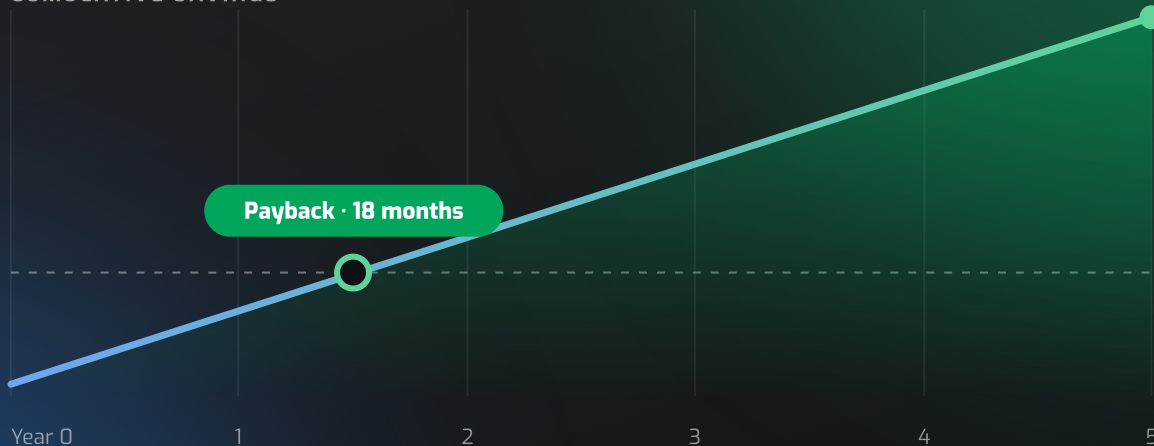
18 Mo.

average across models

5-YEAR RETURN ON
INVESTMENT**280%**

cumulative return

CUMULATIVE SAVINGS



- ✓ Up to 40% lower fan energy consumption with EC motors
- ✓ Washable ESP cells eliminate filter replacement.
- ✓ Automatic cleaning minimises production interruptions.
- ✓ Guaranteed emission compliance avoids regulatory fines.

Figures are average estimates across models; the chart is illustrative and not to scale. Contact us for a calculation specific to your plant.

CERTIFICATES

Quality & Machinery Certificates

Shaping today and tomorrow with solutions that make a difference in industrial air quality.

شهادة
CERTIFICATE
CERTIFICADO
CERTIFIKAT
認定証
CERTIFICATE
CERTIFICATE
ZERTIFIKAT

CERTIFICATE

ACC ENDÜSTRİ SAN. TİC. LTD. ŞTİ.

ADDRESS: AKÇABURG MAH. 1573. SOK. NO : 1 / 60 34318 ESENYURT / İSTANBUL / TURKEY/ 34318

QACS certify that the quality management system of the above organization has been audited and found to be in accordance with the requirements of standard detailed below

ISO 9001:2015

For The Following Scope

ISI DEĞİŞTİRİCİ BİRİMLERİN (EŞANJÖRLER) HAVA VE DİĞER GAZLARIN SIVILAŞTIRILMASINDA KULLANILAN MAKİNELERİN VE HAVA GAZLARININ FİLTRELENMESİ VE ARITILMASI İÇİN KULLANILAN MAKİNE VE CİHAZLARIN TASARIMI, İMALATI VE KURULUMU
DESIGN, MANUFACTURE AND INSTALLATION OF HEAT EXCHANGER UNITS, MACHINES USED FOR LIQUEFYING AIR AND OTHER GASES, AND MACHINES AND DEVICES USED FOR FILTERING AND PURIFYING AIR AND GASES

Certificate No. : QAIS-Q-TUR-AE-01.26.008

IAF Code: 18

*This certificate is issued in accordance with the QACS International Pvt. Ltd. auditing and Certification procedures and it is remain valid subject to annual surveillance audit.

Date of Initial certification : 11.03.2026
Certificate Issue / Reissue : 11.03.2026

*Certificate Expiry Date : 10.03.2027
Renewal Due : 10.03.2029

Note: Certificate shall be valid after surveillance, only if continuation letter by QACS is present.

QACS International Pvt. Ltd.
101 Lakshmi, Preetiway 42/04/Plots,
Indraprastha, New Delhi 110028, India
Email: info@qacsintl.com
To check the certificate validity please visit
http://www.qacsintl.com or
www.iaf-certsearch.org

QACS Accredited By:
International Accreditation Service (IAS)
3000 Saker Street Suite 100 Brea,
California 92617-1726, USA
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Welcome Board Meeting

Authorized Signatory

To check the current validity of the certificate, kindly scan the QR code and follow the link.

Disclaimer -> This certificate is issued on the basis of random on-site inspection and is not a guarantee of performance. The certificate is issued as a justification for running any type of deposit scheme. QACS will not be responsible if someone give deposit/advance based on this Systems/Product certification making misleading advertisement.

CE

AT UYGUNLUK BEYANI
EC DECLARATION OF CONFORMITY

ACC EXHAUST SOLUTIONS

DEKLARASYON SAHİBİ
Owner of Declaration

ACC MEKANİK MÜHENDİSLİK VE İNŞAAT LİMİTED ŞİRKETİ
Akçaburgaz Mahallesi. 1573. Sokak TEM 34 Esenyurt 2 No:1 İç Kapı No: 60 Esenyurt/İstanbul

ÜRETİCİ
Manufacturer

ACC MEKANİK MÜHENDİSLİK VE İNŞAAT LİMİTED ŞİRKETİ
Akçaburgaz Mahallesi. 1573. Sokak TEM 34 Esenyurt 2 No:1 İç Kapı No: 60 Esenyurt/İstanbul

ÜRÜN
Product

CLARIVENT

TIPLER / MODELLER
Types / Models

2026

GÜÇ
Power

28 kW

İlgili Yönetmelikler
Directive Applied

(2006/42/AT) Makina Emniyeti Yönetmeliği
(2006/42/EC) Machinery Directive
(2014/35/AB) BELİRLİ GERİLİM SINIRLARI İÇİN TASARLANAN ELEKTRİK EKIPIYAN İLE İLGİLİ YÖNETMELİK
(2014/35/EU) Low Voltage Directive
(2014/30/AB) ELEKTROMANYETİK UYUMLULUK YÖNETMELİĞİ
(2014/30/EU) Electromagnetic compatibility

EN ISO 12100:2010; EN 60204-1:2018; DIN EN 61000-6-4

İlgili Standartlar
Related Standards

Biz "ACC MEKANİK MÜHENDİSLİK VE İNŞAAT LİMİTED ŞİRKETİ" olarak yukarıda belirtilen ürünümüzün (2006/42/AT) Makina Emniyeti Yönetmeliği, (2014/35/AB) Belirli Gerilim Sınırları İçin Tasarlanan Elektrikli Ekipman ile ilgili AT Yönetmeliği ve (2014/30/AB) Elektromanyetik Uyumluluk ile ilgili AT Yönetmeliğine uygun olduğunu beyan ederiz.

Biz - ACC MEKANİK MÜHENDİSLİK VE İNŞAAT LİMİTED ŞİRKETİ *declares that our product mentioned above is in accordance with the Machinery Directive (2006/42/EC), the Low Voltage Directive (2014/35/EU)*

Teknik dosyayı hazırlamada yetkili olan kişinin
The person authorized to compile the technical file

İmza - Kase / Sign-Stamp

Adı Soyadı
Name & Surname

Melik TOPTAN

Unvanı / Title
General Manager (General Manager)

Tarih / Date
17.03.2026

Adres
Address

Akçaburgaz Mahallesi. 1573. Sokak TEM 34 Esenyurt 2 No:1 İç Kapı No: 60 Esenyurt/İstanbul

ISO 9001:2015

Quality Management System Certificate

QACS International · Valid until 10.03.2027

CE

EC Declaration of Conformity – CLARIVENT

2006/42/EC · 2014/35/EU · 2014/30/EU



Designed to standards and directives

Complies with EN ISO 12100:2010 · EN 60204-1:2018 · DIN EN 61000-6-4; declaration of conformity with the Machinery, Low Voltage and Electromagnetic Compatibility directives.

— FOR A CLEANER FUTURE

We Provide Clean and Safe Working Environments.



CLARIVENT® Industrial Air Filtration Systems



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Open the digital catalogue

www.accmekanik.com/en/clarivent.html