

Nordfab Electrostatic Precipitators

ESP (STANDARD)

Description

An electrostatic precipitator is a filtration device that removes fine particles, like dust and smoke, from a flowing gas using the force of an induced electrostatic charge minimally impeding the flow of gases through the unit.

Features

- Intelligent power control system
- Single pass achieves up to 95% efficiency
- Double pass achieves up to 99% efficiency
- Capture up to 40% of odours
- Pre filter
- Modular design
- Easy cleaning
- When the door is opened the power is cut
- Protection for current, voltage and temperature
- Eco-friendly
- Typical lifespan over 5 years

Construction

Mild steel with power coated finish. Optional Stainless steel 304 or 316.

Electrical

Input: 190-250VAC 50Hz (60hz) 1 Phase
 Output (Ionizer) (high voltage): 12-14 kV
 Output (Collector) (low voltage): 6-7kV Max 18kV
 Output Current : 15 mA - 75 mA
 100% solid state

Temperature rating

Airflow through cells: -10°C min, 230°C max
 Collector cell: 40-50°C warm water washing or drying
 Ambient humidity: 20-90%

Collector cells

Cell: 540 x 320 x 510 mm (L x W x H)
 Collection Area: 4.655 m²
 Collection plates: 49 units (Aluminium)
 Ionizer Wires: 8 wires per cell, 0.252 mm dia, stainless steel 201

Applications

Restaurants, Cafes, Fast food outlets, Commercial kitchens, Hotels, General HVAC air purification

Options

Stainless steel construction
 Activated carbon modules
 UV-C

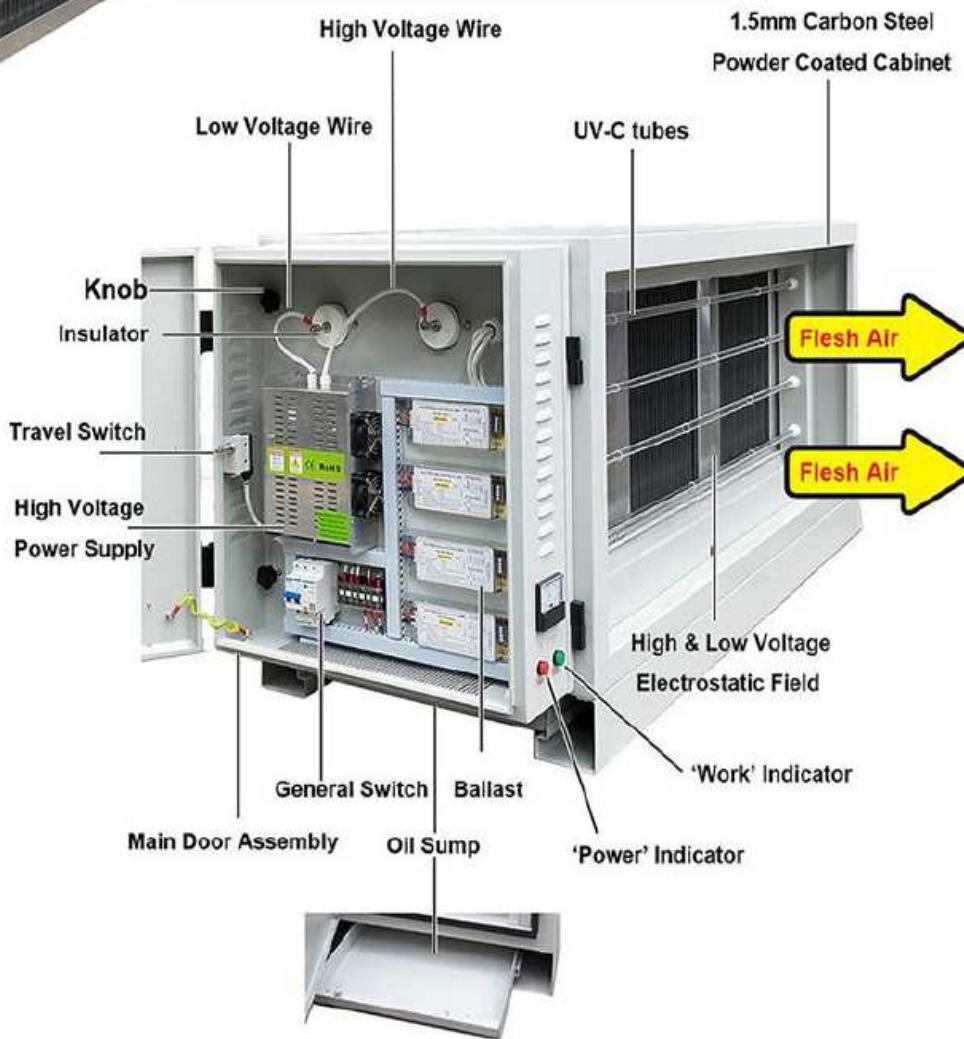


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Low Voltage Collector Area



High Voltage Ioniser Area



Stainless Steel Ioniser Blade



Ceramic Insulator

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Single pass

Model	Airflow (m ³ /h) (max)	Dimensions L x W x H (mm)	Flange size W x H (mm)	Efficiency (%)	Pressure drop (Pa)	Power (W)	Voltage (V) / Frequency (Hz)	Weight (kg)
ESP-S-1	2,500	640x765x690	485x530	95	<100	120	240/50	60
ESP-S-2	5,000	640x1300x690	1020x530	95	<100	220	240/50	94
ESP-S-3	7,500	640x1836x690	1560x530	95	<100	320	240/50	122
ESP-S-4	10,000	640x1300x1380	1020x1220	95	<100	440	240/50	188
ESP-S-6	15,000	640x1835x1380	1560x1220	95	<100	640	240/50	244
ESP-S-9	22,500	640x1835x2070	1560x1950	95	<100	960	240/50	366

Double pass

Model	Airflow (m ³ /h)	Dimensions L x W x H (mm)	Flange size W x H (mm)	Efficiency (%)	Pressure drop (Pa)	Power (W)	Voltage (V) / Frequency (Hz)	Weight (kg)
ESP-D-1	2,500	1060x765x690	485x530	99	<100	240	240/50	120
ESP-D-2	5,000	1060x1300x690	1020x530	99	<100	440	240/50	188
ESP-D-3	7,500	1060x1836x690	1560x530	99	<100	640	240/50	244
ESP-D-4	10,000	1060x1300x1380	1020x1220	99	<100	880	240/50	376
ESP-D-6	15,000	1060x1835x1380	1560x1220	99	<100	1280	240/50	488
ESP-D-9	22,500	1060x1835x2070	1560x1950	99	<100	1920	240/50	732



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ESP (AUTOWASH)

Description

Self cleaning system ideal for when the ESP units are installed in hard to access areas and when regular cleaning is required.

Features

- Cleaning solution tank
- Pump
- Water heater
- Detergent injection
- High performance water spray nozzles
- Time programmable

Construction

Stainless steel 304 (standard)



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ESP (AUTOWASH)

Single pass (Autowash)

Model	Airflow (m ³ /h)	Dimensions L x W x H (mm)	Flange size W x H (mm)	Efficiency (%)	Pressure drop (Pa)	Power (W)	Voltage (V) / Frequency (Hz)
ESP-S-1-A	2,500	640x765x690	485x530	95	<100	120	240/50
ESP-S-2-A	5,000	640x1300x690	1020x530	95	<100	220	240/50
ESP-S-3-A	7,500	640x1836x690	1560x530	95	<100	320	240/50
ESP-S-4-A	10,000	640x1300x1380	1020x1220	95	<100	440	240/50
ESP-S-6-A	15,000	640x1835x1380	1560x1220	95	<100	640	240/50
ESP-S-9-A	22,500	640x1835x2070	1560x1950	95	<100	960	240/50

Double pass (Autowash)

Model	Airflow (m ³ /h)	Dimensions L x W x H (mm)	Flange size W x H (mm)	Efficiency (%)	Pressure drop (Pa)	Power (W)	Voltage (V) / Frequency (Hz)
ESP-D-1-A	2,500	1060x765x690	485x530	99	<100	240	240/50
ESP-D-2-A	5,000	1060x1300x690	1020x530	99	<100	440	240/50
ESP-D-3-A	7,500	1060x1836x690	1560x530	99	<100	640	240/50
ESP-D-4-A	10,000	1060x1300x1380	1020x1220	99	<100	880	240/50
ESP-D-6-A	15,000	1060x1835x1380	1560x1220	99	<100	1280	240/50
ESP-D-9-A	22,500	1060x1835x2070	1560x1950	99	<100	1920	240/50



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ACTIVATED CARBON

Description

The activated carbon filter is designed to remove odour.

Features

- Pellet diameter: 4 mm
- Iodine value: 550 mg/g
- Filling density: 630-650 g/L
- Moisture content: <10%
- Ash Content: <13%
- Hardness: >93%
- Apparent density: approx 0.49
- Life-span: 3-5 months

Construction

Mild steel with power coated finish. Optional Stainless steel 304 or 316.



Model	Airflow (m ³ /h) (max)	Dimensions L x W x H (mm)	Flange size W x H (mm)	Pressure drop (Pa)	Weight (kg)
C-ESP-1	2,500	640x615x690	485x530	100	45
C-ESP-2	5,000	640x1150x690	1020x530	100	85
C-ESP-3	7,500	640x1690x690	1560x530	100	125
C-ESP-4	10,000	640x1150x1380	1020x1220	100	45
C-ESP-6	15,000	640x1690x1380	1560x1220	100	85
C-ESP-9	22,500	640x1690x2070	1560x1950	100	125