KIST + ESCHERICH

ESUC 201/202/401/402

Filter, suction and supply unit (performance class 2400 – 3400 m³/h)

Key Facts

- ✓ **Output air suction and filtering**
- ✓ **Control of cleaning equipment**
- ✓ **Power supply for ionisation**
- ✓ **Compressed air preparation and control**
- ✓ **Monitoring and signal output**

Product Description

The ESUC 201/401 and ESUC 202/402 have been developed exclusively for use with KIST + ESCHERICH surface cleaning devices. These class 3 power supply units are equipped with high-quality compact filters to efficiently clean output air laden with low to medium particle volumes.

- ESUC 201/401 features a single-stage filter system.
- ESUC 202/402 is equipped with a two-stage filter system that facilitates even more thorough filtration.

The contaminated air is either emitted into the environment or discharged via an external output air system.

In addition to the pure filter function, the units take care of the comprehensive control and monitoring of any connected cleaning devices as well as integrated components such as the suction fan and the HV power supply. An optimal cleaning process can be guaranteed thanks to the individually adjustable parameters for the compressed air supply and suction strength.

External components, such as ionisers or flow monitors, are also integrated into the monitoring concept. The automatic signalling system – alerting via signal lamps – ensures fast error identification. Integration into remote machine controls is possible, with the option of a PLC control and bus connection to be realised as well.

Technical Data

ESUC 201/202/401/402 Standard

	ESUC 201	ESUC 202	ESUC 401	ESUC 402
Variants	Standard	Standard	Standard	Standard
Volume flow (max.)	2360 m³/h	2360 m³/h	3350 m³/h	3350 m³/h
Number of possible filter stages	1	2	1	2
Operating voltage	3x 400 V, PE, N	3x 400 V, PE, N	3x 400 V, PE, N	3x 400 V, PE, N
Frequency	50 Hz	50 Hz	50 Hz	50 Hz
Rated power	4.2–10.2 kVA	4.2–10.2 kVA	6.8–12.9 kVA	6.8–12.9 kVA
Rated current (max.)	6.0-14.8 A	6.0-14.8 A	9.8-18.6 A	9.8-18.6 A
Pre-fuse	16 A	16 A	20/25 A	20/25 A
Diameter of the suction port	1x DN150	1x DN150	2x DN150	2x DN150
	2x DN150	2x DN150	3x DN110	3x DN110
	3x DN110	3x DN110	1x DN200	1x DN200
	1x DN200	1x DN200	2x DN200	2x DN200
	2x DN200	2x DN200		
Diameter of the output air port	1x DN150	1x DN150	1x DN200	1x DN200
	1x DN200	1x DN200		
Pressure difference (max.)	2880 Pa	2880 Pa	3400 Pa	3400 Pa
Compressed Air Quality	factory, oil-free, dry	factory, oil-free, dry	factory, oil-free, dry	factory, oil-free, dry
Operating air pressure input	max. 8 bar	max. 8 bar	max. 8 bar	max. 8 bar
Ambient temperature (min. – max.)	5 – 40 °C	5 – 40 °C	5 – 40 °C	5 – 40 °C
Weight	250 kg	290 kg	275 kg	315 kg
Degree of protection for control cabinet	IP54	IP54	IP54	IP54

ESUC 201/202/401/402 ESD

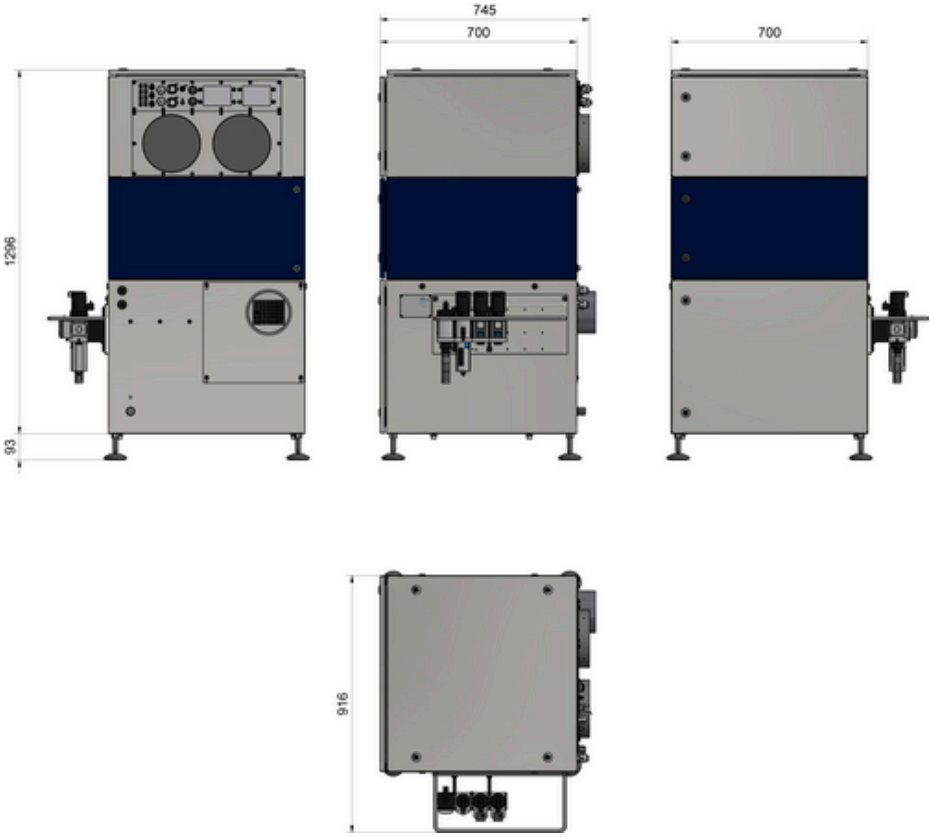
	ESUC 201 ESD	ESUC 202 ESD	ESUC 401 ESD	ESUC 402 ESD
Variants	ESD applications	ESD applications	ESD applications	ESD applications
Volume flow (max.)	2360 m^3/h	2360 m^3/h	3350 m^3/h	3350 m^3/h
Number of possible filter stages	1	2	1	2
Operating voltage	3x 400 V, PE, N	3x 400 V, PE, N	3x 400 V, PE, N	3x 400 V, PE, N
Frequency	50 Hz	50 Hz	50 Hz	50 Hz
Rated power	4.2–10.2 kVA	4.2–10.2 kVA	6.8–12.9 kVA	6.8–12.9 kVA
Rated current (max.)	6.0-14.8 A	6.0-14.8 A	9.8-18.6 A	9.8-18.6 A
Pre-fuse	16 A	16 A	20/25 A	20/25 A
Diameter of the suction port	1x DN150	1x DN150	2x DN150	2x DN150
	2x DN150	2x DN150	3x DN110	3x DN110
	3x DN110	3x DN110	1x DN200	1x DN200
	1x DN200	1x DN200	2x DN200	2x DN200
	2x DN200	2x DN200		
Diameter of the output air port	1x DN150	1x DN150	1x DN200	1x DN200
	1x DN200	1x DN200		
Pressure difference (max.)	2880 Pa	2880 Pa	3400 Pa	3400 Pa
Compressed Air Quality	factory, oil-free, dry	factory, oil-free, dry	factory, oil-free, dry	factory, oil-free, dry
Operating air pressure input	max. 8 bar	max. 8 bar	max. 8 bar	max. 8 bar
Ambient temperature (min. – max.)	5 – 40 °C	5 – 40 °C	5 – 40 °C	5 – 40 °C
Weight	250 kg	290 kg	275 kg	315 kg
Degree of protection for control cabinet	IP54	IP54	IP54	IP54

Notes:

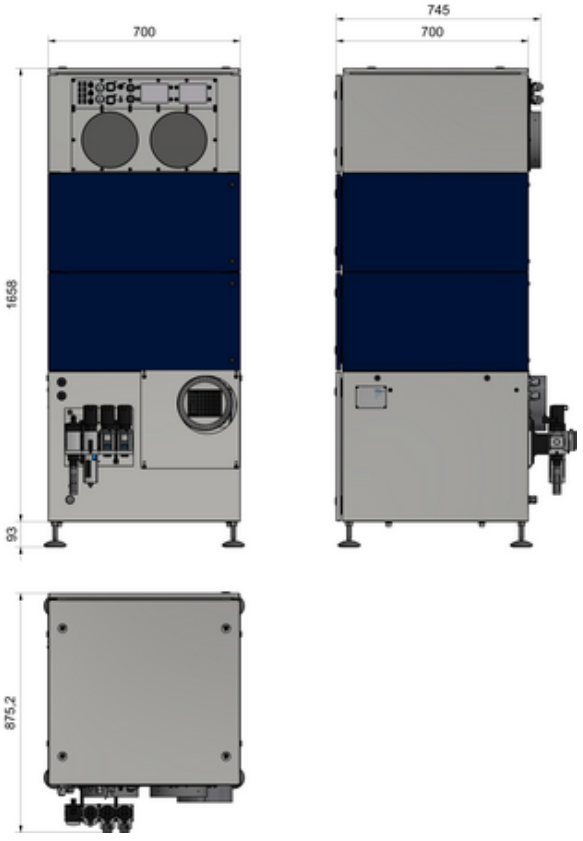
- The maximum volume flow rate and maximum pressure difference are the fan characteristic values in suction mode, free-blowing.
- The rated power and rated current as well as the weight vary depending on the equipment.
- The stated weight refers to a variant without added options.

Technical Drawings

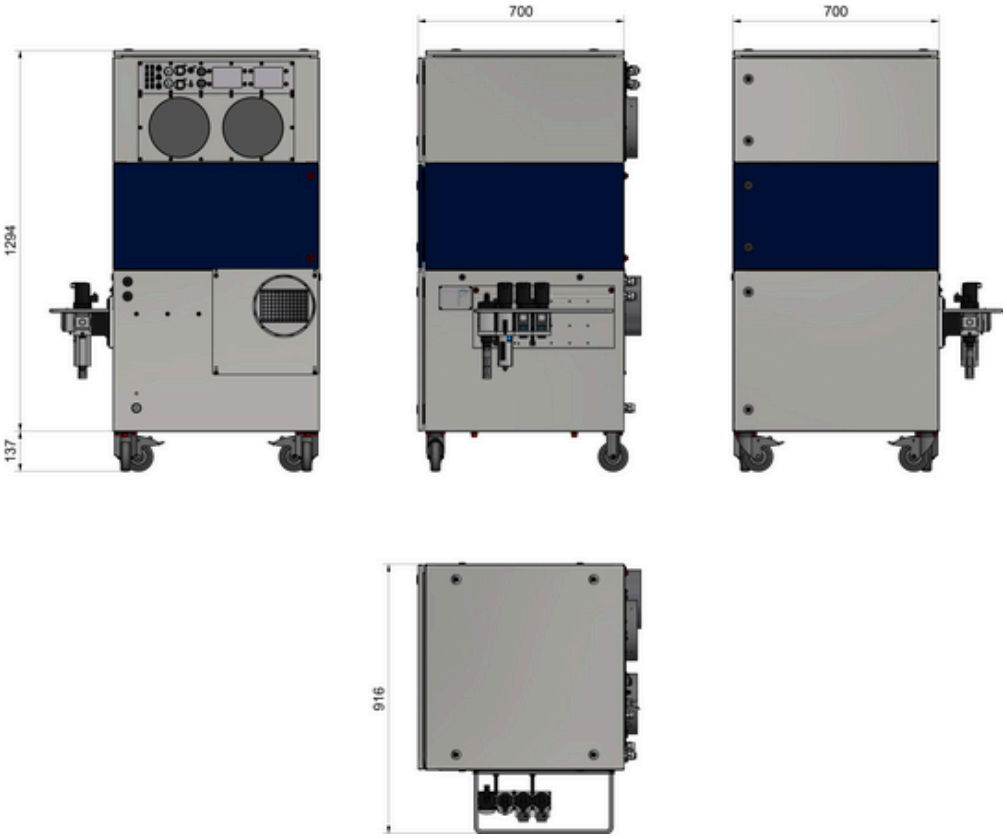
ESUC 201



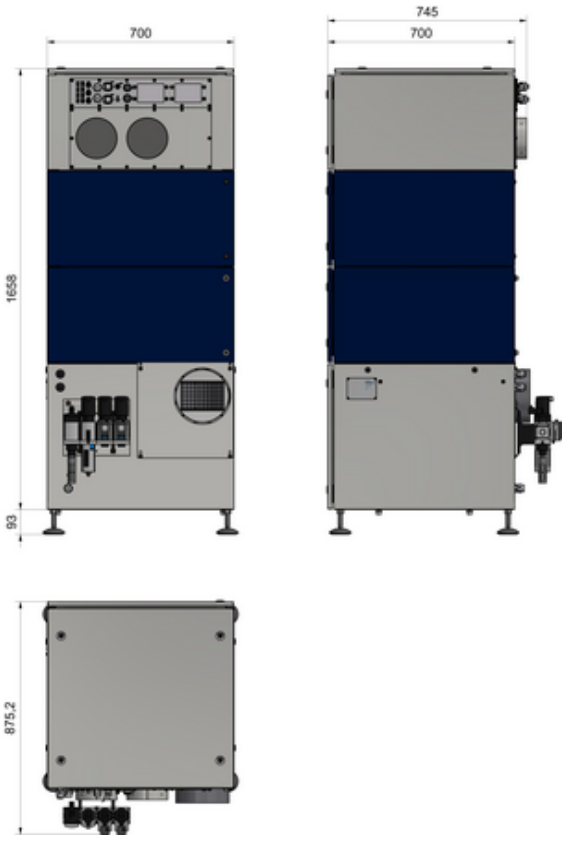
ESUC 202



ESUC 401



ESUC 402



Options

- Compressed Air Preparation and Control
- HV power supply and monitoring for AC ionisation systems
- Power supply and monitoring for DC or ESD ionisation systems
- Control of switched cleaning
- Control and monitoring of cleaning systems with movement
- Control of ROTORCLEAN cleaning systems
- Settings of the suction strength (rev speed setting) of the fan
- Extended monitoring of system parameters (operating pressure, volume flow, rev speed of rotating nozzles)
- Connection to external systems via Profibus/Profinet
- Silencer to reduce noise emissions
- Touch panel for setting system parameters and individual error messages on the suction device directly

Related Products

Accessories filter

Accessories for output air components

Accessories for suction hoses

ALM

Volume flow monitoring in the suction line

ALBY

Bypass to divert airflow for reduced turbulence

AL2V

2-way distributor for controlling the alternating operation of two cleaning devices on one suction device