

## POWER UNIT 300 P

The POWER UNIT 300 P is an approved clean-air dust extractor in a self-supporting sheet metal construction made from coloured powdered sheet steel. The device conforms to the most recent regulations, is certified with the BG–GS test seal, in accordance with GS-HO-07 (with endorsement for residual dust concentration test seal H3) and, thus, it can be directly installed in the workroom without additional fire or explosion protection measures. Therefore, it provides an ideal production condition with healthy air at the workplace.



It is also suitable for use in workshops with a utilization factor of 2-4 machines (dependent on the required volume-flow), as well as to supplement a stationary plant as local extraction for universal application with different materials. The small external dimensions also allow the dust extractor to be installed in confined workshops.

The integrated pre-separator protects the filter bags from direct impact and achieves a high degree of pre-separation through decompression of the airflow. Thus, the greatly reduced impact on the filter significantly increases the endurance and service life of the filter bags. The available bypass apertures are to generate additional circulation of air, in order to prevent blinding the filter against the filter retaining plate.

The fan, on the clean-air side, is in a flow-optimized housing. The well conceived design of the aluminium impeller with rearward facing curved vanes attains the highest operational effects. As necessary, using the convenient CEE plug with phase changing switch, the direction of rotation can be changed with one movement of the hand. The motor is in the return airflow and cased in a soundproofed cover.

Besides manual switching on, the PLC controller, installed in the device housing, also has an option for connection to automatic ON / OFF – switching, using a potential-free contact of a machine. Cleaning of the filter is carried out automatically after the fan is switched off. During extraction, cleaning is started if the maximum permitted filter differential pressure is exceeded. It is possible to manually start this procedure at any time using a switch on the device. In addition, a further control option can also be used here. When using the machine recognition with slide-valve control (accessory), activation can be carried out via a Potential-Free Contact (PFC) or transducer coils. The switching on threshold for the transducer coil and lag time is adjustable for each machine. The machine recognition with slide-valve control has a so-called bypass control, which also automatically opens one or more valves if the minimum volume-flow is not attained. It is possible to activate electropneumatic or electromotive valves using 24V control voltage.

With the integrated extinguishing facility, with liquid tank, the dust extractor is not dependent on a water supply. Activation of an extinguishing procedure is automatic, controlled by a temperature sensor.

However, it can also be manually activated using the pushbutton on the operating panel of the device control, adjacent to the indicator light.

The bag filters used, with internal metal spiral support, have a calendered, surface-treated filter material which is electroconductive, has the BIA certificate and conforms to Category M. Furthermore, the filter can be washed up to 3 times, which greatly increases the service life. The external application selected prevents congestion in the inside of the filter. The easily removed cover permits good access to the whole filter on the clean-air side for maintenance tasks.

For regeneration of the filter the proven AL-KO Opti JET procedure is used that ensures low contents of residual dust, as in stationary plant engineering. The compressed air required is stored in its own internal compressed air tank, specially adapted and authorized. Cleaning is carried out using compressed-air impact pulses that clean the filter internally and externally (opposite to the filter impact direction). If there is heavier contamination, the resulting mechanical deformation of the filter generated optimizes the degree of regeneration.

The extracted swarf and dust collects in the swarf sack in the container, for dust-free removal. The filling container, on rollers, makes it considerably easier to transport the material stored to the disposal location. After emptying or replacing the swarf sack, the filling container is again locked, using a generously dimensioned handle, operated from the front. Thereby, the container will be coupled tubeless to the vacuum system via two connection points.

The device is delivered ready to plug-in, only the swarf sack must be installed. With relatively low assembly effort, the direction of extraction of the filling container can be changed. A retrofit is also possible for the disposal modification, such as briquette press or rotary feeder.

Ex-factory pre-assembled

## **Accessories POWER UNIT 300 P:**

- Swarf sacks
- External switching cabinet
- Machine recognition with slide-valve control 24V up to 4 machines
- Frequency inverter with pressure control
- Space increase for expansion
- BP-Transportation tube
- PUR- Spiral hose
- Fill level monitoring using ultrasonic sensor

## Technical data POWER UNIT 300 P:

• Intake connection	300mm
• Motor rating	7,5 kW; 400 V/50 Hz
• max. volume-flow	6000 m <sup>3</sup> /h
• Rated volume-flow at the connection at 20 m/s	5089 m <sup>3</sup> /h
• Vacuum at the connection at 20 m/s	2280 Pa
• Filter area	30 m <sup>2</sup>
• Filter material	Kat. M, el, <b>weiß waschbar</b> (90 piece)
• Impact on filter	169 m <sup>3</sup> /m <sup>2</sup> /h
• max. noise level	76 dB(A)
• Residual dust content	H3 /<0,1 mg/m <sup>3</sup> )
• Swarf collection volume	500 Liter
• Basic controls	Micro SPS-Logo Siemens
• Electrical connections	5m <b>Anschlusskabel mit CEE-Stecker</b> 5 polig, 32 A, <b>mit Phasenwender</b>
• Compressed air supply	<b>½" Normstecker mit Wartungseinheit</b>
• Dimensions ( L x W x H)	2963 x 1004 x 2346
• Weight	kg
• Design / Control side	choice right / left