The air purifiers

Extraction unit type LFE 301 for laser application



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Product No.: 97310301015

Description

Extraction unit type LFE 301 for laser application

The mobile LFE 301 filter unit has been specially designed for use in environments in which it is necessary to extract fumes and particulate matter that are generated due to cleaning or laser cutting.

The process air is first taken into the LSE's rear-mounted suction housing and is channelled to the filter compartment via a baffle plate. In the first filter stage, the inlet air passes through three filter cartridges which separate out the fumes and dusts using the surface filtration principle. The filter cartridges are cleaned fully automatically by compressed air depending on their level of contamination. Please note that a compressed air connection is required.

The removed dust particles arrive in a dust collecting tank below the filter cartridges. The dust collecting tank can be easily removed via a service door for emptying.

In the second filter stage, the air stream is guided through a cassette that is filled with an activated carbon granulate. This filter stage possesses a very large filter surface for the absorption of gases and odours.

The unit's final filter stage consists of a HEPA disposable filter that removes any remaining fine particles. An automatic filter monitoring system indicates when it is necessary to change the filter cartridges or the HEPA final stage.

The suction device is equipped with powerful high-pressure turbines that can be continuously adjusted to increase or reduce the suction power. All the operating states can be output or set by the display.

In addition, the LFE unit is also equipped with a particle sensor in the pneumatic area in order to detect any potential filter breakthroughs and shut down the unit automatically in the event of an emergency.

The LFE is equipped with a Harting interface as standard, making it possible to control the unit externally, e.g. via laser.

Standard equipment:
- 3 x nanofilter cartridges, each with a filter surface area of 2.7 m²
- Activated carbon cassette filled with 7 kg of granulate
- H13 HEPA final stage
- Particle sensor
- Harting industrial interface for external control

Properties

Blower type:	Continuous-flow turbine, single-stage
Control interface:	Harting
Interface description:	Pin 1&2: start-stop, Pin 3: ext. voltage input, Pin 4: ext. fault signal, Pin 5: ext. operation signal, PE=GND
Main filter quantity:	3
Volumetric flow (m³/h):	400
max. pressure (Pa):	7,500
Engine power (kW):	2 × 0.6
Supply voltage (V):	115
Connection frequency (Hz):	50/60
Current consumption (A):	1.1
Automatic cleaning:	Yes

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Properties

Filter control:	Siemens (S7 + LOGO)
Pre-filter:	deflector plate
main filter:	filter cartridge
Filter class:	Dust class M (in accordance with DIN EN 60335-2-69)
Cartridges number:	3
Filter surface (m²):	2.7
final filter:	H13 and activated carbon cartridge
Ansaugstutzen (mm):	LFE intake housing
Ausblas:	through the vent openings in the sound-absorbing baffle
Sound level (dB(A)):	68 – in accordance with DIN EN ISO 3744
Weight (kg):	168
Width (mm):	751
Depth (mm):	400
Height (mm):	1,590
Colour:	RAL 9010

Replacement parts



Activated carbon filter 337 x 230 x 212 mm
Product No.: 97059



Hepa filter H13, size 337 x 230 x 100 mm
Product No.: 100350004



Ulpa filter U16, size 337 x 230 x 100 mm
Product No.: 100350005

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Activated carbon 7,5 kg for LFE unit
Product No.: 100197310



Macrofalt filter G3, 62x62x48mm,
Product No.: 100350008



Filter cartridge, Type easy clean nano
Product No.: 6160600302708



Spare filter mat for Rittal-exhaust fan
Product No.: 5020007079

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