The air purifiers

# Extraction unit type LFE 301 for ST1 dust MIE>10mJ






**TEKA Absaug- und Entsorgungstechnologie GmbH** · Millenkamp 9 · 48653 Coesfeld
Tel.: +49 2541 / 84841-0 · Fax: +49 2541 / 84841-72 · Mail: info@teka.eu · Web: www.teka.eu

Product No.: 9731030201524

## Description

# Extraction unit type LFE 301 for ST1 dust MIE>10mJ

The **TEKA LFE 301** is a mobile cartridge filter unit for laser applications with increased dust generation and is designed for continuous operation. It extracts fumes and fine dust produced during laser engraving, cleaning or cutting. This special version of the LFE 301 has an ignition-source-free design for St 1 dusts. It is fitted with antistatic filter cartridges and solenoid valves to ATEX 3D (zone 22), and the unit is fully earthed.

### At a glance

- **Filtration:** baffle plate, three cleanable filter cartridges, activated carbon, HEPA H13 final stage
- **Cleaning:** fully automatic with compressed air, depending on contamination
- **Safety:** particle sensor detects filter breakthroughs and switches off
- **Integration:** Harting interface for control by the laser

### Your benefits

- **Stable operation:** While one of the three filter cartridges is being cleaned, the other two continue to extract.
- **Surface filtration:** The easy clean nano cartridges hold the particles on the surface, so they do not penetrate the filter material. No initial precoating is needed.
- **Particles, gases and odours:** After the cartridges, an activated carbon cassette absorbs gases and odours, and the HEPA final stage separates the last fine particles.
- **Easy maintenance:** The cleaned-off particles fall into a dust collection tray that can be removed through a maintenance door. The filter monitoring shows when a change is needed.
- **Operation:** The Siemens S7 control is located in the lid at operating height. The display lets you adjust the suction power continuously.
- **Quiet operation:** The design with separate exhaust air routing reduces the noise level.

### Important

A compressed air connection is required for cleaning.

### Options

Intake housing in three versions (one of your choice included), spark trap, shut-off valve, exhaust air spigot, automatic dosing unit and, as final stage, an optional ULPA U16 filter.

The operating instructions are available in the Downloads tab. Our overview page shows more systems for laser fume extraction.

## Properties

| | |
|---|---|
| **Blower type:** | Continuous-flow turbine, single-stage |
| **Control interface:** | Harting |
| **Interface description:** | Pin 1&2=Start-stop Pin 3&4=Collective fault signal (NO contact) Pin 5&6=Operation control Pin 7&8=Not assigned Pin 9=Ground (GND) |
| **Main filter quantity:** | 3 |
| **Volumetric flow (m³/h):** | 500 |
| **max. pressure (Pa):** | 11,000 |
| **Engine power (kW):** | 2 |
| **Supply voltage (V):** | 230 |



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## Properties

| | |
|---|---|
| **Connection frequency (Hz):** | 60/50 |
| **Current consumption (A):** | 1.4 |
| **Automatic cleaning:** | Yes |
| **Filter control:** | Siemens (S7 + LOGO) |
| **Pre-filter:** | deflector plate |
| **Vorfilter:** | 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 |
| **Ausblas:** | through the vent openings in the sound-absorbing baffle |
| **Weight (kg):** | 168 |
| **Width (mm):** | 751 |
| **Depth (mm):** | 400 |
| **Height (mm):** | 1,590 |
| **Colour:** | RAL 7035 |
| **Ausführung:** | anti-static |

## 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



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



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