

3D PRINTING • ELECTRIC • ATEX II 1/3D • ZONE 20 (INTERNAL) / ZONE 22 (EXTERNAL)

C-10 EX (4W)

Electric ATEX vacuum cleaner for combustible plastic powder from 3D printing with the highest internal tank protection available: Zone 20 inside the collection tank, Zone 22 externally. Four individually tested HEPA H14 filters. ATEX and IECEx certified by LCIE.

- ATEX II 1/3D — Zone 20 internal tank • Zone 22 external • LCIE, NB 0081
- IECEx certified — IECEx LCIE 15.0048 • internationally recognised
- 4× HEPA H14 — 99.99 % at 0.3 µm • individually factory tested • EN 17348:2022
- ESD safe — conductive cloth filter and conductive accessories included
- Stainless steel SAE 430 tank • SAE 304 available as option
- Bypass motor 1.2 kW • 194 m³/h • brushless motor available



Tiger-Vac C-10 EX (4W) — electric ATEX vacuum cleaner for combustible plastic powder from 3D printing

ATEX 2014/34/EU — II 1/3D • Zone 20 (internal) / Zone 22 (external) • LCIE 15 ATEX 3061 • IECEx LCIE 15.0048 • HEPA H14 — EN 17348:2022 • EN ISO 80079-36/37:2016 • EN IEC 60079-0:2018

Quick facts	
ATEX	II 1/3D
Zones	Zone 20 (internal) / Zone 22
Certification	ATEX + IECEx (LCIE, NB 0081)
Filter	4× HEPA H14
Filter efficiency	99.99 %
Airflow	194 m³/h
Vacuum pressure	2504 mmH ₂ O
Motor type	2-stage bypass
Power	1.2 kW
Noise level	72 dB(A)
Bag capacity	19 L
Weight	24 kg
Tank	SAE 430 (SAE 304 optional)

Zone 20 internally — the highest protection class for the collection tank

The C-10 EX (4W) is Tiger-Vac's electric ATEX vacuum cleaner for 3D printing environments handling combustible plastic powder, and it stands apart through a distinctive dual classification: II 1/3D. This means the unit is certified for Zone 22 externally — the standard requirement for ATEX vacuum cleaners in production environments — but in addition, the construction provides Zone 20 protection inside the collection tank. Zone 20 is the most stringent dust classification, covering areas where an explosive dust cloud is present continuously or for long periods. Inside a vacuum cleaner collecting combustible powder, that is precisely the condition that

applies — and the C-10 EX is built accordingly.

The unit is 3rd party certified by LCIE (NB 0081) with both ATEX certificate LCIE 15 ATEX 3061 and IECEx certificate IECEx LCIE 15.0048. The IECEx certification is the international certificate recognised in over 30 countries beyond the EU — including Norway, Switzerland, Australia, South Africa and many countries in the Middle East and Asia. For companies procuring centrally for facilities in multiple countries, or trading with international partners who require ATEX documentation, this is a significant advantage.

4 HEPA H14 filters — covering both working air and cooling air

What truly distinguishes the C-10 EX from conventional ATEX vacuum cleaners is the filtration system. While most models have one or two HEPA filters on the exhaust side, the C-10 EX has four HEPA H14 filters positioned so that both the working air and the motor cooling air are filtered through HEPA on both inlet and outlet. No air passes through the motor without passing through a HEPA filter — in either direction. All four filters are individually factory tested before dispatch.

Before reaching the HEPA filters, dust first encounters the conductive cloth filter with support cage, which captures coarse particles and protects the HEPA elements. The conductive disposable bag (19 L) collects the material and can be changed hygienically without contact with the powder. A conductive poly liner (40 L) is included as a secondary containment barrier. The filter blockage indicator on the motor unit signals when the bag is approaching capacity.

Technical specifications

Parameter	Value
ATEX marking	II 1/3D — External: Ex h tc IIIC T200°C Dc IP6X • Internal: Ex h IIIC T200°C Da
ATEX zones	Zone 22 external (Cat. 3D) • Zone 20 internal tank (Cat. 1D)
Certification	LCIE 15 ATEX 3061 (ATEX) • IECEx LCIE 15.0048 • 3rd party (LCIE, NB 0081)
Harmonised standard	EN 17348:2022 (combustible dust)
Filter class	HEPA H14 (EN 1822) — 99.99 % at 0.3 µm
Number of HEPA filters	4 pcs. — individually factory tested
Primary filter	Conductive cloth filter with support cage (SD)
Motor type	2-stage heavy duty bypass
Power	1.2 kW / 1200 W
Voltage	220–240 V, 50/60 Hz, single phase
Current	5 A
Airflow	194 m³/h
Vacuum pressure	2504 mmH ₂ O
Noise level	72 dB(A)
Suction inlet	Ø60 mm
Recovery bag capacity	19 L (conductive disposable bag — included)
Wheel system	4-wheel dolly
Dimensions	H 93 × W 43 × L 43 cm
Weight	24 kg (27 kg with SAE 304 tank)
Cord length	10.6 m

Parameter	Value
Tank (standard)	Stainless steel SAE 430
Tank (option)	Stainless steel SAE 304
ESD safe	Yes — conductive accessories included
Operating temperature	-5°C ≤ Ta ≤ +37°C
Recovery type	Dry only

Compliance and harmonised standards: ATEX Directive 2014/34/EU • EN 17348:2022 • EN IEC 60079-0:2018 • EN 60079-31:2014 • EN ISO 80079-36:2016 • EN ISO 80079-37:2016. ATEX certificate: LCIE 15 ATEX 3061 (version 01, issued 29 July 2021). IECEx certificate: IECEx LCIE 15.0048 (issue 2, issued 29 July 2021). Both issued by LCIE, NB 0081, Fontenay-aux-Roses, France.

Accessories



3D tool kit for 60 mm suction inlet — included

3D tool kit — 60 mm suction inlet



Conductive cloth filter with cage for Tiger-Vac C-10 EX — included

Conductive cloth filter with cage



Conductive recovery bags for Tiger-Vac C-10 EX — included

Conductive recovery bags (3 pcs., 19 L)



HEPA H14 filter for Tiger-Vac C-10 EX — included (4 pcs.)

HEPA H14 filter (4 pcs. included)



Cable holder hook on the motor unit — included

Cable holder hook on motor unit



Brushless motor for Tiger-Vac C-10 EX — optional

Brushless motor (always with 4×HEPA H14)



Optional 3D tools for Tiger-Vac C-10 EX — optional

Optional 3D tools

CONTACT

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