

DEPURECO · II 1/3D EX H IIIC T160°C DA/DC

Depureco ECOBULL T DEX 1/3D INERT



The ECOBULL T DEX 1/3D INERT is the three-phase big brother in the ECOBULL 1/3D INERT family: 3 kW side-channel blower on 400V, 230 mbar vacuum and 340 m³/h flow -- about 40 % more suction capacity than the M model and a solid solution for process collection where multiple points pull simultaneously or where a single demanding process (continuous mechanical grinding, battery blending station) has to keep collection speed above average. The ATEX class is II 1/3D Ex h IIIC T160°C Da/Dc -- same temperature class as the M model, same inerting container with N₂ flux, same hydrogen vent and cartridge HEPA13. The difference lies in the motor capacity and power requirements: a stably installed 400V three-phase outlet is required, and 16 A C-type or equivalent group fuse is recommended. For larger reactive metal environments where the M model falls short -- aluminium production lines, magnesium foundry, battery series production -- the T is the right choice.

APPLICATIONS

- Aluminium production line with 2-3 grinding points connected to the same INERT collection
- Magnesium foundry with continuous chip and powder collection
- Battery series production -- electrode blending station with high powder flow
- Central vacuum for R&D; facility where multiple labs pull in parallel
- Lithium battery recycling -- breakdown and separation of reactive material
- Titanium processing -- 3D-print farm production with constant powder collection

Technical specifications

ATEX marking	II 1/3D Ex h IIIC T160°C Da/Dc
Internal / external zone	22 / 22
Motor type	3D ATEX-certificeret sidekanalblæser, 3 kW 3-faset 400V 50/60 Hz
Airflow	340 m ³ /h
Vacuum	230 mbar (2345 mmH ₂ O)
Container	100 L
Sound pressure	72 dB(A)
Filter class	H class
Filter type	Cartridge-primaerfilter antistatisk polyester HEPA13 (EN 60335-2-69 klasse H)
Primary filter	Cartridge antistatisk polyester klasse HEPA13
Cleaning system	Manuel filterrens (bagudtryk)
Collection system	Detachable container + INERT neutralisation bath
Material	Lakeret staalkonstruktion, AISI 304 stoevbeholder med N2-fluxet inertiing-indsats
IP class	IP55
Power	3.0 kW
Voltage	400 V / 50-60 Hz
Venturi units	0 pcs
Inlet	Diameter 50 mm
Dimensions (L x W x H)	660 x 800 x 1630 mm
Weight	95 kg

Questions and answers

Is 340 m³/h necessary for most INERT tasks?

Not always. For a single collection point with medium-fine powder flow, the M model's 240 m³/h is sufficient and saves you about 930 €. The T model's 340 m³/h is required if you have multiple simultaneous collection points (Y-splitters, multiple grinding cells) or a process producing more powder per unit time than the M can handle -- typically over 2 kg/h of reactive powder. Rule of thumb: if your process runs faster than you can empty with M collection once per shift, you need T. Conversely: if you only use 30-40 L of a 100 L bin per shift, M is sufficient.

Should the ECOBULL T INERT run on its own group fuse?

Yes, strongly recommended. 3 kW three-phase motor draws about 7-8 A per phase under normal operation -- but start current is about 35-50 A per phase for 80-200 ms. On a shared group fuse with other machines, start current can trip short-circuit protection. A 16 A C-type three-phase group with RCD is the standard recommendation; a motor starter with soft-start capability can also make a difference and reduces motor wear. If you install 2+ ECOBULL T INERT in the same room, we recommend phase balancing (load 1-2-3-1-2-3 on the main installation).

Can I run ECOBULL T INERT via a central hose?

Yes. At 230 mbar vacuum and 340 m³/h, the T model can drive a central hose up to about 40 m in Ø50 diameter with 3-4 collection points. Beyond 40 m, pressure drop starts to eat into the vacuum at the furthest point -- count on 0.5 mbar loss per metre of hose plus 2-3 mbar per bend or hold-coupling. For longer installations or more points we recommend a central vacuum with separate blower station rather than ECOBULL T INERT. We can help with sizing and central-vacuum drawing.

Is the ECOBULL T INERT certified for food or pharma environments?

The standard delivery is built to industrial specifications -- AISI 304 stainless steel in the container, antistatic polyester in the filter, painted steel chassis. For food and pharma industry we recommend the upgrade option "HX.P" (AISI 304 polished stainless steel header, see price list) providing polished interior surfaces washable per FDA/CFR standards. Pharma-specific upgrades (AISI 316L, validation documentation) require special order -- lead time 8-12 weeks. Contact us if you have GMP or HACCP requirements.

Contact and advisory

PARTICULAIR

Particulair

Højtoften 12

2690 Karlslunde, Denmark

CVR: 34129894

Phone: (+45) 70 23 12 03

E-mail: sales@particulair.com

Web: particulair.eu

Product page: particulair.eu/ex-vac/en/atex-dust/ecobull-t-dex-1-3d-inert/

SMARTER THINKING • BETTER WORKING

This datasheet is generated deterministically from Particulair product data. Prices and availability provided on request. All specifications subject to change without notice.