

DEPURECO · II 3D EX H IIIB T140 DC

# Depureco DV AIR 1100 Z22



The Depureco DV AIR 1100 Z22 is an **ATEX-certified filter unit** for central vacuum systems in Zone 22 (external) -- delivered **WITHOUT** integrated container and **WITHOUT** integrated discharge system. The unit has **7 class M cartridge filters** (595,000 cm<sup>2</sup> antistatic polyester) with **SP-Reverse jet pulsejet cleaning**, max recommended airflow 2700 m<sup>3</sup>/h, inlet Ø150 mm, discharge Ø250 mm. Fixed frame with 4000 mm height. The unit is **passive** -- it has no motor and **must be mandatorily combined with a vacuum unit** (CVS Z22 or CVS ROOTS Z22) plus a **DISCHARGE SYSTEM** of your choice for dust discharge. Filter inspection door is included from the factory. Footprint 1500 x 1500 mm, weight 528 kg. ATEX marking II 3D Ex h IIIB T140 Dc.

## APPLICATIONS

- Central filter unit in larger vacuum systems with ATEX Zone 22 requirements
- Combined with CVS Z22 or CVS ROOTS Z22 vacuum unit + optional DISCHARGE SYSTEM
- Max 2700 m<sup>3</sup>/h airflow with 7 class M cartridges
- SP-Reverse jet pulsejet cleaning for continuous operation without manual filter cleaning
- Suited to ATEX Zone 22 environments with non-conductive dust (IIIB: paper, fibre, grain, non-metal)

# Technical specifications

<b>ATEX marking</b>	II 3D Ex h IIIB T140 Dc
<b>Internal / external zone</b>	- / 22
<b>Motor type</b>	Ingen motor -- passiv filter-enhed; luftflow leveres af tilknyttet sugeaggregat
<b>Airflow</b>	2700 m <sup>3</sup> /h
<b>Filter class</b>	M class
<b>Filter type</b>	7 patroner klasse M (595.000 cm <sup>2</sup> antistatisk polyester. EN 60335-2-69 / IFA-BGIA M-PES)
<b>Primary filter</b>	Patronfilter (antistatisk polyester). 595.000 cm <sup>2</sup> total
<b>Cleaning system</b>	SP-Reverse jet pulsejet-rens (trykluft-drevet, differenstryk-styret)
<b>Collection system</b>	No collection (separate filtration and collection unit required)
<b>Material</b>	Lakeret staal-kabinet (ATEX-godkendt udfoerelse)
<b>IP class</b>	-
<b>Voltage</b>	-
<b>Dimensions (L x W x H)</b>	1500 x 1500 x 4000 mm
<b>Weight</b>	528 kg

# Questions and answers

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## What does the ATEX marking II 3D Ex h IIIB T140 Dc mean?

The filter unit is EU-type approved under ATEX directive 2014/34/EU for operation in external Zone 22 (dust, low risk). 'Ex h' is the constructional safety type per EN ISO 80079-36/37 -- note that this is Ex h alone (without the 'tc' suffix that CVS Z22 side-channel blowers carry). 'IIIB' covers non-conductive dust (paper, fibre, grain etc.). 'T140' is the maximum surface temperature in operation (140 degrees C). 'Dc' is the EPL code for Zone 22. The cartridges are of antistatic polyester -- a critical detail for ATEX operation, as it dissipates electrostatic charge and thus eliminates spark risk.

## What does Depureco DV AIR 1100 Z22 do, and why does it require a separate vacuum unit?

Depureco DV AIR 1100 Z22 is a **passive filter unit** -- it has no motor and cannot draw air itself. Its role is to clean the air from a connected vacuum unit (CVS Z22 side-channel or CVS ROOTS Z22) through 7 class M cartridges (595,000 cm<sup>2</sup> antistatic polyester). Air flow comes from the vacuum unit, passes through the cartridges, and the deposited dust is cleaned by the SP-Reverse jet pulsejet system. The catalogue note is explicit: 'DV AIR must be mandatorily combined with a suction unit'. The discharge (2700 max recommended airflow) leaves the filter unit via the Ø250 mm flange and must be routed to a DISCHARGE SYSTEM (rotary valve, butterfly, big-bag frame etc.) for final dust collection.

## How does the SP-Reverse jet filter cleaning work?

SP-Reverse jet is an automatic pulsejet cleaning system. Compressed air pulses (typically 5-6 bar) are fired into the cartridges from the back in short intervals -- this releases the dust cake from the surface, and it falls into the hopper and onwards to the connected discharge system. Cleaning is differential-pressure driven (starts when pressure drop exceeds threshold, stops when it drops back), so the filter always keeps its efficiency without over-cleaning or wasted air. An SP cleaning system control option can be added for automatic management.

## Which vacuum units can DV AIR be combined with?

The recommended matches are the CVS Z22 range (3D ATEX side-channel blower) and the CVS ROOTS Z22 range (3D ATEX Roots pump). The choice depends on your system's vacuum needs and duty profile: side-channel gives moderate vacuum (200-380 mBar) at various flows, while Roots holds constant high vacuum (490 mBar). The max recommended flow on this unit is 2700 m<sup>3</sup>/h -- choose a vacuum unit with matching or lower flow to stay within the filter's capacity. We help with sizing based on pipe lengths, take-off points and dust characteristics.

# Contact and advisory

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**Product page:** [particulair.eu/ex-vac/en/atex-dust/dv-air-1100-z22/](http://particulair.eu/ex-vac/en/atex-dust/dv-air-1100-z22/)

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