DEPURECO · II 3D EX H IIIC T140°C DC -- II 3G EX H IIB T3 GC

# Depureco MINIAIR 2V Z2/22


The MINIAIR 2V Z2/22 is Depureco's smallest ATEX combined vacuum without an electric motor -- 2 venturi units drive the entire suction on compressed air alone. That means no electrical ignition source in the worked area: the whole unit is ATEX-certified II 3D + II 3G and therefore allowed in rooms with Zone 22 dust and Zone 2 gas simultaneously, which is typical for refinery boundary zones, battery production and smaller process handling points. 45 L AISI 304 tank, 300 m3/h flow, 500 mbar vacuum and 73 dB(A) -- compact (550 x 620 x 1150 mm) and wheeled for a single operator. Air consumption is 2500 Nl/min at 6-8 bar -- in practice a dedicated compressor outlet, not just a factory-standard air socket. H14 absolute filter (22,000 cm2 fiberglass, EN 1822-5) is optional, not standard.

## APPLICATIONS

- Refinery boundary zone with light HC vapour and combustible process dust
- Battery factory -- electrolyte cans + lithium-bearing electrode dust
- Smaller process handling points where an electric motor is not allowed
- Paint-shop prep where solvents may be present
- Pharma pilot production with combustible excipients (ATEX inside + Zone 2 gas)

# Technical specifications

| | |
|---|---|
| **ATEX marking** | II 3D Ex h IIIC T140°C Dc -- II 3G Ex h IIB T3 Gc |
| **Internal / external zone** | 22 / 22 |
| **Motor type** | 2 venturi-enheder, pneumatisk drift (trykluft 6 bar) |
| **Airflow** | 300 m³/h |
| **Vacuum** | 500 mbar (5097 $mmH_2O$) |
| **Container** | 45 L |
| **Sound pressure** | 73 dB(A) |
| **Filter class** | M class |
| **Filter type** | Stjernefilter antistatisk polyester klasse M, 15.000 cm2, manuel rens (H14 22.000 cm2 fiberglass som tilkob) |
| **Primary filter** | Stjernefilter antistatisk polyester klasse M, 15.000 cm2 |
| **Cleaning system** | Manuel filterrens |
| **Collection system** | Detachable container |
| **Material** | Lakeret staalkonstruktion, AISI 304 stoevbeholder |
| **Air consumption** | 2500 nl/min |
| **Supply pressure** | 6-8 bar |
| **Air supply hose** | Diameter 12 mm |
| **Venturi units** | 2 pcs |
| **Inlet** | Diameter 70 mm |
| **Dimensions (L x W x H)** | 550 x 620 x 1150 mm |
| **Weight** | 42 kg |

# Questions and answers

## Why no electric motor?

Because the MINIAIR is designed for rooms where gas may be present. An electric motor -- even ATEX-certified -- has hot surfaces and contact elements that are a potential ignition source. Venturi operation has no moving electrical parts: the compressed air itself creates the vacuum through the nozzles. That is the safest construction for Zone 2 gas.

## How much compressed air does it use?

2500 Nl/min at 6-8 bar (catalogue spec A672). That is not trivial: a small factory compressor (e.g. 5.5-7.5 kW with FAD of 500-1000 Nl/min) cannot support it alone. Count on at least 15-22 kW installed compressor capacity for continuous operation, and a refrigerant-dried air supply (PDP +3°C or better) to avoid condensation in the venturi nozzles.

## What is the difference between MINIAIR 2V and AC 65 Z2/22?

The MINIAIR 2V is smaller (45 L) and has 2 venturi -- it is ideal for single-operator points. The AC 65 Z2/22 has the same ATEX marking but a larger 65 L container, broader filter area (24,000 cm2) and heavier suction cycling. Choose MINIAIR if space is tight and collection volume is small; AC 65 if there are multiple operators or longer run-time per shift.

## Can it run continuously?

Yes. Venturi drive has no thermal limit as long as the compressed-air supply sustains the flow. The MINIAIR 2V is designed for continuous operation and has no duty-cycle restriction. In practice it is the compressor capacity that decides whether it is sustainable over a full shift -- check the compressor FAD against the 500 Nl/min consumption.

# Contact and advisory

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