

DEPURECO · ACD EX 1/- D (INTERN KONSTRUKTION SVARENDE TIL ZONE 20 PER IEC 60335-2-69 ANNEX AA)

# Depureco BL 45 ACD



The Depureco BL 45 ACD is a single-phase brushless model built for daily field-service use: the 45 L container and the long-lived brushless motor mean the vacuum runs on the same site for years without motor maintenance, and the 72 dB(A) noise level makes it comfortable to stand next to all day. Internal Zone 20 construction per IEC 60335-2-69 Annex AA ensures an ignition inside the container does not propagate into the room.

## APPLICATIONS

- Quiet laboratory environments requiring low acoustic impact
- Dental-technical workshops with fine precious-metal dust
- Medical-technical cleanrooms and cleanroom-adjacent environments
- Smaller process installations requiring minimal maintenance
- Research facilities with combustible dust and continuous duty

# Technical specifications

<b>ATEX marking</b>	ACD EX 1/- D (intern konstruktion svarende til Zone 20 per IEC 60335-2-69 Annex AA)
<b>Internal / external zone</b>	20 / ikke-ATEX
<b>Motor type</b>	1 brushless-motor (1,1 kW)
<b>Airflow</b>	220 m <sup>3</sup> /h
<b>Vacuum</b>	230 mbar (2345 mmH <sub>2</sub> O)
<b>Container</b>	45 L
<b>Sound pressure</b>	72 dB(A)
<b>Filter class</b>	M class
<b>Filter type</b>	Stjernefilter antistatisk polyester klasse M, 15.000 cm <sup>2</sup> (HEPA H14 22.000 cm <sup>2</sup> som tilvalg)
<b>Primary filter</b>	Stjernefilter antistatisk polyester klasse M. 15.000 cm <sup>2</sup>
<b>Collection system</b>	Synthetic safebag
<b>Material</b>	Lakeret staalkonstruktion, AISI 304 stoevbeholder
<b>Power</b>	1.1 kW
<b>Voltage</b>	230 V / 50-60 Hz
<b>Inlet</b>	Diameter 50 mm
<b>Dimensions (L x W x H)</b>	550 x 620 x 1303 mm
<b>Weight</b>	45 kg

# Questions and answers

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## Why is the Depureco BL 45 ACD a better choice than a standard industrial vacuum?

Brushless motors have no carbon brushes that wear, giving longer motor life and significantly reduced spark formation in operation. Combined with the antistatic filter fabric and the ACD-certified construction per IEC 60335-2-69 Annex AA, this means the Depureco BL 45 ACD is significantly safer and more reliable than a standard brush-motor vacuum in combustible-dust environments.

## Why this specific motor and phase configuration?

A brushless motor at 1.1 kW delivers 220 m<sup>3</sup>/h at 230 mbar in a quiet, long-lived format. The 1-phase 230 V supply means the model can be deployed anywhere without a three-phase installation. Unlike a 2-motor bypass solution (where two motors raise each other's noise frequency), the brushless motor holds 72 dB(A) even under full load.

## What types of dust is the Depureco BL 45 ACD actually intended for?

Combustible laboratory and workshop dust in small to medium quantities, where quiet operation and long motor life matter more than raw suction: dental precious-metal dust, R&D; powders, fine polymer dust from lab experiments, fine swarf from smaller CNC operations. For continuous duty on production lines a side-channel blower (ECOBULL range) is chosen instead.

## What is the difference between ACD and ATEX?

ACD is the IEC 60335-2-69 Annex AA certification for combustible dust in non-ATEX-classified areas. ATEX is the 2014/34/EU Directive for formally classified zones. A laboratory or dental workshop is typically NOT ATEX-classified, but still works with combustible dust -- the Depureco BL 45 ACD covers exactly that scenario without requiring zone classification of the room.

# Contact and advisory

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