

DEPURECO · II 1/2D EX HTC IIIC T140°C DA/DB

# Depureco PUMA 25 DEX 1/2D



The PUMA 25 DEX 1/2D is the volume king of the standard PUMA range: an 18.5 kW motor delivers 1350 m<sup>3</sup>/h -- 42 percent more flow than the PUMA 15/20 -- at 270 mbar. Higher air volume per minute makes it possible to run 6-8 simultaneous pickup points or cover a whole department centrally. ATEX II 1/2D Ex htc IIIC T140°C Da/Db, H14 HEPA (110,000 cm<sup>2</sup>) included, TUEV panel, remote control. The 370 kg chassis is noticeably heavier than the PUMA 20 due to the larger motor and a reinforced frame for the higher flow.

## APPLICATIONS

- Central suction station for an entire department (6-8 pickup points)
- Large-scale production (bakery, cement, metallurgy) with continuous dust loading
- Coarse dust with high mass flow (metal chips, grinding swarf, granulates)
- Replacement of two smaller PUMA units with one central PUMA 25
- High-tempo production lines with large bulk material flows

# Technical specifications

<b>ATEX marking</b>	II 1/2D Ex htc IIIC T140°C Da/Db
<b>Internal / external zone</b>	20 / 21
<b>Motor type</b>	Sidekanalblaeser 3-fase (18.5 kW), TUEV-certificeret el-panel + remote control
<b>Airflow</b>	1350 m <sup>3</sup> /h
<b>Vacuum</b>	270 mbar (2753 mmH <sub>2</sub> O)
<b>Container</b>	175 L
<b>Sound pressure</b>	74 dB(A)
<b>Filter class</b>	M class
<b>Filter type</b>	Stjernefilter antistatisk polyester klasse M, 45.000 cm <sup>2</sup> , manuel rens + H14 absolutfilter 110.000 cm <sup>2</sup> (inkluderet)
<b>Primary filter</b>	Stjernefilter antistatisk polyester klasse M, 45.000 cm <sup>2</sup>
<b>Cleaning system</b>	Manuel filterrens
<b>Collection system</b>	Detachable container
<b>Material</b>	Lakeret staalkonstruktion, AISI 304 stoevbeholder
<b>IP class</b>	IP65
<b>Power</b>	18.5 kW
<b>Voltage</b>	400 V / 50-60 Hz
<b>Inlet</b>	Diameter 100 mm
<b>Dimensions (L x W x H)</b>	850 x 1550 x 1980 mm
<b>Weight</b>	370 kg

# Questions and answers

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## Is the PUMA 25 overkill if I only have 3-4 pickup points?

Often yes. The PUMA 25 is designed for high volumetric flow -- not for higher mbar or finer dust. If your 3-4 points are normal 100 mm handsets on moderate dust, the PUMA 15 or 20 gives better overall economy (lower power consumption, lower purchase cost). PUMA 25's 1350 m<sup>3</sup>/h is only relevant when you actually have the points to use it -- otherwise flow is wasted on drawing in clean air.

## How much does power consumption change going from PUMA 20 to PUMA 25?

PUMA 20 (15 kW) consumes about 12-14 kWh/hour under full load. PUMA 25 (18.5 kW) consumes about 15-17 kWh/hour -- about 20% more. At 8 hours/day: about 24-40 kWh/day extra, equating to EUR 3-7/day of electricity at EUR 0.20/kWh industrial rates. That totals EUR 800-1,800 per year -- a real OPEX factor to include in your investment case.

## What's the container emptying frequency at continuous operation?

Depends on dust density: for light dust (flour, plastic) 175 L can last a full week; for heavier dust (mineral, metal) it can fill in 1-3 days at continuous high load. Consider the P00273 tiltable kit + an external continuous-flow bin for facilities where stopping to empty is costly. Or integrate a pre-separator that relieves the PUMA container.

## Can the PUMA 25 be used outdoors in Zone 21?

Technically yes -- the chassis is IP65 and tolerates rain and dust. But consider: (1) temperature limit -20 to +40°C must be respected, so in Danish winters beyond certain limits there is risk of condensation and freezing in the motor. (2) Direct solar radiation on the metal chassis can lift surface temperature above the T140°C limit -- always cover outdoor installations. (3) The electrical panel needs an ATEX-approved enclosure for outdoor placement. Consult us for outdoor-specific installation.

# Contact and advisory

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## PARTICULAIR

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