

DELFIN · II 1/- D EX H TB IIIC T80°C (INTERNAL) DA/- -- ACD EX 1/-D (INTERN ZONE 20, EKSTERN IKKE-ATEX)

# Delfin MTL 452 ACD



The MTL 452 ACD is the mid-size ACD model with a 45-litre container, two bypass motors in parallel (2.2 kW) and a large star/pocket filter (20,000 cm<sup>2</sup>) with manual cleaning. The combination delivers high airflow (360 m<sup>3</sup>/h) without requiring three-phase power, while the filter handles larger dust volumes between emptyings. The internal construction follows IEC 60335-2-69 Annex AA, so the dust container is treated as Zone 20 in non-ATEX-classified environments.

## APPLICATIONS

- Mid-sized production areas with combustible dust outside ATEX classification
- Food production with larger dust volumes and longer running times
- Powder-coating service areas with continuous dust generation
- Bakeries and mills with continuous flour-dust collection
- Metal-powder handling outside ATEX-classified booths

# Technical specifications

<b>ATEX marking</b>	II 1/- D Ex h tb IIIC T80°C (Internal) Da/- -- ACD EX 1/-D (intern Zone 20, ekstern ikke-ATEX)
<b>Internal / external zone</b>	20 / ikke-ATEX
<b>Motor type</b>	2 bypass-motorer i parallel (2 x 1,1 kW)
<b>Airflow</b>	360 m <sup>3</sup> /h
<b>Vacuum</b>	245 mbar (2500 mmH <sub>2</sub> O)
<b>Container</b>	45 L
<b>Sound pressure</b>	74 dB(A)
<b>Filter class</b>	H class
<b>Filter type</b>	HEPA H14 (EN 1822), 99,995 % MPPS, 20.500 cm <sup>2</sup>
<b>Primary filter</b>	Stjerne/taskefilter polyester ANT M-klasse antistatisk, 20.000 cm <sup>2</sup> , Ø 420 mm -- manuel rystning
<b>Collection system</b>	Plastic bag
<b>Material</b>	AISI 304 (inox)
<b>IP class</b>	IP64
<b>Power</b>	2.2 kW
<b>Current</b>	10 A
<b>Voltage</b>	230 V / 50 Hz
<b>Inlet</b>	Diameter 80 mm
<b>Dimensions (L x W x H)</b>	550 x 690 x 1400 mm
<b>Weight</b>	56 kg

# Questions and answers

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## What is the star/pocket filter, and how is it cleaned?

A star/pocket filter is a primary filter with a large total surface area (20,000 cm<sup>2</sup>, Ø 420 mm) in polyester with antistatic M-class treatment. It is cleaned manually by shaking the filter so the dust falls into the container -- a simple, robust solution with no compressed air. Air load is 180 m<sup>3</sup>/m<sup>2</sup>/h, higher than on the larger LP models and matching a more periodic duty cycle.

## Can the MTL 452 ACD be used in an ATEX-classified zone?

No. The MTL 452 ACD is certified to IEC 60335-2-69 Annex AA and intended only for non-ATEX-classified areas. For classified zones, choose a model from our ATEX range -- for example the corresponding MTL 451 1/2D, certified for Zone 21.

## What is the difference between the MTL 452 ACD and MTL 202 ACD?

Both have two bypass motors in parallel (2.2 kW, 360 m<sup>3</sup>/h) and the same ACD certification. The MTL 202 ACD has a 20-litre container, cartridge filter with Dustop, and weighs 35 kg -- suited to compact workshops. The MTL 452 ACD has a 45-litre container, star/pocket filter with manual cleaning, and weighs 56 kg -- designed for longer duty and larger dust volumes.

## Why is the internal part called Zone 20 when the surrounding area is non-ATEX?

Inside the dust container, a continuous explosive dust atmosphere exists by definition during operation -- that qualifies it as Zone 20. IEC 60335-2-69 Annex AA requires the vacuum's internals to safely handle this atmosphere even when the surrounding environment is non-ATEX.

# Contact and advisory

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