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

Depureco PUMA 18S ACD

The Depureco PUMA 18S ACD is the highest suction model in the PUMA range without HD reinforcement: 15 kW motor calibrated to 530 mbar vacuum -- over half a bar. Flow capacity at 720 m3/h is deliberately lower to give the motor its full energy budget for vacuum. The model is 1900 mm tall, making it 80 mm shorter than the rest of the PUMA range and therefore passable under standard gates. Used where long hoses and small inlets make raw suction the critical parameter.

APPLICATIONS

- Metalworking houses with plasma, laser and water cutting
- Powder-metallurgy plants with sintered powder and fine dust
- Battery-cell factories with combustible electrode powder
- Process installations with high loads of reactive fine dust
- Large CNC houses and milling centres with multi-point collection

Technical specifications

ATEX marking	ACD EX 1/- D (intern konstruktion svarende til Zone 20 per IEC 60335-2-69 Annex AA)
Internal / external zone	20 / ikke-ATEX
Motor type	Sidekanalblaeser 3-fase (15 kW, sug-prioriteret) med cyklon
Airflow	720 m³/h
Vacuum	530 mbar (5406 mmH_2O)
Container	175 L
Sound pressure	74 dB(A)
Filter class	M class
Filter type	Stjernefilter antistatisk polyester klasse M, 45,000 cm2 (HEPA H14 som tilvalg, relief valve og vacuum remote control inkluderet)
Primary filter	Stjernefilter antistatisk polyester klasse M. 45.000 cm2
Collection system	Detachable container
Material	Lakeret staalkonstruktion, AISI 304 stoevbeholder
IP class	IP55
Power	15.0 kW
Voltage	400 V / 50 Hz
Inlet	Diameter 100 mm
Dimensions (L x W x H)	850 x 1550 x 1900 mm
Weight	335 kg

Questions and answers

Why is the Depureco PUMA 18S ACD a better choice than a standard industrial vacuum?

Because heavy industry and three-shift duty require a vacuum built to hold up for years in 24/7 operation without breakdown. The PUMA range has a reinforced frame, tangential cyclone inlet that preserves cyclone effect throughout filter life, and a drivetrain sized for continuous heavy load. The ACD certification per IEC 60335-2-69 Annex AA keeps the internal Zone 20 capacity intact.

Why this specific motor and phase configuration?

A three-phase side-channel blower at 7.5-18.5 kW is the only motor configuration that can handle the air quantities and vacuum levels heavy industry demands. The PUMA range offers different calibrations (P for flow, S for suction), so you match exactly your plant's profile. The 175 L container with tangential cyclone inlet ensures coarse dust does not burden the filter.

What types of dust is the Depureco PUMA 18S ACD actually intended for?

Heavy industrial dust in production volumes: fine foundry sand, magnetite dust, metal swarf and slag particles from plasma cutting, powder-metallurgy fractions, shooting-range lead dust, fine metal particles from light-metal rolling. For smaller volumes choose the TX range; for reactive metal dust choose the INERT models.

What is the difference between ACD and ATEX?

ACD is the certification for combustible dust in non-ATEX-classified industrial plants. Most steelworks, foundries and powder-metallurgy plants are not formally ATEX-classified even though the dust is combustible -- because the duty or dust concentration does not reach the classification threshold. ATEX is for formally classified zones per 2014/34/EU.

Contact and advisory

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