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

Depureco PUMA HD 30S ACD

The Depureco PUMA HD 30S ACD is the suction model in the HD range: same 21.3 kW motor as the 30P, but calibrated to 445 mbar vacuum at the expense of flow (1110 m3/h here). The S designation makes it optimal for collection through long narrow channels -- for example fine foundry sand, magnetite dust or metal splatter from plasma cutting. Reinforced 620 kg frame, 110,000 cm2 antistatic polyester filter and IEC 60335-2-69 Annex AA certification.

APPLICATIONS

- Steelworks with 24/7 operation and continuous coarse-dust collection
- Powder-metallurgy primary plants with sintered fine dust
- Continuous powder transfer in large process installations
- Plasma-cutting houses with heavy metal splatter and slag particles
- Repair-and-maintenance houses at steelworks and foundries

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 (21,3 kW, sug-prioriteret) med cyklon
Airflow	1110 m^3/h
Vacuum	445 mbar (4539 mmH_2O)
Container	175 L
Sound pressure	78 dB(A)
Filter class	M class
Filter type	Stjernefilter antistatisk polyester klasse M. 110.000 cm2 (HEPA H14 som tilvalg)
Primary filter	Stjernefilter antistatisk polyester klasse M. 110.000 cm2
Collection system	Detachable container
Material	Lakeret staalkonstruktion, AISI 304 stoevbeholder
IP class	IP55
Power	21.3 kW
Voltage	400 V / 50 Hz
Inlet	Diameter 130 mm
Dimensions (L x W x H)	1050 x 1950 x 2300 mm
Weight	620 kg

Questions and answers

Why is the Depureco PUMA HD 30S ACD a better choice than a standard industrial vacuum?

Because steelworks, foundries and powder metallurgy wear out ordinary PUMA models in a few months. The HD range has a reinforced frame over 560 kg, 110,000 cm2 antistatic polyester filter area, factory-fitted electric shaker and integrated forklift inlets -- a category-level different robustness. The ACD certification per IEC 60335-2-69 Annex AA preserves internal Zone 20 capacity under extreme operating conditions.

Why this specific motor and phase configuration?

A three-phase side-channel blower at 21.3-25.3 kW is the only motor configuration that can move the air quantities and handle the vacuum-demanding applications HD industry requires. The motor is overspecified for 24/7 duty with service intervals of several thousand hours, and the drivetrain is direct-coupled without drive belts requiring maintenance.

What types of dust is the Depureco PUMA HD 30S ACD actually intended for?

The heaviest combustible dust fractions: coarse foundry sand, magnetite dust, slag particles, fine aluminium and titanium dust from rolling and stamping processes, powder-metallurgy fine fractions, fine metal particles from plasma and laser cutting. The HD range is chosen where a standard PUMA is undersized and where INERT protection is not required (the dust is combustible but not reactive).

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 plants. Most steelworks and foundries are not formally ATEX-classified, but the dust is still combustible and equipment must be certified. ATEX is the 2014/34/EU Directive for formally classified zones.

Contact and advisory

PARTICULAIR

Particulair
Højtoften 12
2690 Karlslunde, Denmark
CVR: 34129894
Phone: (+45) 70 23 12 03
E-mail: sales@particulair.com
Web: particulair.eu
Product page: particulair.eu/ex-vac/en/acd/puma-30s-acd/

SMARTER THINKING • BETTER WORKING