

Product Reference PAS8-KDS3A

Atlas Copco portable automatic dry-prime diesel engine-driven pump

Specifications

Model	PAS8-KDS3A
Suction/Discharge	DN200 (8")
Operating flow rate	100 - 540 m ³ /h 1 667 - 9 000 l/min 440 - 2 378 GPM
Head max.	35 m
Solids handling	76 mm Ø
Best efficiency point - BEP	430 m ³ /h @ 22 m
Efficiency	69%
Dimensions L x W x H	
Standard high skid frame	2.85 x 1.1 x 1.62 m
Optional eco skid frame	2.85 x 1.1 x 1.5 m
Optional trailer mounted	5.02 x 1.67 x 2.13 m
Fuel tank capacity	
Standard high skid frame	607 liters
Eco skid frame	260 liters
Fuel consumption	12.5 l/h ^{a, b}
Fuel autonomy	
Standard high skid frame	49 h ^a
Eco skid frame	21 h ^a
Weight, dry	1770 kg
Max. Sound Power Level (LWA) ^(c, d)	tbc
Max. Sound Pressure Level (LPA) at full load and 7m	tbc

^a Reference - best efficiency point at max. speed

^b Reference - fuel specific density 0.84 kg/l

^c According to 2000/14/EC/OND

^d Test references:

ISO 3744 : 2010 Acoustics - determination of sound power levels and sound energy levels using sound pressure

ISO 4871 : 1996 Acoustics - declaration and verification of noise emission values of machinery and equipment

Measured on unit running at maximum rpm

Key Features

Pump system

- High performance pump with superior BEP's – best efficiency points
- High abrasion-resistant ductile cast iron impeller – excellent compromise between impact resistance and surface hardness
- Semi-open impeller allowing free passage of large diameter solids
- Removable front cover for direct access to the wear plates and impeller for easy servicing
- Mechanical seal with oil bath reservoir for dry running capabilities
- Automatic priming with oilfree diaphragm vacuum pump that draws significant quantities of air allowing drainage possible even at 'snore' condition

Engine system

- Durable power with broad range of operating speed to set optimal performance and efficiency
- High capacity cooler guarantees continuous operation even at high ambient conditions enabling longer servicing at 500 hours

Control system

- Control cubicle with dedicated door - tight protected against dust ingress & water splash
- Vibration-resistant manual engine speed regulation with micrometer fine adjustment for maximum accuracy
- Auto-start/stop by float switch level regulation for efficient operation

Frame and enclosure

- Sound-attenuated & rugged zincor steel enclosure
- Big doors & service panels for superior accessibility
- Spillage free frame (integrated forklift pockets, 110% containment)
- Rigid lifting beam with eye in the center of gravity



Applications

Lifting, transportation or evacuation of clean or dirty water with solids in suspension such as drainage from construction or mine sites, sewage from industries and municipal, floodwater or stream diversions.

Operating limits

Max. operating altitude without engine deration	4000 m
Max. fluid temperature	50°C
Max. fluid density	1100 kg/m ³
Max. fluid viscosity	50 cSt
Fluid pH range	5 - 8

Engine

Durable, clean and quiet power provided by the Kubota variable speed diesel engine



Model	Kubota V3307-DI-T-E3B
Type	Vertical 4-cycle diesel
Cylinders	4
Governor	Mechanical
Combustion system	Direct Injection
Cooling system	Liquid cooled
Intake system	Turbocharged
Max. continuous power	46.9 kW
Max. speed	2200 rpm
Exhaust emission compliance	EU Stage IIIA flex

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Pump set

Atlas Copco high efficiency semi-open impeller centrifugal pump
 Endurance Series type P6-250G-SAE4-V10 with automatic priming system consisting of oil-free diaphragm vacuum pump that allows running at snore conditions, a high capacity air/water separator with siphon valve and automatic timed system for condensate recovery and a clapet-type discharge inspection valve.



Endurance Series	Type P8-280G-SAE4-V10
Operating speed	1200 - 2200 rpm
Maximum absorbed power	42.2 kW
- centrifugal pump	40.0 kW
- priming system	2.2 kW
Construction features	
Pump casing	Cast iron GG20
Impeller	Ductile Iron GGG50
Mechanical seal	Silicon carbide against silicon carbide with Nitrile elastomers + backup lip seal all in oil bath reservoir
Wear plates	Replaceable ductile iron GGG50 wear plates front & rear impeller side
Pump shaft material	Steel 38 Ni Cr Mo 4
Shaft sleeve	AISI 316 sleeve
Bearings	Double bearings - single and double raw balls life grease lubricate
Coupling	SAE 4 - V10"
Gaskets	Compressed synthetic fibers
O-Rings	Buna-N
Diaphragm vacuum pump	Oil free water-tolerant 50m3/h coupled through V-belts to the pump
Air-separation chamber	Casing in cast iron with S/S float mechanism (installed at suction side)
Non return Check Valve	Made in neoprene, installed on discharge port

Control System

Qc1011 basic controller provide ease of use for safe, uncomplicated and efficient operation, maintenance and service monitoring

Control functions

- Start/stop
- Auto mode (float switch regulation)
- Emergency stop
- Manual speed regulation

Indications

- Running hours
- Engine speed
- Battery charge voltage
- Fault icons (warnings & shutdowns)
- Vacuum pressure gauge
- Fuel level gauge

Warnings and shutdown

- Fail to start
- Fail to stop
- Low engine oil pressure
- Engine high temperature
- Charge failure
- Low fuel level
- Battery under voltage
- Battery over voltage



Options and Accessories

Standard Options

- Trailer with adjustable towbar & road signalization
- External fuel tank connection
- Quick couplings for external fuel tank connection
- Towing eye (DIN, AC, NATO, Ball)
- Spark arrester
- Additional fuel filter
- Synthetic oil supply first filling
- Customer color (RAL)
- Witnessed performance test
- Additional AIB
- Additional ASL

Accessories

- Suction and discharge hoses
- Suction strainer
- Couplings

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Performance curve

Tested according to UNI EN ISO 9906 2^oLevel

Test liquid: water: density 1000 kg/m³

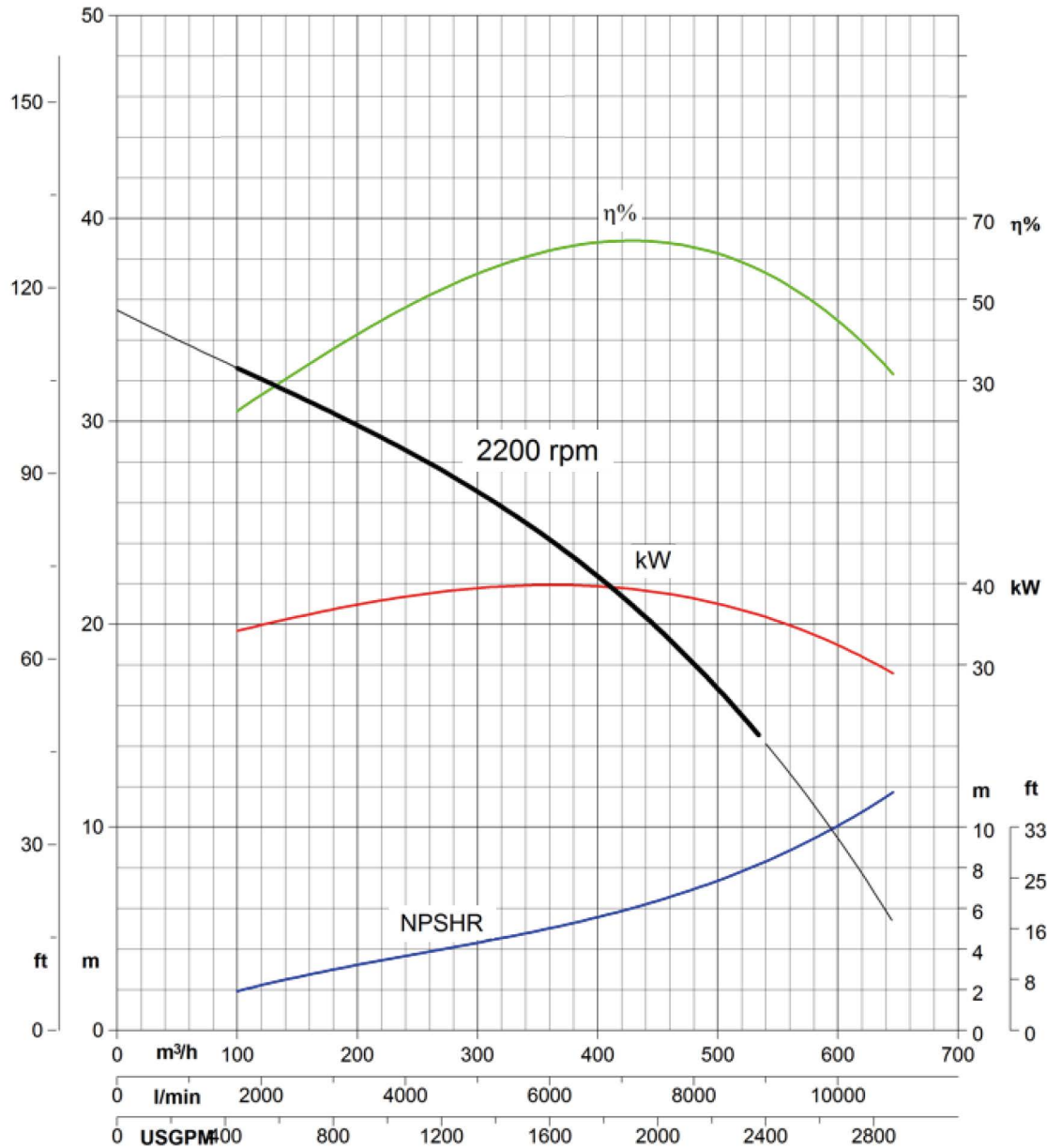
Spherical solids handling: D 76mm

Priming time: -s (with suction lift of 2 m)

Impeller diameter: 280 mm

Number of blades: 2

Installed power: kW 40



— Cavitation or flooded suction conditions
— Operating Range