

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 - 590 m ³ /h
Head max.	33 m
Solids handling	76 mm Ø
Best efficiency point - BEP	445 m ³ /h @ 22 m
Efficiency	69%
Dimensions L x W x H	
Standard high skid frame	2.88 x 1.10 x 1.73 m
Optional eco skid frame	2.88 x 1.10 x 1.61 m
Optional trailer mounted (standard skid)	4.52 x 1.62 x 2.32 m
Optional trailer mounted (economy skid)	4.52 x 1.62 x 2.21 m
Fuel tank capacity	
Standard high skid frame	607 liters
Eco skid frame	260 liters
Fuel consumption @ B.E.P.	12.5 l/h
Fuel autonomy @ B.E.P.	
Standard high skid frame	49 h
Eco skid frame	21 h
Weight, dry	
Standard high skid frame	1654 kg
Optional eco skid frame	1578 kg
Weight of undercarriage	461 kg
Max. sound power level (LWA) ^(a,b)	94 dB(A)
Max. sound pressure level (LPA) at full load and 7m	70 dB(A)

^a According to 2000/14/EC/OND

^b 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

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

Pump set

Endurance Series	Type P8-265G-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
Shaft seals	Tungsten carbide + double back-up lip seals in oil bath
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	Viton
Diaphragm vacuum pump	Oil-free water tolerant 50m ³ /h coupled to the pump with V-belts
Air-separation chamber	Casing in cast iron with S/S float mechanism (installed at suction side)
Non return check valve	Flapper type, made in neoprene, installed on discharge port

Options and Accessories

- 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
- Synthetic oil supply first filling

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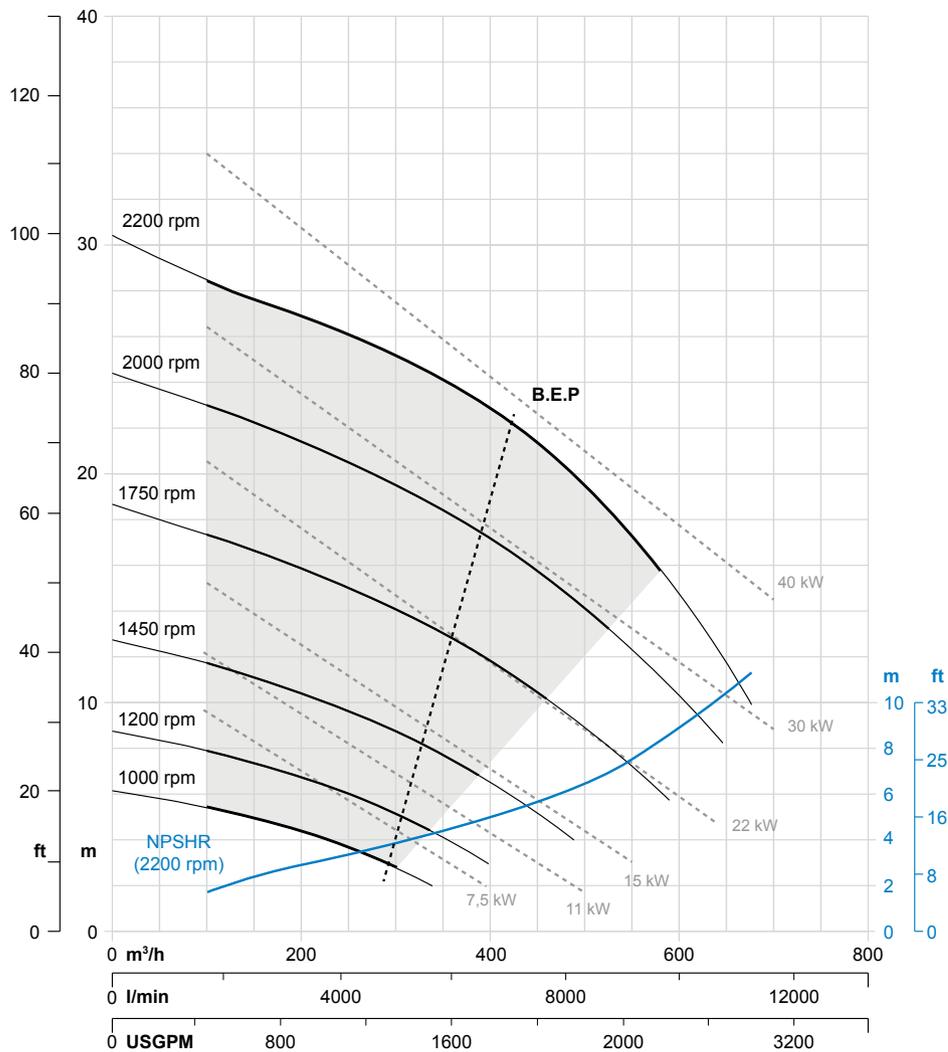
Operating limits

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
Max. outside temperature.....	50°C

Performance curve

Tested according to EN ISO 9906 Grade 2

Test liquid: water: density 1000 kg/m³
 Spherical solids handling: D 76mm
 Priming time: -s (with suction lift of 2 m)
 Impeller diameter: 265 mm
 Number of blades: 2
 Installed power: kW 40
 Power requirements do not include priming system



Recommended pump operating range
 B.E.P. = Best Efficiency Point

Control System

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 voltage

Key Features

Pump system

- High performance pump with superior efficiency
- 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 oil-free diaphragm vacuum pump that draws significant quantities of air, allowing drainage even under 'snore' conditions

Engine systems

- Durable power with a broad range of operating speeds to set optimal performance and efficiency
- High capacity cooler guarantees continuous operation even at high ambient conditions enabling longer service intervals (500 hours)

Frame and enclosure

- Sound-attenuated & rugged galvasteel enclosure, with large doors for easy service
- Spillage free frame (integrated forklift pockets, 110% containment)
- Rigid lifting beam with eye in the center of gravity