

Product Reference PAS4-KDS3A

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



Specifications

Model	PAS4-KDS3A
Suction/Discharge	DN100 (4")
Operating flow rate	50 - 240 m ³ /h
Head max.	33 m
Solids handling	45 mm Ø
Best efficiency point	182 m ³ /h @ 24 m
Efficiency	75%
Dimensions L x W x H	
Standard high skid frame	2.15 x 0.95 x 1.37 m
Optional eco skid frame	2.15 x 0.95 x 1.17 m
Optional trailer mounted (standard skid)	3.74 x 1.57 x 1.92 m
Optional trailer mounted (economy skid)	3.70 x 1.57 x 1.77 m
Fuel tank capacity	
Standard high skid frame	300 liters
Eco skid frame	105 liters
Fuel consumption @ B.E.P.	5.5 l/h
Fuel autonomy @ B.E.P.	
Standard high skid frame	55 h
Eco skid frame	19 h
Weight, dry	
Standard high skid frame	1070 kg
Optional eco skid frame	987 kg
Weight of undercarriage	285 kg
Max. Sound Power Level (LWA) ^(a,b)	93 dB(A)
Max. Sound Pressure Level (LPA) at full load and 7m	67 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

Model	Kubota V2403-M-DI-E3B
Type	Vertical 4-cycle diesel
Cylinders	4
Governor	Mechanical
Combustion system	Direct Injection
Cooling system	Watercooled
Intake system	Natural aspiration
Max. continuous power	25.7 kW
Max. speed	2200 rpm
Exhaust emission compliance	EU Stage IIIA

Pump set

Endurance Series	Type P4 220G SAE4 V7.5
Operating speed	1200 - 2200 rpm
Maximum absorbed power	18.2 kW
- centrifugal pump	16.0 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	Steel 38 Ni Cr Mo 4 AISI 316 sleeve
Coupling	SAE 4 - V7.5"
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

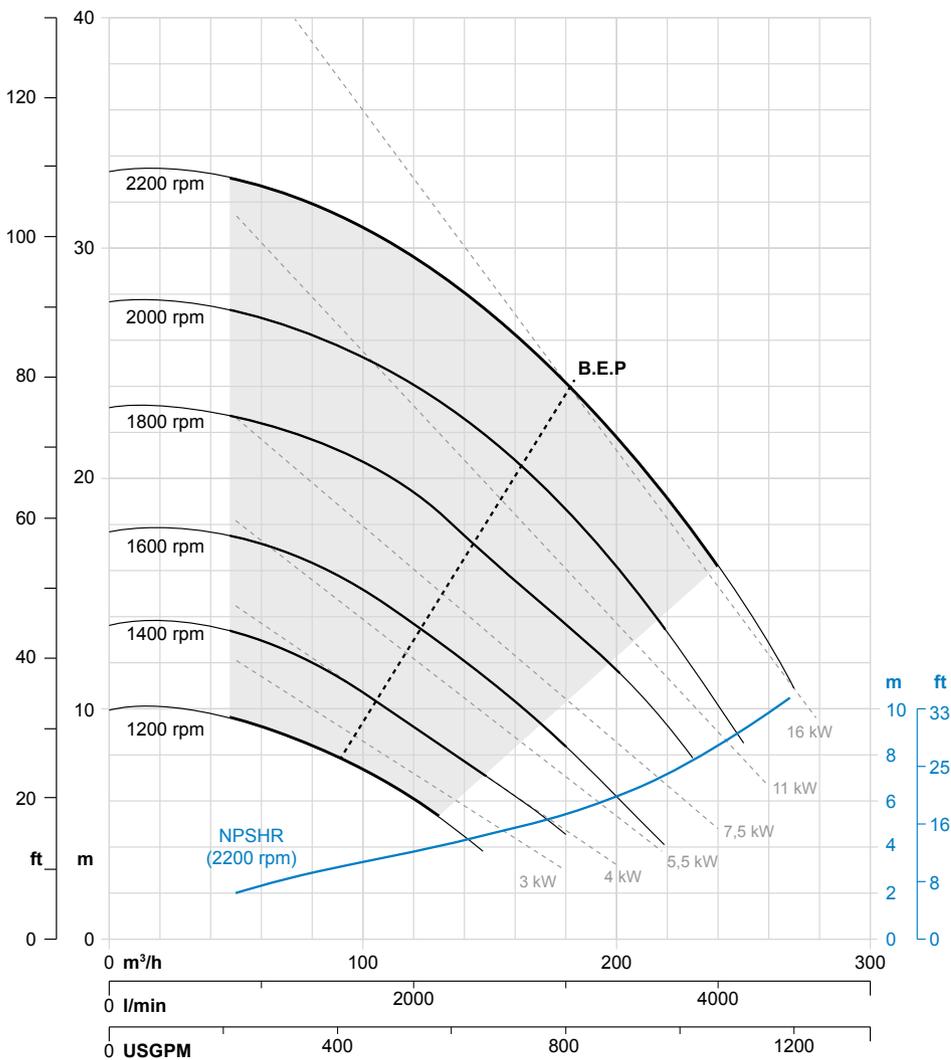
Spherical solids handling: D 45mm

Priming time: -s (with suction lift of 1.5m)

Impeller diameter: 215 mm

Number of blades: 3

Power requirements do not include priming system



Recommended pump operating range

B.E.P. = Best Efficiency Points

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 under voltage
- Battery over voltage

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 under 'snore' conditions

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

Frame and enclosure

- Sound-attenuated & rugged galvasteel 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