Schlumberger

KUDU Power Unit

Electric and hydraulic power source for PCPs

APPLICATIONS

- Single or multiple wellsites
- Hydraulic or electric oil and gas wellsites

BENEFITS

- Eliminates environmental spillage by containing fluid
- Reduces costly shutdowns caused by overheating
- Provides ideal working temperature for the enclosures
- Can control noise

FEATURES

- Electric or hydraulic powered
- Options for open skid or enclosed units
- One power unit supports multiple wellsites
- Compliant with Alberta Energy Regulator (AER) standards
- Fuel shutoff valve
- Tested and proven in temperatures ranging from -40 to 113 degF [-40 to 45 degC]
- Unique features for enclosed units:
 - efficient airflow design
 - automatic climate control system
- Optional packages:
 - sound attenuation
 - gas scrubber for fuel flexibility
 - upgraded engine oil filtration and capacity
 - genset configuration
 - tandem pump configuration
 - · heat trace system

KUDU power units are electrically or hydraulically powered and include open skid and walk-in enclosures for individual or multiple well production. The units can be specified to use diesel, propane, or natural gas to generate electricity or to provide hydraulic fluid power for progressing cavity pumps (PCPs).

With improved fluid containment, KUDU power units protect against environmental spillage. An

optional sound attenuation package provides

noise control.

Enclosed units

The unique airflow design of the enclosed unit circulates clean, filtered air to eliminate overheating and costly shutdowns.

The computerized climate control system monitors the enclosure to maintain an optimal temperature range. This feature works particularly well in severely cold conditions.

The enclosed design improves reliability and delivers longer life by eliminating the environmental effects of snow and dirt that can wear out a power unit. The efficient layout provides room to work inside, and additional components such as a gas scrubber or a variable frequency drive may be added.

Additional options

Sound attenuation

The unit is constructed with sound-insulated walls and a hospital-grade silencer. The KUDU sound package surpasses the AER Noise Control Directive for rural locations (35 dBA at 1,312.3 ft [400 m]).

Fuel delivery

The unit is connected to supplied fuel hookups for easy use with natural gas or propane. It can also be fitted with an optional scrubber package for fuel flexibility.

Engine options

Several engine displacement options ensure that each operation receives the right amount of horsepower. Unit engines are available in 4.3-L GM[™], 5.7-L GM, 5.9-L Cummins[™], 8.3-L Cummins, 6.2-L Origin[™], 8.0-L Origin, and 10.0-L Origin. The Origin line includes engines certified by the US Environmental Protection Agency.

Genset configuration

KUDU power units are available for standby electrical power or preservice power needs.



KUDU power unit in Sedgewick, Saskatchewan, Canada.

Tandem pump configuration

Each power unit can be fitted with multiple hydraulic pumps to operate multiple wellhead drives and compressors.

Heat trace system

The optional system package warms up the flow line to improve flow and conserve energy. It includes a centrifugal booster pump, valves, and quick connectors.

Safety features

- Two full-access doors with panic bars comply with occupational health and safety standards for Alberta and Saskatchewan, Canada.
- 12V lighting provides excellent visibility.
- Each unit is equipped with a fuel shutoff valve to meet the CSA B149.1 Natural Gas and Propane Installation Code requirements.

KUDU Power Unit

KUDU Power Unit Natural Gas and Propane Engine Specifications [†]			
Manufacturer	Displacement, L	Engine Power, hp [‡]	Electrical Power, kW§
GM	4.3	56	33
GM	5.7	75	45
Cummins	5.9	84	50
Cummins	8.3	99	59
Origin	6.2	108	80
Origin	8.0	120	72
Origin	10.3	155	115

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[†]Custom units are available upon request.

†All engines are rated under standard conditions at 1,800 rpm for continuous duty as per manufacturer's ratings; hp refers to the amount of horsepower at the flywheel.

§kW ratings are at 0.8 power factor correction.