

Hydraulic power units

Portable hydraulic power supply at the rig site

Applications

- Onshore/Offshore operations
- ATEX Zone I, Zone II, or nonzoned

Features and Benefits

- Compact, easy to transport and can be installed for both onshore and offshore locations
- Self-contained requiring minimal installation labor and maintenance
- Thermostatically-controlled hydraulic oil cooler maintaining optimum oil temperatures for safety
- Automatic shutdown systems offers increased safety for rig personnel
- Lifting certification available for all units

Baker Hughes hydraulic power units are custom-built and certified to the highest industry safety standards. With a proven history of success in the field, the Baker Hughes power units offer the ultimate in flexibility.

The suite of power units includes the zone I electric power unit, zone II diesel power unit, and the existing platform/drilling rig power unit. Once installed, the electric power unit requires minimal maintenance and is ideal for long-term installation in virtually any location, regardless of the environment.

The compact size makes them easy to transport to or from offshore locations

and maximize use of existing space. Being self-contained, they require minimal maintenance and labor to install. The thermostatically controlled hydraulic oil cooler, where installed, maintains optimum hydraulic oil temperature for safety.

Contact your Baker Hughes representative today to find out how the Baker Hughes hydraulic power units can help you improve safety and efficiency in both onshore and offshore applications.

Safety and handling

Before handling, transporting, or use, review the Operating Procedure for guidance.



Figure 1 - Zone I electrical power unit.



Figure 2 - Zone I diesel power unit.

Technical Specifications

Zone I electrical power unit

Lifting certification	EN 12079 and DNV 2.7-1 / 2.7-3
Explosion-proof equipment to ATEX zone	
Pump	Variable displacement axial piston pump suitable for closed and open center hydraulic systems and pressures up to 6,000 psi (414 bar)
Engine	100 hp (75 kw) EExd electric motor
Cooler	Thermostatically controlled hydraulic oil cooler
Pressure and temperature trips	Motor over current, motor high temperature, high hydraulic oil temperature and low hydraulic oil level trips
Electric supply	3-phase 380/415/480 volts 50/60 Hz
Hydraulic output	Up to 37 gpm (140 lpm) at 3,000 psi (172.3 bar) and up to 59 gpm (132 lpm) at 2,000 psi at 50 Hz
Size	4 ft 9-in. long x 4 ft 9-in. wide x 4 ft 9-in. high (1,500 mm long x 1,500 mm wide x 1,500 mm high)
Weight	6,600 lb (3,000 kg)
Operating temperature range	-20°C to 50°C

Zone II diesel power unit

Lifting certification	EN 12079 and DNV 2.7-1 / 2.7-3
Explosion-proof equipment to ATEX zone II	
Pump	Variable displacement axial piston pump suitable for closed and open center hydraulic systems and pressures up to 6,000 psi (414 bar)
Engine	4-cylinder diesel with Pyroban® protection systems
Cooler	Combined water-cooled manifold/exhaust cooler
Pressure and temperature trips	Low lubricating oil pressure, high cooling water temperature, high oil temperature, and high exhaust temperature trips
Flame arrestors	Exhaust gas flame and spark arrestors, inlet air flame arrestor, crank case vent flame arrestor
Fan and fan belts	Nonmetallic radiator fan and antistatic fan belts
Protection device	Overspeed protection device operating an inlet air cut-off
Caps	Screw caps to dipstick and oil filter caps
Hydraulic output	2,500 psi (172.4 bar) or 35 gpm (132 lpm) at 1,800 rpm
Starter	Air-operated
Size	8 ft 3-in. long x 4 ft 3-in. wide x 6 ft high (2,500 mm long x 1,300 mm wide x 1,840 mm high)
Weight	6,600 lb (3,000 kg)
Operating temperature range	-20°C to 40°C

Nonzoned diesel power unit with increased safety

Engine protection includes exhaust spark arrestor, overspeed shutdown, emergency stop, low engine oil pressure shutdown

Pump	Fixed displacement gear pump suitable for open center hydraulic systems and pressures up to 3,000 psi (207 MPa)
Engine	DEUTZ® 6L914 6-cylinder diesel
Hydraulic output	2,500 psi (172.3 bar) or 35 gpm (132 lpm)
Starter	Air- or spring-operated
Size	7 ft 8-in. long x 4 ft 3-in. wide x 4 ft 9-in. high (2,400 mm long x 1,300 mm wide x 1,500 mm high)
Weight	5,500 lb (2,500 kg)

Note: The specifications given herein may not apply to all existing Baker Hughes hydraulic power units.

