



DIESEL ENGINE	No emission compliance	Stage IIIA / Tier 3	Tier 4 Final EPA	Stage V
Model :	PERKINS serie 1104	PERKINS serie 1104	KOHLER series KDI 3404 TCRSCR	PERKINS series 904J-E36TA
Type :	Turbo	Turbo Intercooler	Turbo Intercooler	Turbo Intercooler
Total displacement :	4400cc - 4 in linea	4400cc - 4 in line	3400cc - 4 in line	3600cc - 4 in line
Injection :	Mechanical control with direct injection	Mechanical control with direct injection	Electronic control with Common Rail	Electronic control with Common Rail
Aftertreatment sys.:	-	-	EGR + DOC + SCR	EGR + DOC + DPF + SCR
Cooling :	air water, dry air filter	air water, dry air filter	air water, dry air filter	air water, dry air filter
Maximum power :	82.5 kW (112 Hp)	83 kW (113 Hp)	90 kW (122 Hp)	90 kW (122 Hp)
Adj. power. :	82 kW (2400 rpm)	83 kW (2200 rpm)	90 kW (2200 rpm)	90 kW (2400 rpm)
Maximum torque :	404 Nm a 1400 rpm	418 Nm a 1400 rpm	500 Nm a 1400 rpm	500 Nm a 1500 rpm
Alternator :	12V - 65 A	12V - 65 A	12V - 90 A	12V - 120 A

### ELECTRIC SYSTEM

Battery: ..... 12 V - 132 Ah (600 A)  
Road light system, front working light.

### 4X4 FOUR-WHEEL DRIVE

Hydrostatic "automotive" transmission with variable displacement pump and variable displacement hydraulic motor with electro-hydraulic control, and reverse gear control on the steering wheel.

Electro-hydraulically controlled mechanical gearbox for "working speed" and "road transfer" speed.

### SPEED

4 forward gears      2 reverse gears  
Ist 0 - 3.0 Km/h      0 - 3.0 Km/h  
IInd 0 - 7.2 Km/h      0 - 3.0 Km/h  
IIIRD 0 - 10.0 Km/h      0 - 10.0 Km/h  
IVth 0 - 25.0 Km/h      0 - 10.0 Km/h  
Traction / weight ratio ..... 48%

### AXLES AND WHEELS

Front and steering with planetary reduction gears on the wheel hubs and flanged gearbox. Rear, oscillating ( $\pm 6^\circ$ ) and steering with planetary reduction gears on the wheel hubs.

Tyres:

Stage 0 - III A ..... 405/70-20 16PR  
Tier 4 Final EPA - Stage V .... 405/70-20 14PR

### BRAKES

Internal oil-bath disc service and emergency brakes acting on the 4 wheels, activation with miniservo pump on independent dual circuit. Negative type parking brake, with internal oil-bath discs on the front axle and electro-hydraulically controlled release.

### STEERING

Assisted by means of load-sensing power steering with double displacement on 4 steering wheels; steering selection device for: 2 steering wheels, 4 steering wheels - crab steering.

### WATER SYSTEM

"Self-priming" volumetric water pump with quick-suction.

Max. capacity: ..... 250 litres/min.  
Maximum head: ..... 4 bar  
Two connected tanks positioned opposite each other made of polyethylene with a total capacity of ..... 870 litres.  
Water feeding to the drum controlled by means of electromagnetic flow meter and fed litre reading on the cabin display.  
Water pump activation from the driver's seat.  
Suction selection from the ground with quick-coupling pipes.

### MIXING AND UNLOADING

Double-cone drum with double-spiral mixing screws and convex bottom.  
Geometrical drum volume: ..... 5000 litres  
Drum rotation speed: ..... 20 rpm  
Class S1 concrete produced as : ..... 3.5 cu m  
Drum rotation by means of a piston pump with variable flow rate and an orbital hydraulic motor in closed circuit with infinitesimal electrical control positioned in the cabin.  
Unloading chute with hydraulic tilting by means of a double-acting jack and control placed inside the cabin.  
1 unloading chute extension provided as standard equipment.

### EQUIPMENT HYDRAULIC SYSTEM

Gear pump  
Max. flow rate: ..... 45 litres/min.  
Maximum pressure: ..... 230 bar  
3-element distributor servo-controlled with multi-function joystick.  
Aluminium heat exchanger for hydraulic oil cooling.  
Pressurised closed-circuit intake with oil filter replaceable from the outside.

### LOADER

Loading device with grab bucket and lifting arms controlled by double-acting hydraulic cylinders. Electrohydraulically operated trap door.  
Volumetric capacity: ..... 680 litres  
Number of loaderfuls per load: ..... around 9

### CAB

Closed cab with heating system, designed in accordance with ROPS & FOPS Level I standards. Tilting front window.  
Anatomic seat with flexible suspension and height adjustment, seat belts.  
LCD TV display with camera for rear visibility, optional/standard depending on engine type.

### SERVICE REFILL CAPACITIES

Fuel tank: ..... 85 litres  
Total hydraulic system capacity: ..... 120 litres  
Engine oil: ..... 7.96 kg

### WEIGHTS

Operating weight ..... 6300 kg  
Max gross weight: ..... 14800 kg  
load-carrying capacity: ..... 8700 kg