

MODEL: KD250-FD02 – POWER GENERATOR

KOHLER POWER SYSTEMS

CAPS – Prime /Standby application Power Generator

Since 1920's, Kohler Co. became one of the world's leading manufacturers of Generators. They specifically designed Generators to suit every application to give to their clients a solution that fits their needs. Industry requires specifically designed generators built tough, easy to use, transport and maintain. When utility power is not available, you can rely on a Kohler Generator to provide your site or business with a reliable solution. The KD250 generator is a 250-kVA generator with a large tank and specific options that makes it a reliable, practical and sustainable continuous source of power for your installation.

Model	KD250IV-FD02
Rating	250 kVA (ESP*) / 227 kVA (PRP**)
Voltage	415v
Frequency	50Hz
Phases	3
Engine Make / Model	JOHN DEERE 6068HFS55-228
Alternator Model	KH01180T
Dimensions (LxWxH)	3560mmx1200mmx2182mm
Weight	2740 kgs (Dry)
Noise Level	71 dB(A) @ 7m
Fuel Tank Capacity	FD02 = 868 L FD03 = 1630 L
Autonomy	24 hours @ 75% load
Control panel	APM303



* The standby power (ESP) rating is applicable for supplying emergency power in variable load applications in accordance with ISO 8528-1. Overload is not allowed.

** Prime Power (PRP) is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO 8528-1.

Standard Features and benefits

- ✓ **Exceptional productivity:** 35 hours runtime at 50% load with the fully bunded fuel tank which also prevents any rain water Ingress.
- ✓ **Robust:** Built tough to run even in extreme Australian weather conditions.
- ✓ **Durable:** 1500rpm low speed John Deere engine.
- ✓ **Easy to operate:** Digital control panel simple to operate with all the information you need to run and take care of your generator (key start or remote start, low fuel level, hour meter, engine speed, battery voltage, electrical instruments including voltage, current, frequency and power).
- ✓ **Safety protection:** Standard 4-pole Schneider Electric NS circuit breaker
- ✓ **Easy handling:** With its central lifting ring and fork slots this generator can be positioned anywhere needed in no time.

- ✓ **Super quiet:** 71 dB(A) @ 7m equivalent of an open space office noise.
- ✓ **Generator protection:** Control panel shutdown protection (Over speed, oil pressure, water temperature) and electrical protection against abnormal voltage and frequency.



APM303 – Digital control panel

- ✓ **Environmentally friendly:** Compliant with the European emission standards.
- ✓ **Guaranteed:** 1 year or 2000 hours warranty whichever occurs first.

Included in the offer

EN16	Battery isolator switch (Optional)
FD02	Large autonomy tank with containment
FD14	Retention bund alarm
CEL02	Heat hand protection
SOCKETS	Optional : 2 x 32A 3P (5 pins) and 2 x 15A SP (3 pins) External Sockets

Options

- ✓ 12 months service. For your peace of mind, get this extra option, which will keep your system operational. Our expert team of Service specialists will come to you and check and service your installation 4 times a year.
- ✓ Unlimited hours prime warranty available.

Engine Specifications

GENERAL ENGINE DATA	
Engine model	JOHN DEERE
Engine ref.	6068HFS55-228
Air inlet	Turbo
Cylinders arrangement	L
Number of cylinders	6
Displacement (C.I.)	6.72
Air coolant	Air/Water DC
Speed (RPM)	1500
Maximum stand-by power at rated RPM (kW)	228.0
Frequency regulation (%)	+/- 0.5%
Governor type	Electronic
COOLING SYSTEM	
Radiator & Engine capacity (L)	27.7
Max water temperature (°C)	110
Outlet water temperature (°C)	93
Fan power (kW)	3.40
Fan air flow w/o restriction (m3/s)	3.8
Type of coolant	Glycol-Ethylene
Thermostat (°C)	85-97

EMISSIONS	
Emission PM (g/kW.h)	0.05
Emission CO (g/kW.h)	
Emission HCNOx (g/kWh)	
Emission HC (g/kW.h)	0.12
EXHAUST	
Exhaust gas flow (L/s)	577
Max. exhaust back pressure (mm EC)	750
FUEL	
Consumption @ 110% load (L/h)	51.4
Consumption @ 100% load (L/h)	47.10
Consumption @ 75% load (L/h)	35.90
Consumption @ 50% load (L/h)	24.40
OIL	
Oil capacity (L)	32.5
HEAT BALANCE	
Heat rejection to exhaust (kW)	151
Heat rejection to coolant (kW)	88
AIR INTAKE	
Max. intake restriction (mm H2O)	375
Intake air flow (L/s)	197.00

Alternator Specifications

GENERAL DATA	
Alternator ref.	KH01180T
Number of Phase	Three phase
Power factor (Cos Phi)	0.800
Altitude (m)	0 to 1000
Overspeed (rpm)	2250
Capacity for maintaining short circuit at 3 In for 10 s	Yes
Insulation class	H
T° class, continuous 40°C	H / 125°K
T° class, standby 27°C	H / 163°K
AVR Regulation	Yes
Total Harmonic Distortion in no-load DHT (%)	<2.6
Total Harmonic Distortion, on load DHT (%)	<2.8

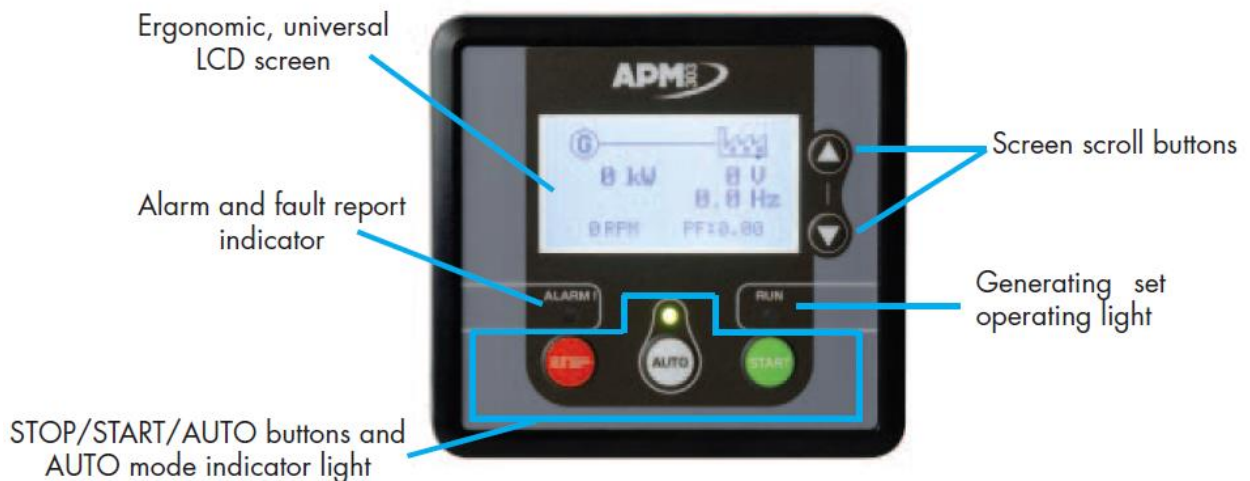
Wave form : NEMA=TIF	<40
Wave form : CEI=FHT	<2
Coupling	Direct
Recovery time (Delta U = 20% transient) (ms)	200
Protection class	IP 23
Technology	Without collar or brush

OTHER DATA	
Continuous Nominal Rating 40°C (kVA)	225
Standby Rating 27°C (kVA)	250
Efficiencies 100% of load (%)	93.0
Air flow (m3/s)	0.533

Control Panel

APM303, comprehensive and simple

The APM303 is a versatile control panel which can be operated in manual or automatic mode. Equipped with an LCD screen, the user-friendly APM303 offers high-quality basic functions to guarantee simple, reliable operation and supervision of your generating set. It offers the following features:



Measurements	phase-to-neutral and phase-to-phase voltages, currents, active and reactive power, power factor, kWh energy meter, fuel content, oil pressure and coolant temperature
Supervision	Modbus RTU communication on RS485
Reports	2 configurable alarm outputs
Safety features	overspeed, oil pressure, coolant temperatures, minimum and maximum voltage, minimum and maximum frequency, maximum current, maximum active power, phase sequence
Traceability	stack of 12 stored events