



Rating Range

		KD88W	
		50Hz	
Standby	kW	70	
	kVA	88	
Prime	kW	63	
	kVA	79	



Standard Feature:

- KOHLER Co., provides one-source responsibility for the generating system and accessories
- The generator set and it's components are prototype-tested, factory-built and production-tested
- One-year standard warranty covers all systems and components
- John Deere engine
- KOHLER alternator
- 50°C radiator
- Frame and vibration damper
- 180L Fuel tank
- Dry air cleaner
- APM303 controller
- Battery and battery cable
- 9dB(A) muffler
- Operation manual

Generator Rating

Alternator	V	Phs	Hz	Standby		Prime	
				kW/kVA	Amps	kW/kVA	Amps
4P10X	220/380	3	50	70/88	133	63/79	120
	230/400	3	50	70/88	126	63/79	114
	240/415	3	50	70/88	122	63/79	110

RATINGS: All three-phase units are rated at 0.8 power factor. PRP: Prime power is available for an unlimited number of annual operating hours in variable load applications in accordance with ISO8528.1. A 10% overload capability is available for a period of 1 hours within a 12-hour period of operating in accordance with ISO3046.1. ESP: The emergency standby power rating is applicable for supplying emergency power in variable load applications in accordance with ISO-8528.1. Overload is not allowed. The generator set manufacturer reserves the rights to change the design or specification without notice and without any obligation or liability whatsoever.

Alternator Specification

- IEC60034, NEMA MG1.22, ISO8528, CSA, UL, ISO9001,ISO14001, CE standard
- IP23
- Class H Insulation
- 2/3 winding pitch

Specification	50Hz
Voltage	400V
Standby (27°C),kVA	88.5
Prime (40°C), kVA	80.5
Efficiency (full load)	88.6%
Air Flow, ft^3/min	450

Specification	Alternator
Manufacturer	KOHLER
Type	4 Pole Rotating
Excitation	PMG
Leads	12 Leads
Voltage regulator	Solid State
Insulation:	NEMA MG1
Material	Class H
Coupling	Single Bearing
Voltage regulation	±1%

Specification

Engine

Engine Specification	
Manufacturer	John Deere
Engine Model	4045TF220
Engine Type	Turbocharged
Cylinder arrangement	4 in-line
Displacement, L (in^3)	4.5 (273)
Bore and Stoke, mm (in)	106 x 127 (4.17 x 5.0)
Compression ratio	17:1
Piston speed, m/min (ft/min)	381 (1248)
Rated speed (r/min)	1500
Max, power at rated rpm, kW (BHP)	83 (111)
Governor Type	Mechanical
Frequency Regulation	±2.5%
Air Cleaner Type	Dry

Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust Flow, m^3/min (cfm)	12.3 (434)
Exhaust Temperature, °C (°F)	565 (1049)
Max allowable back pressure, kPa (in Hg)	7.5 (2.2)
Hook up, mm (in)	76.5 (3.0)

Engine Electrical

Engine Electrical	
Battery Charging	
Ground/Negative	Negative
Voltage (DC)	12
Starter motor rated voltage (DC)	12
Battery, recommended Ampere Hour (CCA)	
QTY, CCA	1,680
Battery Voltage (DC)	12

Fuel

Fuel System	
Max. Fuel Flow, Lph (gph)	108 (28.5)
Fuel prime pump	Manual
Fuel Type	Diesel
Fuel Tank Capacity, L (gal)	180 (47.6)

Lubrication

Lubrication System	
Type	Full Pressure
Oil pan capacity with filter, L (qt)	12.5 (13.2)
Oil pan capacity initial filling, L (qt)	13.5 (14.4)

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Specification

Cooling

Radiator System

Radiator system capacity , L (gal)	23.6 (6.2)
Heat rejected to cooling water at rated, kW (Btu/min)	35 (1990)
Water pump type	Centrifugal
Fan loss, kW (HP)	2.5 (3.4)
Max, restriction of cooling air, intake and discharge of radiator, kPA (in H_2O)	0.2 (0.8)

Air requirement

Radiator-cooled cooling air m^3/min (scfm)	202 (7141)
Combustion air, m^3/min (ft^3/min)	5.6 (198)
Air density = $1.20 kg/m^3$ ($0.075 lb/ft^3$)	

Fuel Consumption

Diesel, L/h (gal/h), load%	Standby
100%	21.5 (5.7)
Diesel, L/h (gal/h), load%	Prime
100%	19.5 (5.2)
75%	14.0 (3.7)
50%	10.0 (2.6)

Controller



APM303

The APM303 is a versatile unit which can be operated in manual or automatic mode. It offers the following features:

Measurements:

Phase-to-neutral and phase to phase voltages, fuel level, load currents, active power, power factors, kW/h energy meter, oil pressure and coolant temperature

Supervision:

Modbus RTU communication on RS485

Reports:

2 configurable reports

Safety features:

Overspeed, oil pressure, coolant temperatures, minimum and maximum voltage, minimum and maximum frequency

Traceability

Stack of 12 stored events

For further information, please refer to the datasheet for APM303

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Option

Canopy

- Canopy M128, 50Hz, 76 dB(A) @ 1m

Standard

- Critical muffler, 40dB(A)
- Hospital muffler, 29dB(A)
- Connector, 40cm (16in)
- Bellow
- Protection Guard

Cooling system

- Block heater (recommend to use when below 0°C (32°F))
- Radiator protection cover

Decision-Marker 4000 Controller

- Alternator protection
- Audible alarm module
- 5 expandable modules with 4 inputs/6 outputs
- Network modules (RTC and GSM modems and Ethernet router)
- NFPA 100 module
- Remote annunciator
- Voltage/speed adjustment module
- Win Telys Software

Fuel system

- Automatic fuel tank fill kit
- Fuel tank with secondary containment basin
- Subbase fuel tank leak alarm
- Water separator fuel filter

Electrical System

- Battery charger, equalize/float type
- Battery isolator switch

Engine and alternator

- Alternator strip heater
- Air cleaner, heavy duty (with air restriction indicator)
- Droop kit with 3-function voltage regulator
- Electronic governor
- Lube oil drain pump
- PMG alternator and voltage regulator
- Tropical heavy-duty alternator insulation

Others

- _____
- _____
- _____
- _____
- _____
- _____

Dimension and weight

Open Model

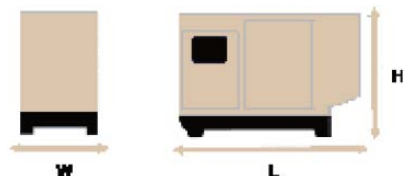


Dimension, LxWxH mm: 1870 x 994 x 1360

Dry weight, kg: 1070

Wet weight,kg: 1270

Canopy Model



Dimension, LxWxH mm: 2300 x 1080 x 1680

Dry weight, kg: 1490

Wet weight,kg: 1690

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