



220 - 415V Diesel



#### **Rating Range**

		KH750
		50Hz
Standby	kW	607
	kVA	758
Prime	kW	552
	kVA	689



#### **Standard Feature:**

- KOHLER Co., provides one-source responsibility for the generating system and accessories
- The generator set and it's components are prototypetested, factory-built and production-tested
- One-year standard warranty covers all systems and components
- Doosan engine with 27.5 volt battery charging alternator
- Meccalte single bearing alternator class H insulation system
- Unit-mounted radiator with 40°C (104°F) ambient air capability
- Skid and vibration isolators
- Dry type air filter
- Main circuit breaker
- Microprocessor controller
- Battery, battery rack and cables
- · Operation and installation manual

# **Generator Rating**

				Standby		Prime	
Alternator	V	Phs	Hz	kW/kVA	Amps	kW/kVA	Amps
	220/380	3	50	607/758	1153	552/689	1048
ECO40 VL4B	230/400	3	50	607/758	1095	552/689	996
	240/415	3	50	607/758	1056	552/689	960



# Alternator Specification

•	IEC60034, NEMA MG1.22, ISO8528, CSA, UL,
	ISO9001,ISO14001, CE standard
•	IP23
•	Class H Insulation

■ IF 23		
<ul> <li>Class H Insulation</li> </ul>		
2/3 winding pitch		
Specification	50Hz	_
Voltage	400V	
Standby (27°C),kVA	825	
Prime (40°C), kVA	750	
Efficiency (full load)	95.1%	
Air Flow, $m^3/min$	54	
Direct-axis (X"d), %	9	
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Specification	Alternator
Manufacturer	MECC ALTE
Туре	4 Pole Rotating
Leads	12 Leads
Voltage regulator	DER-1
Insulation:	NEMA MG1
Material	Class H
Coupling	Single Bearing
Voltage regulation	±1%

# Specification

Engine		Engine Electrical	
Engine Specification		Engine Electrical	
Manufacturer	Doosan/Hyundai	Battery Charging	27.5V
Engine Model	DP222LB	Ground/Negative	Negative
Engine Type	4cycle,Turbocharge	Voltage (DC)	27.5
Cylinder arrangement	12V	Starter motor rated voltage (DC)	24
Displacement, L (in³)	21.93 (1338)	Battery, recommended Ampere	
Bore and Stoke, mm (in)	128 x 142 (5.0 x 5.6)	Hour (CCA)	
Compression ratio	15:1	QTY, CCA	2,170
Piston speed, m/min (ft/min)	426 (1398)	Battery Voltage (DC)	12
Rated speed (r/min)	1500		
Max, power at rated rpm, kW (BHP)	664 (890)	Fuel	
Governor Type	Electronic	Fuel System	
Frequency Regulation	±0.5%	Max. Fuel Flow, Lph (gph)	630 (166.4)
Air Cleaner Type	Dry	Fuel prime pump	Manual
		Fuel Type	Diesel
Exhaust		Fuel Tank Capacity, L (gal)	610 (161)
Exhaust System		<u>.</u>	
Exhaust manifold type	Dry	Lubrication	
Exhaust Flow, $m^3/min$ (cfm)	101 (3565)	Lubrication System	
Exhaust Temperature, °C (°F)	481 (898)	Type	Full Pressure
Max allowable back pressure, kPa (in Hg)	5.9 (1.74)	Oil pan capacity with filter, L (qt)	40 (42.3)

## **Specification**

### Cooling

Radiator System	
Radiator Ambient Temperature, °C (°F)	40 (104)
Radiator system capacity , L (gal)	114 (30.12)
Heat rejected to cooling water at rated, kW (Btu/min)	288 (16378)
Water pump type	Centrifugal
Fan loss, kW (HP)	24 (32.2)
Max, restriction of cooling air, intake and discharge of radiator, kPA (in $H_2O$ )	-

Air requirement	
Radiator-cooled cooling air $m^3/min$ (scfm)	860 (30353)
Combustion air, $m^3/min$ ( $ft^3/min$ )	42.2 (1489)
Air density =1.20 $kg/m^3 (0.075 lb/ft^3)$	

Fuel Consumption	
Diesel, L/h (gal/h), load%	Standby
100%	162.7 (43.0)
Diesel, L/h (gal/h), load%	Prime
100%	147.1 (38.9)
75%	109.2 (28.8)
50%	73.0 (19.3)

## Controller



# The APM403 is a versatile control unit which allows operation in manual or automatic mode

- Measurements: voltage and current
- kW/kWh/kVA power meters
- Standard specifications: Voltmeter, Frequency meter.
- J1939 CAN ECU engine control
- Alarms and faults: Oil pressure, Coolant temperature,
- Overspeed, Start-up failure, alternator min/max,
- Emergency stop button.
- Engine parameters: Fuel level, hour counter
- Event log/ Management of the last 300 genset events.
- Mains and genset protection
- Clock management
- USB connections, USB Host and PC,
- Communications: RS485 INTERFACE
- ModBUS protocol /SNMP



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# Option

#### Canopy

Canopy M229, 50Hz, 74.8 dB(A)@7m (23ft) standby

#### Standard

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

## **Cooling system**

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

#### Fuel system

- Automatic fuel tank fil 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**

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- •
- \_\_\_\_\_
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- \_\_\_\_\_
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## Dimension and weight

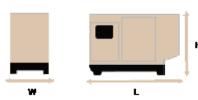
## **Open Model**



Dimension, LxWxH mm: 3470 x 1630 x 2232

Dry weight, kg: 4428 Wet weight, kg: 5038

#### Canopy



Dimension, LxWxH mm: 5031 x 1690 x 2662

Dry weight, kg: 5863 Wet weight, kg: 6560