



220 - 415V Diesel



#### **Rating Range**

		KH300
		50Hz
Standby	kW	240
	kVA	300
Prime	kW	219
	kVA	274



#### **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 28.5 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**

				Stand	lby	Prim	ne
Alternator	V	Phs	Hz	kW/kVA	Amps	kW/kVA	Amps
	220/380	3	50	240/300	456	219/274	416
ECO38 2L4A	230/400	3	50	240/300	433	219/274	395
	240/415	3	50	240/300	417	219/274	381



# **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	330	
Prime (40°C), kVA	300	
Efficiency (full load)	93.7%	
Air Flow, $m^3/min$	32	
Direct-axis (X"d), %	8.4	
	O.,	

Specification	Alternator
Manufacturer	MECC ALTE
Туре	4 Pole Rotating
Leads	12 Leads
Voltage regulator	DSR
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	28.5V
Engine Model	P126TI	Ground/Negative	Negative
Engine Type	4cycle,Turbocharge	Voltage (DC)	28.5
Cylinder arrangement	6 inline	Starter motor rated voltage (DC)	24
Displacement, L (in <sup>3</sup> )	11.05 (674)	Battery, recommended Ampere	
Bore and Stoke, mm (in)	123 x 155 (4.8 x 6.1)	Hour (CCA)	
Compression ratio	17.1:1	QTY, CCA	2,170
Piston speed, m/min (ft/min)	465 (1526)	Battery Voltage (DC)	12
Rated speed (r/min)	1500		
Max, power at rated rpm, kW (BHP)	272 (365)	Fuel	
Governor Type	Electronic	Fuel System	
Frequency Regulation	±0.5%	Max. Fuel Flow, Lph (gph)	230 (60.8)
Air Cleaner Type	Dry	Fuel prime pump	Manual
		Fuel Type	Diesel
Exhaust		Fuel Tank Capacity, L (gal)	470 (124.2)
Exhaust System		<u>-</u>	
Exhaust manifold type	Dry	Lubrication	
Exhaust Flow, $m^3/min$ (cfm)	49.7 (1754)	Lubrication System	
Exhaust Temperature, °C (°F)	593 (1099)	Type	Full Pressure
Max allowable back pressure, kPa (in	5.9 (1.74)	Oil pan capacity with filter, L (qt)	20 (21.1)
Hg)		Oil pan capacity with initial fill,L(qt)	23 (24.3)

## Specification

## Cooling

Radiator System	
Radiator Ambient Temperature, °C (°F)	40 (104)
Radiator system capacity , L (gal)	51 (13.5)
Heat rejected to cooling water at rated, kW	101.4
(Btu/min)	(5767)
Water pump type	Centrifugal
Fan loss, kW (HP)	7 (9.4)
Max,restriction of cooling air, intake and	
discharge of radiator, kPA (in $H_2O$ )	-

Air requirement	
Radiator-cooled cooling air $m^3/min$ (scfm)	370 (13056)
Combustion air, $m^3/min$ ( $ft^3/min$ )	21.1 (745)
Air density =1.20 $kg/m^3 (0.075 lb/ft^3)$	

Fuel Consumption	
Diesel, L/h (gal/h), load%	Standby
100%	66.2 (17.5)
Diesel, L/h (gal/h), load%	Prime
100%	58.1 (15.3)
75%	43.6 (11.5)
50%	30.0 (7.9)

## 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 M228, 50Hz, 70.2 dB(A)@7m (23ft) standby (critical muffler)

#### **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 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**

- \_\_\_\_\_\_
- \_\_\_\_\_\_\_
- •
- •
- •
- \_\_\_\_\_

## **Dimension and weight**

## **Open Model**

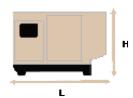


Dimension, LxWxH mm: 3160 x 1340 x 1713.5

Dry Weight, kg: 2479 Wet weight, kg: 2949

#### Canopy





Dimension, LxWxH mm: 4475 x 1410 x 2430

Dry weight, kg: 3624 Wet weight, kg: 4094