



### Rating Range

**KH275**  
**50Hz**

<b>Standby</b>	<b>kW</b>	220
	<b>kVA</b>	275
<b>Prime</b>	<b>kW</b>	200
	<b>kVA</b>	250



### 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
- 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

Alternator	V	Phs	Hz	Standby		Prime	
				kW/kVA	Amps	kW/kVA	Amps
	220/380	3	50	220/275	418	200/250	380
ECO38 1L4A	230/400	3	50	220/275	397	200/250	361
	240/415	3	50	220/275	383	200/250	348



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	275
Prime (40°C), kVA	250
Efficiency (full load)	93.4%
Air Flow, $m^3/min$	32
Direct-axis (X'd), %	7.45

Specification	Alternator
Manufacturer	MECC ALTE
Type	4 Pole Rotating
Leads	12 Leads
Voltage regulator	DSR
Insulation:	NEMA MG1
Material	Class H
Coupling	Single Bearing
Voltage regulation	±1%

## Specification

### Engine

Engine Specification	
Manufacturer	Doosan/Hyundai
Engine Model	P126TI
Engine Type	4cycle,Turbocharge
Cylinder arrangement	6 inline
Displacement, L ( $in^3$ )	11.05 (674)
Bore and Stoke, mm (in)	123 x 155 (4.8 x 6.1)
Compression ratio	17.1:1
Piston speed, m/min (ft/min)	465 (1526)
Rated speed (r/min)	1500
Max, power at rated rpm, kW (BHP)	272 (365)
Governor Type	Electronic
Frequency Regulation	±0.5%
Air Cleaner Type	Dry

### Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust Flow, $m^3/min$ (cfm)	49.7 (1754)
Exhaust Temperature, °C (°F)	593 (1099)
Max allowable back pressure, kPa (in Hg)	5.9 (1.74)

### Engine Electrical

Engine Electrical	
Battery Charging	28.5V
Ground/Negative	Negative
Voltage (DC)	28.5
Starter motor rated voltage (DC)	24
Battery, recommended Ampere Hour (CCA)	
QTY, CCA	2,170
Battery Voltage (DC)	12

### Fuel

Fuel System	
Max. Fuel Flow, Lph (gph)	230 (60.8)
Fuel prime pump	Manual
Fuel Type	Diesel
Fuel Tank Capacity, L (gal)	470 (124.2)

### Lubrication

Lubrication System	
Type	Full Pressure
Oil pan capacity with filter, L (qt)	20 (21.1)
Oil pan capacity with initial fill,L(qt)	23 (24.3)

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## 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 (Btu/min)	101.4 (5767)
Water pump type	Centrifugal
Fan loss, kW (HP)	7 (9.4)
Max, restriction of cooling air, intake and discharge of radiator, kPA (in $H_2O$ )	-

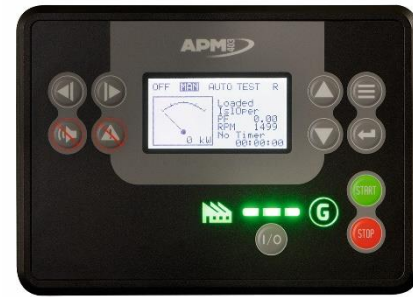
#### Air requirement

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, battery voltage.
- 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, 69.9 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 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

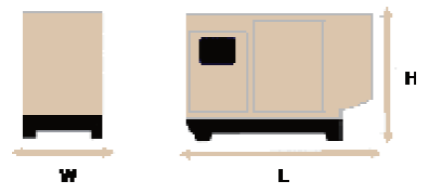


Dimension, LxWxH mm: 3160 x 1340 x 1713.5

Dry weight, kg: 2394

Wet weight, kg: 2864

### Canopy



Dimension, LxWxH mm: 4475 x 1410 x 2430

Dry weight, kg: 3539

Wet weight, kg: 4009

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