



Rating Range

KH700

50Hz

Standby	kW	565
	kVA	706
Prime	kW	513
	kVA	641



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 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

Alternator	V	Phs	Hz	Standby		Prime	
				kW/kVA	Amps	kW/kVA	Amps
	220/380	3	50	565/706	1073	513/641	974
ECO40 2L4B	230/400	3	50	565/706	1019	513/641	926
	240/415	3	50	565/706	983	513/641	892



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	735
Prime (40°C), kVA	680
Efficiency (full load)	95%
Air Flow, m^3/min	54
Direct-axis (X'd), %	9.52

Specification	Alternator
Manufacturer	MECC ALTE
Type	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 Specification	
Manufacturer	Doosan/Hyundai
Engine Model	DP180LB
Engine Type	4cycle,Turbocharge
Cylinder arrangement	10V
Displacement, L (in^3)	18.27 (1115)
Bore and Stoke, mm (in)	128 x 142 (5.0 x 5.6)
Compression ratio	15:1
Piston speed, m/min (ft/min)	426 (1398)
Rated speed (r/min)	1500
Max, power at rated rpm, kW (BHP)	612 (821)
Governor Type	Electronic
Frequency Regulation	±0.5%
Air Cleaner Type	Dry

Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust Flow, m^3/min (cfm)	118 (4165)
Exhaust Temperature, °C (°F)	587 (1089)
Max allowable back pressure, kPa (in Hg)	5.9 (1.74)

Engine Electrical

Engine Electrical	
Battery Charging	27.5V
Ground/Negative	Negative
Voltage (DC)	27.5
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)	630 (166.4)
Fuel prime pump	Manual
Fuel Type	Diesel
Fuel Tank Capacity, L (gal)	610 (161)

Lubrication

Lubrication System	
Type	Full Pressure
Oil pan capacity with filter, L (qt)	34 (35.9)

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GCD5-05007 (KH700) 0723 EN

Specification

Cooling

Radiator System

Radiator Ambient Temperature, °C (°F)	40 (104)
Radiator system capacity , L (gal)	91 (24.04)
Heat rejected to cooling water at rated, kW (Btu/min)	268 (15240)
Water pump type	Centrifugal
Fan loss, kW (HP)	16 (21.4)
Max, restriction of cooling air, intake and discharge of radiator, kPA (in H_2O)	-

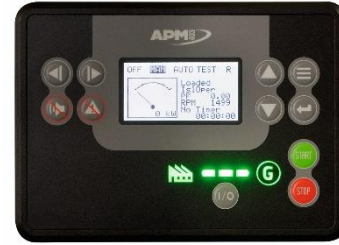
Air requirement

Radiator-cooled cooling air m^3/min (scfm)	700 (24720)
Combustion air, m^3/min (ft^3/min)	36 (1271)
Air density = $1.20 kg/m^3$ ($0.075 lb/ft^3$)	

Fuel Consumption

Diesel, L/h (gal/h), load%	Standby
100%	149.5 (39.5)
Diesel, L/h (gal/h), load%	Prime
100%	136.4 (36)
75%	103.8 (27.4)
50%	71.2 (18.8)

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 M230, 50Hz, 71.2 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 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

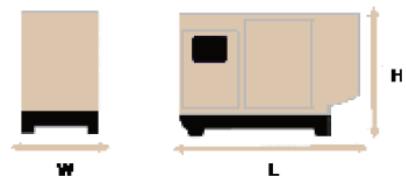


Dimension, LxWxH mm: 3470 x 1630 x 2232

Dry weight, kg: 4043

Wet weight, kg: 4653

Canopy



Dimension, LxWxH mm: 5031 x 1690 x 2662

Dry weight, kg: 5381

Wet weight, kg: 6078

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