

Model:1250REOZM

KOHLER Power Systems

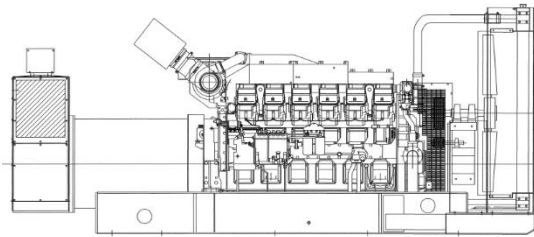
380 V - 416V

Diesel



Ratings Range

		50Hz
Standby	kW	1108 – 1112
	kVA	1385 – 1390
Prime	kW	1012 – 1016
	kVA	1265 - 1270



Standard Features:

- Kohler Co. provides one-source responsibility for the generating system and accessories
- The generator set and its components are prototyped-tested, factory-built and production tested
- The generator set accepts 100% one step load
- The generator set complies with ISO8528-5, G3 requirement for transient performance
- A one-year limited warranty covers all systems and components.
- **Generator features:**
 - The brushless, rotating-field generator has broadrange reconnectability
 - PMG provides superior short-circuit capability

Alternator	Voltage	Ph	Hz	Standby Rating		Prime Rating	
				kW/kVA	Amps	kW/kVA	Amps
	220/380	3	50	1108/1385	2104	1012/1265	1922
742RSL8050	230/400	3	50	1112/1390	2006	1016/1270	1833
	240/416	3	50	1108/1385	1927	1016/1270	1767

RATINGS: All three-phase units are rated at 0.8 power factor. Standby Ratings: The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Prime Power Ratings: At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. For limited running time and continuous ratings, consult the factory. Obtain technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

Alternator Specification

Specification	Generator	
Type	4pole rotating field	<ul style="list-style-type: none"> • NEMA MG1,IEEE and ANSI standards compliance for temperature rise and motor starting • Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds • Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the generator field • Self-ventilated and dirpproof construction • Digital solid-state,volts-per-hertz voltage regulator with $\pm 0.25\%$ no load to full load regulation
Exciter Type	PMG	
Voltage regulator	Solid State	
Insulation	NEMA MG1	
Material	Class H	
Temperature rise	125 °C prime	
Bearing: quantity, type	1,sealed	
Coupling	Flexible Disc	
Amortisseur windings	Full	
Voltage regulation (no load to full load)	$\pm 0.25\%$	
One step load acceptance	100%	
Unbalanced load capability	100% rated standby current	

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Application Data

Engine		Exhaust	
Engine specifications	50Hz	Exhaust system	50Hz
Engine manufacturer	MHI	Exhaust flow at prime power, m^3/min	242
Engine model	S12R-PTA-3	Exhaust temperature °C	526
Engine turbo	Turbocharged	Max.allowable back pressure mmH_2O	600
Cylinder arrangement	12V	Exhaust outlet size mm (in.)	See drawing
Displacement, L	49.03		
Bore and stroke, mm	170 x 185	Engine Electrical	
Compression ratio	15:1	Engine Electrical system	50Hz
Piston speed, m/min	540	Battery charging alternator	
Rated rpm	1500	Grounding	Negative
Max.power at rated rpm kW/m	1220	Voltage	24V DC
Cylinder head material	Cast Iron	Ampere rating	30A
Crankshaft material	Forged Steel	Starter motor rated voltage	Dual, 24V DC
Governor type	Woodward	Battery, recommended cold cranking amps (CCA)	4,1000A
Frequency regulation	Isochronous		
Frequency regulation (steady state)	±0.25%		
Frequency	Fixed		
Air cleaner type	Dry		

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Application Data

Fuel

Fuel system

Fuel supply line, min ID, mm	25
Fuel return line, min ID, mm	19
Max. fuel flow, Lph	430
Max, fuel pump restriction, kPa	10
Fuel filter: quantity, type	4, secondary

Lubrication

Lubrication system

Type	Full pressure
Oil pan capacity, L	150
Oil pan capacity with filter, L	180
Oil filter: quantity, type	4, Cartridge
Oil cooler	Water-cooled

Cooling

Radiator system

Ambient temperature °C	40
Coolant capacity (engine only) L	125
Coolant capacity (engine and radiator) L	260
Engine jacket water flow, Lpm	1650
Fan loss kW	47
Max.restriction of cooling air, intake and discharge side of radiator, kPa	0.125

Operation requirements

Air requirements

Radiator cooled cooling air, $m^3/min.$	1776.8
Combustion air, m^3/min	101
Heat rejected to ambient air	
Engine, kW (Btu/min.)	88 (5014)
Alternator, kW (Btu/min.)	64 (3640)
Air Density 1.20 kg/m^3 (0.075 lbm/ft^3).	

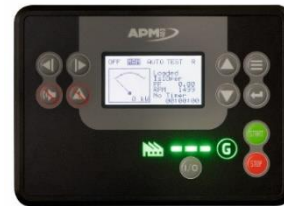
Fuel Consumption

Diesel L/h

100% load	282
75% load	213
50% load	148
25% load	84

Diesel L/h

100% load	257
75% load	196
50% load	138
25% load	81



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

- Measurements: voltage and current
- kW/kWh/kVA power meters
- 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
- Mains and genset protection
- Clock management
- USB connections, USB Host and PC,
- Communications: RS485 INTERFACE
- ModBUS protocol /SNMP

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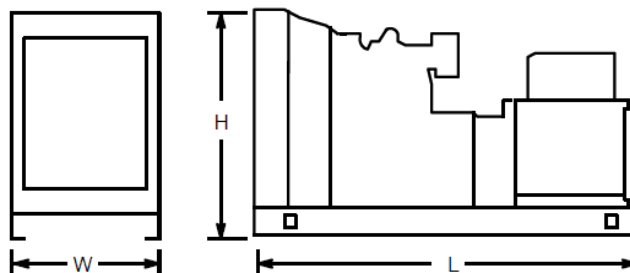
Standard Configuration

- Diesel engine
- Mechanical cooling system
- Alternator:
 - DVR2400
 - PMG
- APM403 Controller (with battery charger)
- Fuel Hose
- Air filter indicator

Option

- Space Heater
- Droop CT
- Winding PT100
- Bearing PT100
- Coolant and oil
- Exhaust bellow
- Starting battery group
- Spring isolator

Dimension and weight



L x W x H (mm): 5080 x 2226 x 2232

Dry weight (kg): 10400

Wet weight (kg): 11310

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