Model:1600REOZM



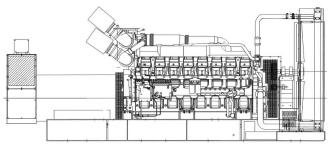
380 V - 416V Diesel

Version: 2023-1



Rating Range

		50Hz
Standby	kW	1250 – 1480
	kVA	1563 – 1850
Prime	kW	1168 – 1368
	kVA	1460 - 1710



Standard Features:

- KOHLER Co. provides one-source responsibility for the generating system and accessories
- The generator set and its components are prototypetested, factory-built and production-tested
- The generator set accepts 100% one step load
- The generator set complies with ISO8528-5 G3 requirements for transient performance
- A one-year limited warranty covers all systems and components

Alternator Features:

PMG alternator

Other Features:

- The low coolant level shutdown prevents overheating(standard on radiator models only)
- The generator set is direct-mounted to the skid

Generator Set Ratings

Alternator	Voltage	Ph Hz	Hz	150°C Rise S	Standby	125°C Rise	Prime
Alternator Voltage Pr	PII	II FIZ	kW/kVA	Amps	kW/kVA	Amps	
	220/380	3	50	1250/1563	2374	1168/1460	2218
742RSL8050	230/400	3	50	1308/1635	2360	1200/1500	2165
	240/416	3	50	1308/1635	2275	1200/1500	2087
	220/380	3	50	1480/1850	2811	1368/1710	2598
743RSL8052	230/400	3	50	1448/1810	2613	1320/1650	2382
	240/416	3	50	1380/1725	2400	1280/1600	2226

Alternator Specification

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Specification	Alternator
Туре	4 Pole, Rotating-Field
Exciter Type	PMG
Voltage Regulator	Solid State
Insulation	NEMA MG1
- Material	Class H
- Temperature Rise	125 °C Rise Prime
Bearing	1
Coupling	Flexible Disc
Amortisseur winding	Full
Voltage regulation	±0.25%
(no load to full load)	_0.2070
One step load acceptance	100%

- NMEA 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 alternator field
- Self-ventilated and dripproof construction
- 2/3 winding pitch
- Digital solid-state

Engine Specification

Engine

Exhaust

Engine Specifications	50Hz	Exhaust System	50Hz
Engine manufacturer	MHI	Exhaust flow at prime power, m3/min	347
Engine model	S16R-Y1PTA-4	Exhaust temperature, °C	519
Туре	4 cycle, Turbocharged	Max. allowable back pressure mmH2O	600
Cylinder arrangement	16V	Exhaust outlet size at engine hookup mm	See ADV
Displacement L(cu.in.)	65.4 (3989)		
Bore and stroke mm (in.)	170 x180 (6.69 x 7.08)		
Compression ratio	15.0:1	Engine Electrical	
Piston speed m/min (ft./min)	540 (1772)	Engine Electrical System	50Hz
Rated rpm	1500	Battery charging alternator	
Max.power at rated rpm,kWm	1701	Grounding	Negative
Cylinder head material	Cast Iron	Volts (DC)	24V
Crankshaft material	Forged steel	Ampere rating	30A
Governor type	Electrionic	Starter motor rated voltage (DC)	Dual 24
Frequency regulation	Isochronous	Battery, recommended cold cranking amps	Four,1000A
Frequency regulation (steady state)	±0.25%	Battery voltage (DC)	12
Frequency	Fixed		
Air cleaner type	Dry		

Engine Specification

Fuel

Fuel System	50Hz
Fuel supply line, min.ID mm	25
Fuel return line, min mm	19
Max fuel flow Lpg (gph)	510 (135)
Max fuel pump restriction (kPa)	10
Fuel filter quantity	4
Recommended fuel	#0 Diesel
Lubrication	

Lubrication System	50Hz
Туре	Full Pressure
Oil pan capacity L	200
Oil pan capacity with filter L	230
Oil filter quantity, type	4,Cartridge
Oil cooler	Water-cooled
Cooling	

Cooling

Radiator System	50Hz
Ambient temperature °C (°F)	40 (104)
Coolant capacity (engine only) L	170
Coolant capacity (engine and radiator) L	315
Engine jacket water flow Lpm	1650
Water pump	Centrifugal
Fan loss kW	45
Max. restriction of cooling air, intake and discharge of radiator kPa	0.125

Operation Requirements

Air Requirements	50Hz
Radiator-cooled cooling air m3/min.	2310.7
Combustion air, m3/min. (cfm)	146 (5155)
Heat rejected to ambient air	
Engine kW (Btu/min.)	127 (7254)
Alternator kW (Btu/min.)	82 (4663)
Air density 1.20 kg/m3 (0.075 lbm/ft3).	

Fuel Consumption 50Hz

Diesel L/h (gal/h)	Standby Rating
100%	383 (101.4)
75%	283 (74.8)
50%	195 (51.5)
25%	109 (28.8)

Diesel L/h (gal/h)	Prime Rating
100%	344 (91.1)
75%	258 (68.3)
50%	180 (47.7)
25%	105 (27.7)

Controllers



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,

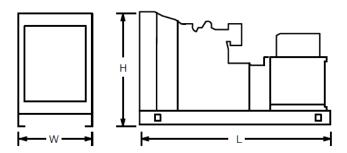
Standard Configuration

- · 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
- Muffler (18-25dBA)
- Coolant and oil
- Exhaust bellow
- Starting battery group
- Spring isolator

Dimension and weight



With 742RSL8050

LxWxH (mm): 5611 x 2212 x 2505

Dry Weight (kg): 11890 Wet Weight (kg): 12800

With 743RSL8052

LxWxH (mm):5768 x 2212 x 2505

Dry Weight (kg): 12390 Wet Weight (kg): 13300

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

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