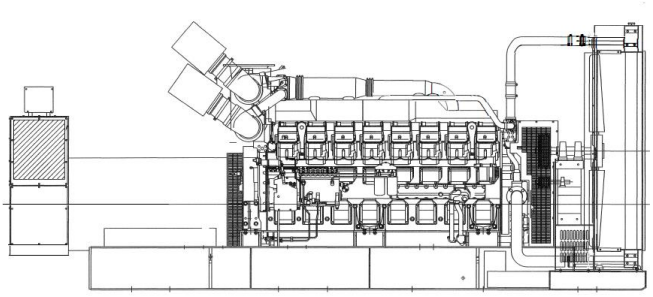
Model:1600REOZM

380 V - 416V Diesel

Rating Range

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



Standard Features：

- REHLKO provides one-source responsibility for the generating system and accessories
- The generator set and its components are prototype-tested, 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	150℃ Rise Standby		125℃ Rise Prime	
				kW/kVA	Amps	kW/kVA	Amps
742RSL8050	220/380	3	50	1250/1563	2374	1168/1460	2218
	230/400	3	50	1308/1635	2360	1200/1500	2165
	240/416	3	50	1308/1635	2275	1200/1500	2087
743RSL8052	220/380	3	50	1480/1850	2811	1368/1710	2598
	230/400	3	50	1448/1810	2613	1320/1650	2382
	240/416	3	50	1380/1725	2400	1280/1600	2226

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

Alternator Specification

Specification	Alternator
Type	4 Pole, Rotating-Field
Exciter Type	PMG
Voltage Regulator	Solid State
Insulation	NEMA MG1
- Material	Class H
- Temperature Rise	125 ℃ Rise Prime
Bearing	1
Coupling	Flexible Disc
Amortisseur winding	Full
Voltage regulation (no load to full load)	±0.25%
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

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Engine Specification

Engine

Engine Specifications	50Hz
Engine manufacturer	MHI
Engine model	S16R-Y1PTA-4
Type	4 cycle, Turbocharged
Cylinder arrangement	16V
Displacement L(cu.in.)	65.4 (3989)
Bore and stroke mm (in.)	170 x180 (6.69 x 7.08)
Compression ratio	15.0:1
Piston speed m/min (ft./min)	540 (1772)
Rated rpm	1500
Max.power at rated rpm,kWm	1701
Cylinder head material	Cast Iron
Crankshaft material	Forged steel
Governor type	Electrionic
Frequency regulation	Isochronous
Frequency regulation (steady state)	±0.25%
Frequency	Fixed
Air cleaner type	Dry

Exhaust

Exhaust System	50Hz
Exhaust flow at prime power, m3/min	347
Exhaust temperature, ℃	519
Max. allowable back pressure mmH2O	600
Exhaust outlet size at engine hookup mm	See ADV

Engine Electrical

Engine Electrical System	50Hz
Battery charging alternator	
Grounding	Negative
Volts (DC)	24V
Ampere rating	30A
Starter motor rated voltage (DC)	Dual 24
Battery, recommended cold cranking amps	Four,1000A
Battery voltage (DC)	12

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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
Type	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

Radiator System	50Hz
Ambient temperature ℃ (°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,

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Version：2024-1

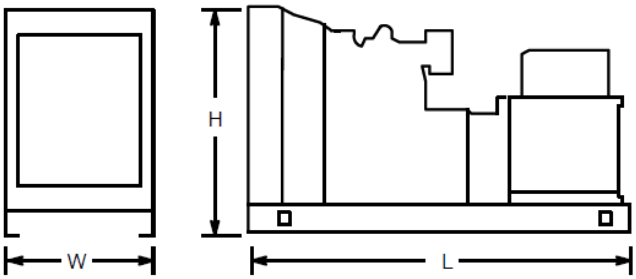
Standard Configuration

- 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

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