Model: 200REOZJF

KOHLER. Power Systems

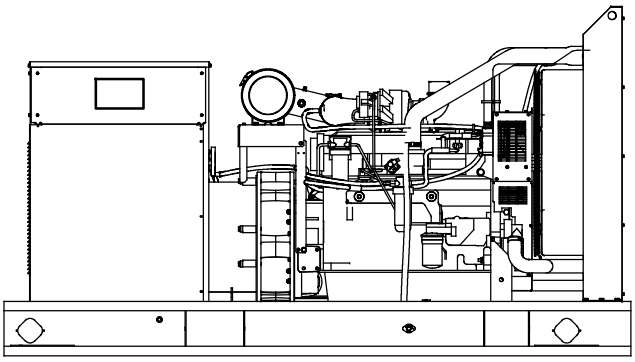
208–600 V **Diesel**

ISO 9001 KOHLER POWER SYSTEMS NATIONALLY REGISTERED

Tier 3 EPA-Certified for Stationary Emergency Applications

Ratings Range

		60 Hz
Standby:	**kW**	168–200
	kVA	210–250
Prime:	**kW**	158–180
	kVA	198–225



Generator Set Ratings

				130°C Rise Standby Rating		105°C Rise Prime Rating	
Alternator	**Voltage**	**Ph**	**Hz**	**kW/kVA**	**Amps**	**kW/kVA**	**Amps**
4S13X	120/208	3	60	184/230	639	173/216	600
	127/220	3	60	194/243	636	180/225	590
	120/240	3	60	184/230	553	173/216	520
	139/240	3	60	200/250	601	180/225	541
	220/380	3	60	168/210	319	158/198	300
	277/480	3	60	200/250	301	180/225	271
4UA9	120/208	3	60	200/250	694	180/225	625
	127/220	3	60	200/250	656	180/225	590
	120/240	3	60	200/250	601	180/225	541
	139/240	3	60	200/250	601	180/225	541
	220/380	3	60	200/250	380	180/225	342
	277/480	3	60	200/250	301	180/225	271
	347/600	3	60	200/250	241	180/225	217
4UA13	120/208	3	60	200/250	694	180/225	625
	127/220	3	60	200/250	656	180/225	590
	120/240	3	60	200/250	601	180/225	541
	139/240	3	60	200/250	601	180/225	541
	220/380	3	60	200/250	380	180/225	342
	277/480	3	60	200/250	301	180/225	271
	347/600	3	60	200/250	241	180/225	217

Standard Features

- Kohler Co. 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 60 Hz generator set offers a UL 2200 listing.
- The generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- A one-year limited warranty covers all systems and components. Two- and five-year extended warranties are also available.
- Alternator features:
  - The unique Fast-Response™ X excitation system delivers excellent voltage response and short-circuit capability using a rare-earth, permanent magnet (PM)-excited alternator.
    (4S13X alternator)
  - The unique Fast-Response™ II excitation system delivers excellent voltage response and short-circuit capability using a permanent magnet (PM)-excited alternator.
    (4UA9 and 4UA13 alternators)
  - The brushless, rotating-field alternator has broadrange reconnectability.
- Other features:
  - Kohler designed controllers for guaranteed system integration and remote communication. See Controllers on page 3.
  - The low coolant level shutdown prevents overheating (standard on radiator models only).
  - Integral vibration isolation eliminates the need for under-unit vibration spring isolators.
  - Multiple circuit breaker configurations.

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 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 Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Permanent-Magnet
Leads: quantity, type	
4SX, 4UA	12, Reconnectable
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H
Temperature rise	130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	Controller Dependent
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current

- 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 alternator field.
- Self-ventilated and dripproof construction.
- Vacuum-impregnated windings with fungus-resistant epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.

Specifications		Alternator
Peak motor starting kVA:		(35% dip for voltages below)
480 V	4S13X (12 lead)	570
480 V	4UA9 (12 lead)	700
480 V	4UA13 (12 lead)	960

Application Data

Engine

Engine Specifications	
Manufacturer	John Deere
Engine model	6068HFG85
Engine type	4-Cycle, Turbocharged, Charge Air-Cooled
Cylinder arrangement	6 Inline
Displacement, L (cu. in.)	6.8 (415)
Bore and stroke, mm (in.)	106 x 127 (4.19 x 5.00)
Compression ratio	17.0:1
Piston speed, m/min. (ft./min.)	457 (1500)
Main bearings: quantity, type	7, Replaceable Insert
Rated rpm	1800
Max. power at rated rpm, kWm (BHP)	235 (315)
Cylinder head material	Cast Iron
Crankshaft material	Forged Steel
Valve material:	
Intake	Chromium-Silicon Steel
Exhaust	Stainless Steel
Governor: type, make/model	JDEC Electronic L14 Denso HP3
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	±0.25%
Frequency	Fixed
Air cleaner type, all models	Dry

Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust flow at rated kW, m^3/min. (cfm)	42.8 (1510)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	527 (980)
Maximum allowable back pressure, kPa (in. Hg)	Min. 4 (1.2) Max. 10 (3.0)
Exhaust outlet size at engine hookup, mm (in.)	98 (3.86)

Engine Electrical

Engine Electrical System	
Battery charging alternator:	24 Volt
Ground (negative/positive)	Negative
Volts (DC)	24
Ampere rating	45
Starter motor rated voltage (DC)	24
Battery, recommended cold cranking amps (CCA):	
Quantity, CCA rating each	Two, 950
Battery voltage (DC)	12

Fuel

Fuel System	
Fuel supply line, min. ID, mm (in.)	11.0 (0.44)
Fuel return line, min. ID, mm (in.)	6.0 (0.25)
Max. lift, fuel pump: type, m (ft.)	Mechanical, 1.8 (6.0)
Max. fuel flow, Lph (gph)	92.7 (24.5)
Max. return line restriction, kPa (in. Hg)	20 (5.9)
Fuel prime pump	Manual
Fuel filter	
Primary	30 Microns
Secondary	2 Microns @ 98% Efficiency
Water Separator	Yes
Recommended fuel	#2 Diesel

Lubrication

Lubricating System	
Type	Full Pressure
Oil pan capacity, L (qt.)	32.5 (34.4)
Oil pan capacity with filter, L (qt.)	33.4 (35.3)
Oil filter: quantity, type	1, Cartridge
Oil cooler	Water-Cooled

Application Data

Cooling

Radiator System	
Ambient temperature, °C (°F) *	50 (122)
Engine jacket water capacity, L (gal.)	11.3 (3.0)
Radiator system capacity, including engine, L (gal.)	27.6 (7.3)
Engine jacket water flow, Lpm (gpm)	230.9 (61)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	94.2 (5360)
Heat rejected to air charge cooler at rated kW, dry exhaust, kW (Btu/min.)	56.1 (3190)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	787 (31)
Fan, kWm (HP)	8.6 (11.5)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H_2O)	0.125 (0.5)

* Enclosure with enclosed silencer reduces ambient temperature capability by 5°C (9°F).

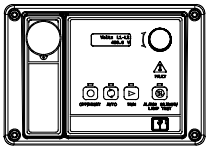
Operation Requirements

Air Requirements	
Radiator-cooled cooling air, m^3/min. (scfm)‡	368.1 (13000)
Combustion air, m^3/min. (cfm)	17.6 (620)
Heat rejected to ambient air:	
Engine, kW (Btu/min.)	46.9 (2670)
Alternator, kW (Btu/min.)	18.5 (1050)

‡ Air density = 1.20 kg/m^3 (0.075 lbm/ft^3)

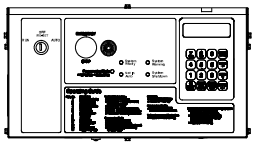
Fuel Consumption		
Diesel, Lph (gph) at % load	**Standby Rating**	
100%	58.0	(15.3)
75%	43.3	(11.4)
50%	31.4	(8.3)
25%	19.7	(5.2)
Diesel, Lph (gph) at % load	**Prime Rating**	
100%	50.1	(13.2)
75%	36.1	(9.5)
50%	25.7	(6.8)
25%	16.6	(4.4)

Controllers



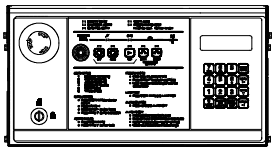
Decision-Maker® 3000 Controller
Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.
- Digital display and menu control provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or serial configuration
- Controller supports Modbus® protocol
- Integrated hybrid voltage regulator with ±0.5% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-100 for additional controller features and accessories.



Decision-Maker® 550 Controller
Provides advanced control, system monitoring, and system diagnostics with remote monitoring capabilities.
- Digital display and keypad provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or modem configuration
- Controller supports Modbus® protocol
- Integrated voltage regulator with ±0.25% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-46 for additional controller features and accessories.



Decision-Maker® 6000 Paralleling Controller
Provides advanced control, system monitoring, and system diagnostics with remote monitoring capabilities for paralleling multiple generator sets.
- Paralleling capability with first-on logic, synchronizer, kW and kVAR load sharing, and protective relays
- Digital display and keypad provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or modem configuration
- Controller supports Modbus® protocol
- Integrated voltage regulator with ±0.25% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-107 for additional controller features and accessories.

KOHLER CO., Kohler, Wisconsin 53044 USA
Phone 920-457-4441, Fax 920-459-1646
For the nearest sales and service outlet in the
US and Canada, phone 1-800-544-2444
KOHLERPower.com

Kohler Power Systems
Asia Pacific Headquarters
7 Jurong Pier Road
Singapore 619159
Phone (65) 6264-6422, Fax (65) 6264-6455

Standard Features

- Alternator Protection
- Battery Rack and Cables
- Customer Connection
  (standard with Decision-Maker® 6000 controller only)
- Local Emergency Stop Switch
- Oil Drain Extension
- Operation and Installation Literature

Available Options

Approvals and Listings

❑ California OSHPD Approval
❑ CSA Approval
❑ IBC Seismic Certification
❑ UL 2200 Listing

Enclosed Unit

❑ Sound Enclosure (with enclosed critical silencer)
❑ Weather Enclosure (with enclosed critical silencer)

Open Unit

❑ Exhaust Silencer, Critical (kit: PA-354809)
❑ Flexible Exhaust Connector, Stainless Steel

Fuel System

❑ Flexible Fuel Lines
❑ Fuel Pressure Gauge
❑ Subbase Fuel Tanks

Controller

❑ Common Failure Relay
❑ Communication Products and PC Software
❑ Customer Connection (Decision-Maker® 550 controller only)
❑ Decision-Maker® Paralleling System (DPS)
(Decision-Maker® 6000 controller only)
❑ Dry Contact (isolated alarm)
(Decision-Maker® 550 and 6000 controllers only)
❑ Input/Output Module (Decision-Maker® 3000 controller only)
❑ Remote Emergency Stop Switch
❑ Remote Serial Annunciator Panel
❑ Run Relay

Cooling System

❑ Block Heater, 1800 W, 90–120 V, 1 Ph
❑ Block Heater, 2000 W, 190–240 V, 1 Ph
Recommended for ambient temperatures below 0°C (32°F)
❑ Radiator Duct Flange

Electrical System

❑ Alternator Strip Heater
❑ Battery
❑ Battery Charger, Equalize/Float Type
❑ Battery Heater
❑ Line Circuit Breaker (NEMA type 1 enclosure)
❑ Line Circuit Breaker with Shunt Trip (NEMA type 1 enclosure)

Paralleling System

❑ Manual Speed Adjust

Miscellaneous

❑ Air Cleaner, Heavy Duty
❑ Air Cleaner Restriction Indicator
❑ Certified Test Report
❑ Crankcase Emissions Canister
❑ Engine Fluids Added
❑ Rated Power Factor Testing
❑ Rodent Guards

Literature

❑ General Maintenance
❑ NFPA 110
❑ Overhaul
❑ Production

Warranty

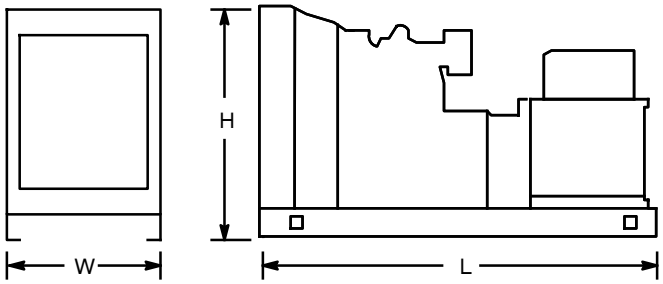
❑ 2-Year Basic
❑ 5-Year Basic
❑ 5-Year Comprehensive

Other Options

❑ _____
❑ _____
❑ _____
❑ _____
❑ _____

Dimensions and Weights

Overall Size, L x W x H, mm (in.):	3000 x 1300 x 1672 (118.1 x 51.2 x 65.8)
Weight (radiator model), wet, kg (lb.):	1923 (4240)



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

DISTRIBUTED BY: