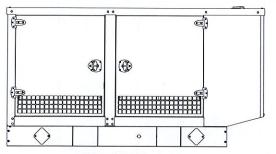


Industrial Generator Set Accessories

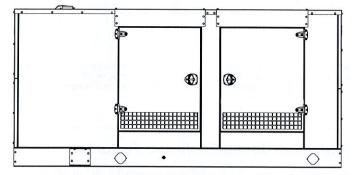
KOHLER. Power Systems

Weather and Sound Enclosures





25-60 kW Enclosure



80-150 kW Enclosure

Applicable to the following:

25-100REZG 50-150REZGB 80/100REZGD and 80/100RZGD 125/150REZGC and 125/150RZGC

Weather Enclosure Standard Features

- Internal-mounted critical silencer and flexible exhaust connector.
- Skid-mounted, steel construction with hinged doors.
- Fade-, scratch-, and corrosion-resistant Kohler®
 Power Armor™ cream beige automotive-grade textured finish.
- Lockable, flush-mounted door latches.
- Vertical air inlet and outlet discharge to redirect air and reduce noise.
- High wind bracing, 241 kph (150 mph). Available on all models, except 80/100REZGB with steel enclosure and 80/100RZGB with steel enclosure.

Sound Enclosure Standard Features

- Includes all of the weather enclosure features with the addition of acoustic insulation material.
- Skid-mounted, steel or aluminum construction with hinged doors. Aluminum enclosures are recommended for high humidity and/or high salt/coastal regions.
- Acoustic insulation that meets UL 94 HF1 flammability classification and repels moisture absorption.
- Sound attenuated enclosure that uses up to 51 mm (2 in.) of acoustic insulation, acoustic-lined air inlet hoods, and acoustic-lined air discharge hood.

Weather and Sound Enclosure Specifications

	Max. D	imensions, m	m (in.)	Weight, kg (lb.) *		Sound Enclosure,		
Model	Length	Width	Height	Steel Weather Enclosure	Steel Sound Enclosure	Aluminum Sound Enclosure	Sound Pressure at 7 m (23 ft.), dB(A) at 60 Hz, Full Load	
25REZG		A STATE OF THE PARTY OF THE PAR	are the letter to be	855 (1880)	860 (1891)	768 (1689)	68	
30REZG			1513 (59.6)	918 (2026)	924 (2037)	832 (1834)	68	
40REZG	0505(404.0)	1078 (42.4)		977 (2149)	982 (2160)	890 (1958)	66	
45REZG	2585(101.8)			1040 (2288)	1045 (2299)	953 (2096)	66	
50REZGB				Lander Bloom See	1122 (2475)	1127 (2486)	1035 (2283)	64
60REZGB				1122 (2475)	1127 (2486)	1035 (2283)	65	
80REZGD/RZGD	3526(138.8)	1153 (45.4)	1694 (66.7)	1454 (3205)	1465 (3228)	1403 (3092)	72	
100REZG	3506(138.0)	1156 (45.5)	1696 (66.8)	1715 (3781)	1725 (3803)	1539 (3393)	74	
100REZGD/RZGD	3526(138.8)	1153 (45.4)	1694 (66.7)	1557 (3434)	1568 (3457)	1506 (3321)	72	
125REZGB	3506(138.0)	1156 (45.5)	1696 (66.8)	1741 (3837)	1751 (3859)	1565 (3449)	72	
125REZGC/RZGC	3526(138.8)	1153 (45.4)	1724 (67.9)	1739 (3834)	1758 (3876)	1592 (3509)	71	
150REZGB	3506(138.0)	1156 (45.5)	1696 (66.8)	1856 (4091)	1866 (4113)	1680 (3703)	75	
150REZGC/RZGC	3526(138.8)	1153 (45.4)	1696 (66.8)	1877 (4138)	1897 (4183)	1730 (3813)	74	

^{*} Weight includes the generator set (wet), enclosure, and silencer. The generator set weight represents using the largest alternator option.

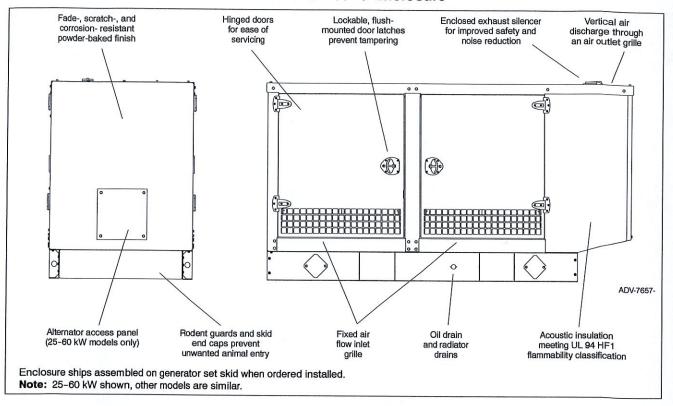
Note: Refer to the respective ADV drawings for details. Refer to TIB-114 for complete generator set sound data.

G6-108 5/13I

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Weather and Sound Enclosure



Enclosure Features

- Available in steel (14 gauge) formed panel, solid construction. Preassembled package offering corrosion resistant, dent resilient structure mounting directly to skid.
- Power Armor™ automotive-grade finish resulting in advanced corrosion and abrasion protection as well as enhanced edge coverage and color retention.
- Internal critical exhaust silencer offering maximum component life and operator safety.

NOTE: Installing an additional length of exhaust tail pipe may increase backpressure levels. Please refer to the generator set spec sheet for the maximum backpressure value.

- Interchangeable modular panel construction. Allows complete serviceability or replacement without compromising enclosure design.
- Cooling/combustion air intake with a horizontal air inlet.
 Sized for maximum cooling airflow.
- Service access. Multi-personnel doors for easy access to generator set control and servicing of the oil fill and battery.
- Cooling air discharge. Weather protective design featuring a vertical air discharge outlet grille. Redirects cooling air up and above enclosures to reduce noise ambient.

Availability is subject to change without notice. Kohler Co. reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local Kohler® generator set distributor for availability.

Additional Sound Enclosure Features

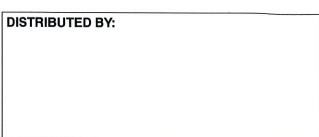
- Available in steel (14 gauge) or aluminum 3.2 mm (0.125 in.) formed panel, solid construction.
- Attenuated design. Mechanically restrained acoustic insulation UL 94 HF1 listed for flame resistance.
- Cooling air discharge. The sound enclosures include acoustic insulation with urethane film.

Available Approvals and Listings

- ☐ UL 2200 Listing
- ☐ CSA Approval
- ☐ IBC Seismic Certification

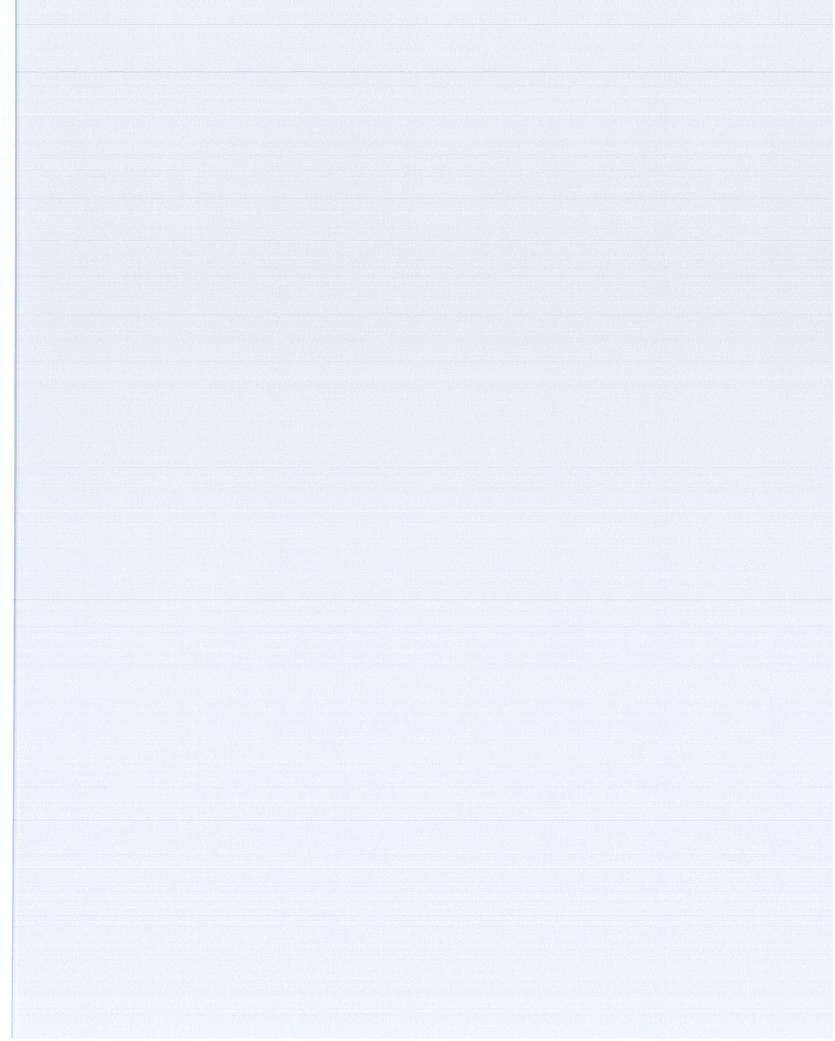
NOTE: Some models may have limited third-party approvals, see your local distributor for details.





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G6-108 5/13I



Model: 40REZG

KOHLER, POVVER SYSTEMS

190-600 V

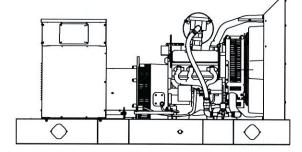
Gas



EPA-Certified for Stationary Emergency Applications

Ratings Range

Standby: kW 33-40 24-34 kVA 33-50 26-40



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[™] Il excitation system delivers excellent voltage response and short-circuit capability using a permanent magnet (PM)-excited alternator.
- 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 electronic, isochronous governor incorporates an integrated drive-by-wire throttle body actuator delivering precise frequency regulation.

Generator Set Ratings

120/208	ng Standby Rating nps kW/kVA Amps 35 39/49 135
120/208	
120/240 3 60 39/49 11 120/240 1 60 33/33 13 139/240 3 60 39/49 11 220/380 3 60 35/44	<i>y</i>
120/240 1 60 33/33 13 139/240 3 60 39/49 11 220/380 3 60 35/44 6	28 40/50 131
139/240 3 60 39/49 11 220/380 3 60 35/44	17 39/49 117
220/380 3 60 35/44 6	38 33/33 138
	17 40/50 120
	66 35/44 66
277/480 3 60 39/49 5	58 40/50 60
4P5 347/600 3 60 39/49 4	47 40/50 48
110/190 3 50 31/39 11	19 32/40 122
115/200 3 50 28/35 10	01 28/35 101
120/208 3 50 24/30 8	33 24/30 83
110/220 3 50 31/39 10	02 32/40 105
110/220 1 50 26/26 11	18 26/26 118
220/380 3 50 31/39 5	59 32/40 61
230/400 3 50 28/35 5	51 28/35 51
240/416 3 50 24/30 4	12 24/30 42
4Q5 120/240 1 60 38/38 15	58 38/38 158
110/220 1 50 30/30 13	36 32/32 145
120/240 1 60 40/40 16	
4Q7 110/220 1 50 32/32 14	67 40/40 167

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. For dual fuel engines, use the natural gas ratings for both the primary and secondary fuels.

G4-139 (40REZG) 7/12i

Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Туре	4-Pole, Rotating-Field
Exciter type	Brushless, Permanent- Magnet
Leads: quantity, type	
4P5	12, Reconnectable
4Q5, 4Q7	4, 110-120/220-240
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
Peak motor starting kVA:	(35% dip for voltages below
480 V, 380 V 4P5 (12 lead)	140 (60 Hz), 98 (50 Hz)
240 V, 220 V 4Q5 (4 lead)	95 (60 Hz), 78 (50 Hz)
240 V, 220 V 4Q7 (4 lead)	104 (60 Hz), 91 (50 Hz)

- 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.
 - Fast-Response[™] II brushless alternator with brushless exciter for excellent load response.

Application Data

Engine

Engine Specifications	60 Hz	50 Hz
Manufacturer	Genera	Motors
Engine: model, type	Industrial I	Powertrain
		L, 4-Cycle
	Natural A	Aspiration
Cylinder arrangement	V	-6
Displacement, L (cu. in.)	4.3 (262)
Bore and stroke, mm (in.)	101.6 x 88.4	(4.00×3.48)
Compression ratio	9.0	5:1
Piston speed, m/min. (ft./min.)	318 (1044)	265 (870)
Main bearings: quantity, type	4, Ba	abbitt
Rated rpm	1800	. 1500
Max. power at rated rpm, kW (HP)	56 (75)	44.8 (60)
Engine power at standby rating, kW (HP)		
Natural Gas	41.9 (56)	40.3 (54)
LP Gas	45.3 (61)	42.5 (57)
Cylinder head material	Cast	Iron
Piston type and material	High Silicor	n Aluminum
Crankshaft material	Nodul	ar Iron
Valve (exhaust) material	Forge	d Steel
Governor type	Elect	ronic
Frequency regulation, no-load to full-load	Isochr	onous
Frequency regulation, steady state	±0.	5%
Frequency	Fix	ced
Air cleaner type, all models	D	ry

Exhaust

Exhaust System	60 Hz	50 Hz
Exhaust manifold type	D	ry
Exhaust flow at rated kW, m ³ /min. (cfm)	8.8 (310)	7.4 (260)
Exhaust temperature at rated kW, dry	8 8	
exhaust, °C (°F)	649 (1200)
Maximum allowable back pressure,	•	•
kPa (in. Hg)	10.2	(3.0)
Exhaust outlet size at engine hookup,		2 5
mm (in.)	76 (3.	0) OD

Engine Electrical

Engine Electrical System	60 Hz	50 Hz
Ignition system	Electronic,	Distributor
Battery charging alternator:		
Ground (negative/positive)	Nega	ative
Volts (DC)	1	2
Ampere rating	7	O
Starter motor rated voltage (DC)	1	2
Battery, recommended cold cranking amps (CCA):		
Qty., rating for -18°C (0°F)	1, 6	630
Battery voltage (DC)	1	2
Fuel		

12		
60 Hz	50 Hz	
Natural Gas, LP Gas, or Dual Fuel		
1 N	PTF	
1.74-2.74 (7-11)		
1.24-2.74 (5-11)		
1.24 (5)		
Nat. Gas	LP Gas	
90 min.	_	
4.0 max.	_	
1.0 max.	85 min.	
0.1 max.	5.0 max.	
0.3 max.	2.5 max.	
25 max.		
	60 Hz Natural Gas Dual 1 N 1.74-2.7 1.24-2.7 1.24-2.7 Nat. Gas 90 min. 4.0 max. 1.0 max. 0.1 max. 0.3 max.	

* Fuels with other compositions may be acceptable. If your fuel is outside the listed specifications, contact your local distributor for further analysis and advice.

G4-139 (40REZG) 7/12i

Application Data

Lubrication

60 Hz	50 Hz
Full Pr	essure
4.3	(4.5)
5.7	(6.0)
1, Ca	rtridge
	Full Pr 4.3 5.7

Cooling

Radiator System	60 Hz	50 Hz	
Ambient temperature, °C (°F) *	50 ((122)	
Engine jacket water capacity, L (gal.)	6.8	(1.8)	
Radiator system capacity, including			
engine, L (gal.)	19.7	(5.2)	
Engine jacket water flow, Lpm (gpm)	106.0 (28)	87.1 (23)	
Heat rejected to cooling water at rated			
kW, dry exhaust, kW (Btu/min.)	39.2 (2230)	34.6 (1970)	
Water pump type	Centi	rifugal	
Fan diameter, including blades, mm (in.)	533	(21)	
Fan, kWm (HP)	1.5 (2.0)	1.0 (1.2)	
Max. restriction of cooling air, intake and	2001	· · · · · · · · · · · · · · · · · · ·	
discharge side of radiator, kPa (in. H ₂ O)	0.125	5 (0.5)	
* Enclosure with enclosed silencer reduc			

Operation Requirements

capability by 5°C (9°F).

Air Requirements	60 Hz	50 Hz
Radiator-cooled cooling air,		
m³/min. (scfm)‡	142 (5000)	113 (4000)
Combustion air, m ³ /min. (cfm)	2.61 (92)	2.20 (78)
Heat rejected to ambient air:		•
Engine, kW (Btu/min.)	16.0 (910)	15.4 (860)
Alternator, kW (Btu/min.)	6.3 (360)	6.2 (350)
† Air density = $1.20 \text{ kg/m}^3 (0.075 \text{ lbm/ft}^3)$	22 - 51	

Fuel Consumption ‡	60 Hz	50 Hz		
Natural Gas, m ³ /hr. (cfh) at % load	Standby Ratings			
100%	16.5 (584)	13.5 (477)		
75%	13.8 (486)	10.4 (367)		
50%	10.2 (360)	8.0 (281)		
25%	7.7 (272)	5.8 (206)		
LP Gas, m ³ /hr. (cfh) at % load	Standl	y Ratings		
100%	6.9 (242)	5.4 (190)		
75%	5.4 (191)	4.2 (148)		
50%	4.0 (141)	3.1 (111)		
25%	2.9 (101)	2.3 (81)		

Nominal fuel rating: Natural gas, 37 MJ/m3 (1000 Btu/ft.3)

LP vapor, 93 MJ/m3 (2500 Btu/ft.3)

LP vapor conversion factors:

8.58 ft.³ = 1 lb. 0.535 m³ = 1 kg. 36.39 ft.³ = 1 gal.

Controllers

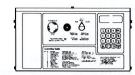


Decision-Maker® 3000 Controller

 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.



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Stand		F4-	
31011	alu	COLL	

- Alternator Protection
- Battery Rack and Cables
- Electronic, Isochronous Governor
- Gas Fuel System (includes fuel mixer, electronic secondary gas regulator, gas solenoid valve, and flexible fuel line between the engine and the skid-mounted fuel system components)
- Integral Vibration Isolation
- Local Emergency Stop Switch
- Oil Drain Extension
- Operation and Installation Literature

Availabl			

A	vailable Options
	Approvals and Listings 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-352663) Flexible Exhaust Connector, Stainless Steel
00	Fuel System Dual Fuel NG/LPG (automatic changeover) Flexible Fuel Line (required when the generator set skid is spring mounted) Gas Filter LP Liquid Wtihdrawal (vaporizer) Secondary Gas Solenoid Valve
	Controller Common Fault Relay Communication Products and PC Software (Decision-Maker® 550 controller only)
_	Customer Connection (Decision-Maker® 550 controller only) Dry Contact (isolated alarm) (Decision-Maker® 550 controller only)
	Input/Output Module (Decision-Maker® 3000 controller only)
	Remote Annunciator Panel
	Remote Emergency Stop Run Relay
	Cooling System Block Heater, 1000 W, 110-120 V [recommended for ambient temperatures below 10°C (50°F)] Radiator Duct Flange
ā	Electrical System Alternator Strip Heater Battery Battery Charger, Equalize/Float Type Battery Heater Line Circuit Breaker (NEMA1 enclosure) Line Circuit Breaker with Shunt Trip (NEMA1 enclosure)

00000	Air Cleaner Restrictor Indicator Certified Test Report Engine Fluids (oil and coolant) Added Rated Power Factor Testing Rodent Guards
0000	Literature General Maintenance NFPA 110 Overhaul Production
000	Warranty 2-Year Basic 5-Year Basic 5-Year Comprehensive
0000000	Other Options

Dimensions and Weights

Miscellaneous

Dimensions and verging

Overall Size, L x W x H, mm (in.):

Wide Skid

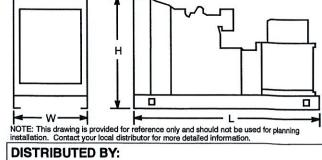
2200 x 1040 x 1172 (86.6 x 40.9 x 46.1)

Narrow Skid

2200 x 864 x 1172 (86.6 x 34.0 x 46.1)

(radiator model), wet, kg (lb.):

556 (1225)





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G4-139 (40REZG) 7/12i