

Standard Features

- Vibration isolation
- Mounting base, stationary applications
- Low coolant level shutdown
- Radio suppression to commercial standards
- Radiator for 115°F (45°C) ambient
- Fan and belt guards
- Junction box
- Operating instructions

Accessories and Options

Cooling Systems

- Water cooled manifold
- Remote radiator cooling
- City water cooling
- High ambient radiator

Cooling System Options

- Block heater with thermostat
- Radiator duct flange
- Remote radiator with motor

Fuel System

- Flexible fuel lines
- Auxiliary fuel pump
- Subbase fuel tank
- Day tank

Exhaust System

- Industrial exhaust silencer
- Critical exhaust silencer
- Flexible exhaust connector, stainless steel
- Silencer mounting for housing
- Tail pipe and rain cap kit

Engine Electrical System

- Battery
- Battery heater
- Battery rack and cables
- Battery charger, trickle-type
- Battery charger, equalize/float-type

Engine Mounted

- Air cleaner, heavy duty
- Oil drain kit
- Air cleaner restriction indicator
- Isochronous governor

Generator Set

- Safeguard breaker
- Molded-case line circuit breaker
- Shunt trip breaker
- Generator strip heater
- CSA approval
- Weather housing
- Export boxing
- Reactive droop compensator
- Construction skid
- Split packaging
- Oversized generator
- 1% voltage regulation
- Load sharing module
- Rated power factor testing
- NFPA-110 literature
- Spring isolators

Controllers

- Manual controller
- Engine gauge box for paralleling
- 6-light controller (NFPA-110, level 2)
- Oversized meter box

Controller Accessories

- Run relay kit
- Tachometer kit
- Wattmeter kit
- Speed potentiometer/electronic governor
- Common failure relay kit
- Local emergency stop kit

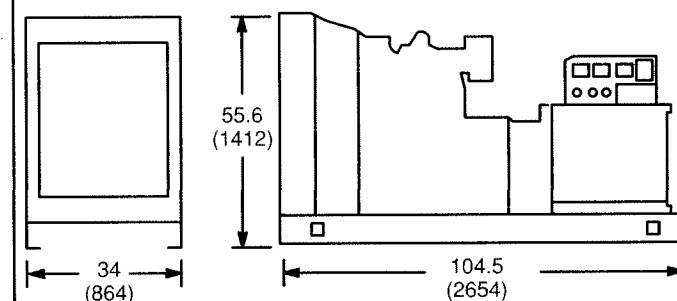
NFPA-110 Controller Accessories

- Decision Monitor – remote annunciator panel
- Fast Check – diagnostic fault detector
- Extension wiring harness for remote mounting of controller
- Isolated alarm contact kit
- Overvoltage protection
- Remote emergency-stop kit
- Remote audio-visual alarm panel
- Pre-High Engine Temp. sender and lamp (yellow)
- Pre-Low Oil Pressure sender and lamp (yellow)
- Low Water Temp. sender and lamp (red)

- _____
- _____

WEIGHTS AND DIMENSIONS

Overall Size: L x W x H – in. (mm) 104.5 x 34 x 55.6
(2654 x 864 x 1412)
Weight – Radiator Model: wet ;b. (kg) 3615 (1640)



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

DISTRIBUTED BY:

KOHLER® GENERATORS 125ROZJ

• Proven Fast Response™ Performance:

Kohler Fast Response™ power systems are employed in a variety of applications worldwide. As the leading manufacturer of integrated power systems, performance and reliability are assured through a comprehensive prototype testing program.

• Instant response to load changes:

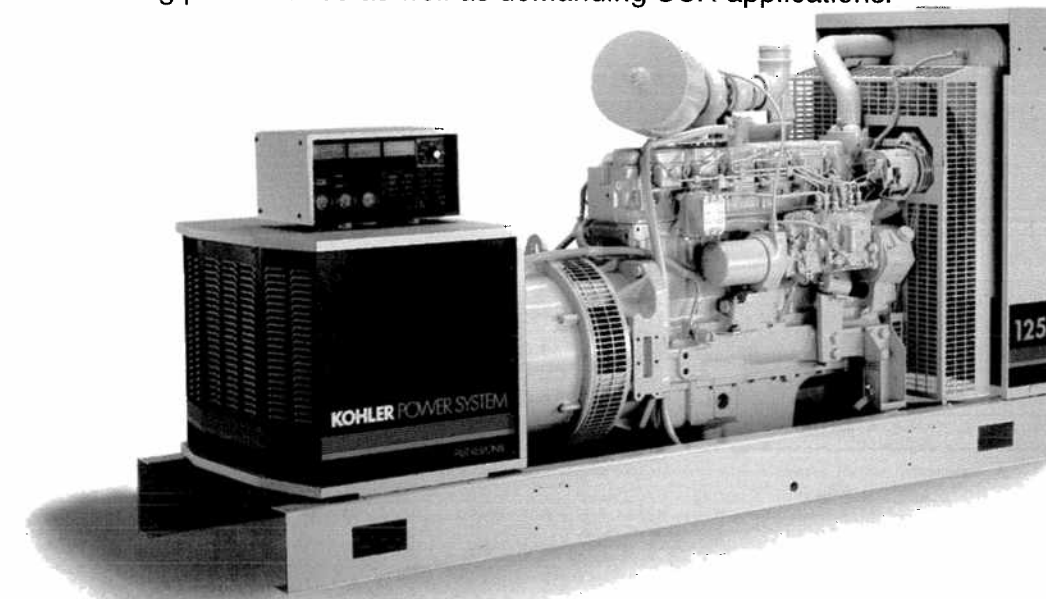
Response to load transients occurs within five-hundredths of a second.

• Sustained short circuit capability:

Fast response systems maintain output long enough to permit selective breaker tripping.

• Superior motor starting:

Kohler power systems are recognized for their outstanding motor starting performance as well as demanding SCR applications.



KOHLER® POWER SYSTEMS

Ratings and Performance

Model Series	Voltage Code	Voltage	Standby Amps.	Phase	Hz	Generator Model	Standby Ratings, kW/kVA	Prime Ratings, kW/kVA
125ROZJ	01	120/240	376	3	60	4S13	125/156	115/144
125ROZJ	51	139/240	376	3	60	4S13	125/156	115/144
125ROZJ	51	127/220	410	3	60	4S13	125/156	115/144
125ROZJ	61	120/240	458	1	60	4S13	110/110	100/100
125ROZJ	71	277/480	188	3	60	4S13	125/156	115/144
125ROZJ	71	220/380	238	3	60	4S13	125/156	115/144
125ROZJ	81	120/208	434	3	60	4S13	125/156	115/144
125ROZJ	91	347/600	150	3	60	4S13	125/156	115/144
125RFOZJ	01	110/220	361	3	50	4S13	110/138	100/125
125RFOZJ	51	110/190	418	3	50	4S13	110/138	100/125
125RFOZJ	61	110/220	432	1	50	4S13	95/95	86/86
125RFOZJ	71	220/380	209	3	50	4S13	110/138	100/125
125RFOZJ	71	230/400	198	3	50	4S13	110/138	100/125
125RFOZJ	71	240/416	191	3	50	4S13	110/138	100/125
125RFOZJ	81	120/208	382	3	50	4S13	110/138	100/125

RATINGS: Standby ratings are continuous for the duration of any power outage. No overload capacity is specified at this rating. Prime ratings are continuous per BS 5514, DIN 6271, ISO-3046 and IEC 34-1 with 10% overload capacity one hour in 12 hours. All single phase units are rated at 1.0 power factor; 3 phase units are rated at 0.8 power factor. Contact factory for ratings of city water cooled and remote radiator models. Larger generators may be used to meet special application requirements. 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. Availability can be determined by contacting your local Kohler Co. Distributor.

Deration Factors

Maximum altitude before gen. set derating – ft (m)	3300(1007)	Maximum intake air temp. before gen. set derating – °F (°C)	100(38)
Altitude deration factor – % per 1000 ft. (305 m)	4	Temp. deration factor – % per 10°F (5.5°C)	1

Application Data

Engine Specifications	60 Hz	50 Hz	Fuel System – cont'd.	60 Hz	50 Hz
Manufacturer	John Deere		Fuel prime pump	Manual	
Type	6076T 4-Cycle Turbocharged		Fuel filter	Primary/Secondary	
Cylinder arrangement (number, inline, V, etc.)	6-Inline		Recommended fuel	#2 Diesel	
Displacement – cu. in. (cc)	466(7640)		Cooling System		
Bore and stroke – in. (mm)	4.56(116) x 4.75(121)		Engine jacket water capacity – gal. (L)	3.8(14.2)	
Compression ratio	16.0:1		Radiator system capacity (incl. engine) – gal. (L)	7.5(24)	
Piston speed – ft/min. (m/sec.)	1425(7.2)	1188(6.0)	Engine jacket water flow – gpm (Lpm)	74(280)	62(233)
Bearings main: number	7		Heat rejected to cooling water at rated kW – dry exhaust Btu/min.	5105	4385
Rated rpm	1800	1500	Water pump type	Centrifugal	
Max. power at rated rpm – hp (kW)	211(157)	175(130)	Fan, blades diameter – in. (mm)	26(660)	
Cylinder head material	Cast Iron		Fan hp (kw)	7(5.2)	4(3)
Crankshaft material	Forged Steel		Maximum air restriction discharge side of radiator – in. H ₂ O (in. Hg)	0.5(0.037)	
Valves material intake	Chromium-Silicon Steel		Optional Cooling Systems		
exhaust	Inconel		Remote Radiator System	Dry	
Governor, type, make/model	Mechanical, Nippondenso EP9		Exhaust manifold type		
Frequency regulation – no-load to full-load, nominal/maximum steady state	3% – 5% +/- 0.33%		Connection sizes		
Air cleaner type – all models	Dry		water inlet – in. (mm)	2.5(64)	
Lubricating System			water outlet – in. (mm)	2.5(64)	
Type	Full Pressure		Remote radiator	Modine/M-5-VR-2/M-7-VR-2	
Oil pan capacity – qts. (L) including filter – qts. (L)	21(20) 22(21)		Make/model	Vertical	
Oil filter – (quantity, type)	1 Full Flow/By-pass		Mounting	Horizontal	
Oil cooler	Water-Cooled		Discharge		
Fuel System			Fan motor – phase, hp (kw)	3,2(1.5)	
Fuel supply line, min. I.D. in.(mm)	0.375(9.5)		Radiator capacity – gal. (L)	8(30.3)	9(34)
Fuel return line, min. I.D. in. (mm)	0.375(9.5)		Static head allowable above water pump – ft. (m)	30(9.15)	20(6.1)
Max. lift of engine driven fuel pump – ft. (m)	4.5(1.4)		Tank top (inlet) – in.	2.5NPT	
Max. fuel flow – gph (Lph)	39(148)		Bottom tank (outlet) – in.	2.5NPT	
			Dry weight – lbs. (kg)	450(203)	550(248)

125ROZJ (G05-086)

Fast Response Generator

Specifications	Model 4S13
Manufacturer	Kohler
Output reconnectable	Broadrange
Number of leads	12
Generator type	Rotating Field
Voltage regulator	Solid State, Volts/Hz
Insulation – NEMA MG1-1.66	
Material	Class H
Temperature rise	Class F
Bearing, number, type	1
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation no load to full load —%	+/- 2% maximum
One step load acceptance % of rating per NFPA-110	100
Peak motor starting kVA – 4S13	515 (60 Hz) 370 (50 Hz)

- Generator is designed and built within NEMA, IEEE and ANSI standards for temperature rise.
- Permanent magnet field rotating brushless exciter.
- Skewed rotor for smooth voltage wave form.
- Self-ventilated, drip-proof construction.
- Vacuum impregnated epoxy varnish – Fungus resistant per MIL-I-24092.
- Sustains short circuit current at 300% of rated current up to 10 seconds.

Optional Cooling Systems – Cont'd.	60 Hz	50 Hz
City Water Cooling System		
Exhaust manifold type	Dry	
Heat exchanger capacity – gal. (L)	1.25(4.5)	
Connection sizes		
water inlet – in. (mm)	0.75 NPT	
water outlet – in. (mm)	1.5 NPT	
City water consumption – gpm (Lpm) at 50°F (10°C)	6.7(22.7)	5.4(20.1)
Connection sizes and capacity based on Young, F502ER4 heat exchanger with pipe threaded water connections, thermo-statically controlled water saver valve, electric solenoid valve, and surge tank.		

Exhaust System	60 Hz	50 Hz
Exhaust flow at rated kW – cfm (m ³ /min.)	1200(34)	955(27)
Exhaust temp at rated kW, dry exhaust – °F (°C)	930(500)	1005(540)
Maximum allowable back pressure – in. Hg (kPa)	2.2(7.5)	
Exhaust outlet size at hook-up – in. (mm)	4(101.6)	

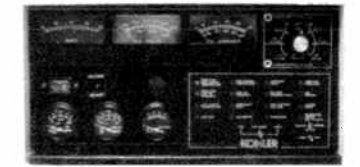
Engine Electrical System	60 Hz	50 Hz
Battery charging alternator ground (negative/positive)	Negative	
Volts	12	
Ampere rating	65	
Starter motor rated voltage	12	
Minimum recommended battery for 0°F/cold cranking performance (CCA)	630	
Quantity	2	
Voltage	12	
Rolling current @ 32°F	800	

Operation Requirements	60 Hz	50 Hz
Radiator-cooled cooling air – cfm (m ³ /min.)	6900(195)	5750(163)
City-water, remote radiator		
cooling air @ 25°F (14°C) rise	5200(146)	
Combustion Air – cfm (m ³ /min.)	475(13.3)	338(9.5)
Heat rejected to ambient air		
Engine BTU/min.	1550	
Generator BTU/min.	790	

Fuel Consumption – gph (Lph)/Load	100%	75%	50%	25%
60 Hz:	9.5 (36)	6.9 (26)	4.5 (17.1)	3.1 (11.6)
50 Hz:	8.1 (30.5)	6.3 (23.7)	4.2 (15.9)	2.8 (10.4)

Standard Controller Features

Dec-3 Controller



Type	Microprocessor
Power Source, with circuit protection	12-Volt
Size – H x W x D in. (cm)	9 (22.9) x 17.8 (45.1) x 11.5 (29.2)
Weight – lb. (kg)	19(8.6)

- AC meters, 3.5 in. (89mm) 2% FS accuracy (Volts, Amps., Frequency)
- Meter phase selector switch
- DC meters, 2 in. (51mm), 2% FS accuracy (Volts, Engine Water Temp., Oil Pressure)
- Running time meter
- Alarm horn and silencing switch per NFPA-110
- Lamp test switch
- Front-mounted voltage adjusting rheostat
- Panel lamps (2)
- Cyclic cranking per NFPA-110
- Engine cool-down timer, 5-minute
- System-Ready lamp (green)
- Not-In-Auto lamp (red)
- High-Engine-Temp. safety shut-down and lamp (red)
- Low oil pressure safety shut-down and lamp (red)
- Overspeed safety shut-down and lamp (red)
- Over-Crank safety shut-down and lamp (red)
- Auxiliary safety shut-down lamp (red)
- Emergency stop lamp (red) *
- Auxiliary pre-alarm lamp (yellow) *
- Low-Fuel lamp (red) *
- Battery charger fault lamp (red) *
- Low-Battery Volts lamp (red) *
- Run-Off/Reset-Auto switch (engine start) — Local/Remote two-wire

* requires external sender

125ROZJ (G05-086)