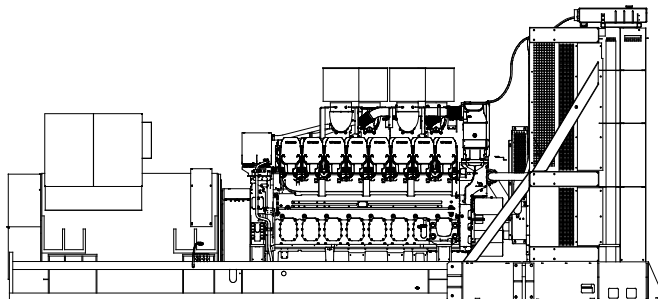


KDxxxx designates a generator set with a Tier 2 EPA-Certified engine.
KDxxxx-F designates a 60 Hz generator set with a fuel optimized engine.



Ratings Range

		60 Hz
Standby:	kW	3250
	kVA	4062
Prime:	kW	2950
	kVA	3688

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 standard three-year or 1000-hour limited warranty for standby applications. Five-year basic, five-year comprehensive, and ten-year extended limited warranties are also available.
- A standard two-year or 8700-hour limited warranty for prime power applications.
- Other features:
 - Kohler designed controllers for one-source system integration and remote communication. See Controller on page 4.
 - The low coolant level shutdown prevents overheating (standard on radiator models only).

General Specifications

Orderable Generator Model Number	GMKD3250
Manufacturer	Kohler
Engine: model	KD83V16
Alternator Choices	KH07631TO4D KH07632TO4D* KH09370TO4D*
Performance Class	Per ISO 8528-5
One Step Load Acceptance	100%
Voltage	480 V, 600 V, 4160 V, 6600 V, or 12470-13800 V
Controller	APM802
Fuel Consumption, L/hr (gal./hr) 100% at Standby	820 (216.6)
Fuel Consumption, L/hr (gal./hr) 100% at Prime Power	771 (203.7)
Emission Level Compliance (KDxxxx)	Tier 2
Open Unit Noise Level @ 7 m dB(A) at Rated Load	99
Data Center Continuous (DCC) Rating (Refer to TIB-101 for definitions)	Same as the Prime Rating below

* Contact the factory for additional information.

Generator Set Ratings

Alternator	Voltage	Ph	Hz	130°C Rise Standby Rating		105°C Rise Prime Rating	
				kW/kVA	Amps	kW/kVA	Amps
KH07631TO4D	277/480	3	60	3250/4062	4886	2950/3688	4436
	2400/4160	3	60	3250/4062	564	2950/3688	512
	3810/6600	3	60	3250/4062	356	2950/3688	323
	7200/12470	3	60	3250/4062	189	2950/3688	171
	7620/13200	3	60	3250/4062	178	2950/3688	162
KH07632TO4D*	7970/13800	3	60	3250/4062	170	2950/3688	155
	347/600	3	60	3250/4062	3909	2950/3688	3549
KH09370TO4D*	7200/12470	3	60	3250/4062	189	2950/3688	171
	277/480	3	60	3250/4062	4886	2950/3688	4436
	2400/4160	3	60	3250/4062	564	2950/3688	512
	3810/6600	3	60	3250/4062	356	2950/3688	323

* Contact the factory for additional information.

RATINGS: All three-phase units are rated at 0.8 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.



Industrial Diesel Generator Set - KD3250
Tier 2 EPA-Certified for Stationary Emergency Applications

Engine Specifications		60 Hz	
Manufacturer	Kohler		
Engine: model	KD83V16		
Engine: type	4-Cycle, Turbocharged, Intercooled		
Cylinder arrangement	16-V		
Displacement, L (cu. in.)	83 (5048)		
Bore and stroke, mm (in.)	175 x 215 (6.89 x 8.46)		
Compression ratio	16.0:1		
Piston speed, m/min. (ft./min.)	774 (2539)		
Main bearings: quantity, type	9, Precision Half Shells		
Rated rpm	1800		
Max. power at rated rpm, kWm (BHP)	3490 (4680)		
Cylinder head material	Cast Iron		
Crankshaft material	Steel		
Valve (exhaust) material	Steel		
Governor: type, make/model	KODEC Electronic Control		
Frequency regulation, no-load to-full load	Isochronous		
Frequency regulation, steady state	±0.25%		
Frequency	Fixed		
Air cleaner type, all models	Dry		
Lubricating System		60 Hz	
Type	Full Pressure		
Oil pan capacity with filter (initial fill), L (qt.)	420 (444)		
Oil filter: quantity, type	8, Cartridge		
Oil cooler	Water-Cooled		
Fuel System		60 Hz	
Fuel supply line, min. ID, mm (in.)	25 (1.0)		
Fuel return line, min. ID, mm (in.)	19 (0.75)		
Max. fuel flow, Lph (gph)	835 (221)		
Min./max. fuel pressure at engine supply connection, kPa (in. Hg)	-30/30 (-8.8/8.8)		
Maximum diesel fuel lift, m (ft.)	3.7 (12)		
Max. return line restriction, kPa (in. Hg)	30 (8.9)		
Fuel filter: quantity, type	3, Primary Engine Filter 2, Fuel/Water Separator		
Recommended fuel	#2 Diesel ULSD		
Fuel Consumption		60 Hz	
Diesel, Lph (gph) at % load		Standby Rating	
100%		820 (216.6)	
75%		726 (191.9)	
50%		482 (127.4)	
25%		278 (73.5)	
Diesel, Lph (gph) at % load		Prime Rating	
100%		771 (203.7)	
75%		642 (169.7)	
50%		466 (123.2)	
25%		243 (64.1)	
Radiator System		60 Hz	
Ambient temperature, °C (°F)		50 (122)	
Engine jacket water capacity, L (gal.)		375 (99)	
Radiator system capacity, including engine, L (gal.)		1192 (315)	
Engine jacket water flow, Lpm (gpm)		2707 (715)	
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)		1170 (66537)	
Charge cooler water flow, Lpm (gpm)		700 (185)	
Heat rejected to charge cooling water at rated kW, dry exhaust, kW (Btu/min.)		970 (55163)	
Water pump type		Centrifugal	
Fan diameter, including blades, mm (in.)		2743 (108)	
Fan, kWm (HP)		95 (127.4)	
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H ₂ O)		0.125 (0.5)	
Remote Radiator System[†]		60 Hz	
Exhaust manifold type		Dry	
Connection sizes:		Class 150 ANSI Flange	
Water inlet/outlet, mm (in.)		216 (8.5) Bolt Circle	
Intercooler inlet/outlet, mm (in.)		178 (7.0) Bolt Circle	
Static head allowable above engine, kPa (ft. H ₂ O)		250 (83.6)	

[†] Contact your local distributor for cooling system options and specifications based on your specific requirements.

Exhaust System	60 Hz	Alternator Specifications	60 Hz
Exhaust flow at rated kW, m ³ /min. (cfm)	711 (25109)	Type	4-Pole, Rotating-Field
Exhaust temperature at rated kW at 25°C (77°F) ambient, dry exhaust, °C (°F)	489 (912)	Exciter type	Brushless, Permanent-Magnet Pilot Exciter
Maximum allowable back pressure, kPa (in. Hg)	8.5 (2.5)	Voltage regulator	Solid-State, Volts/Hz
Exh. outlet size at eng. hookup, mm (in.)	See ADV drawing	Insulation:	NEMA MG1, UL 1446, Vacuum Pressure Impregnated (VPI)
Electrical System		Material	Class H, Synthetic, Nonhygroscopic
Battery charging alternator:		Temperature rise	130°C, 150°C Standby
Ground (negative/positive)	Negative	Bearing: quantity, type	2, Sealed
Volts (DC)	24	Coupling type	Coupling
Ampere rating	140	Amortisseur windings	Full
Starter motor qty. at starter motor power rating, rated voltage (DC)	Standard: 2 @ 9 kW, 24	Alternator winding type	Form Wound
Battery, recommended cold cranking amps (CCA):		Rotor balancing	125%
Quantity, CCA rating each, type (with standard starters)	4, 1110, AGM	Voltage regulation, no-load to full-load	±0.25%
Battery voltage (DC)	12	Unbalanced load capability	100% of Rated Standby Current
Air Requirements		Peak motor starting kVA:	(35% dip for voltages below)
Radiator-cooled cooling air, m ³ /min. (scfm)‡	3823 (135000)	480 V	KH07631TO4D 8996
Cooling air required for generator set when equipped with city water cooling or remote radiator, based on 14°C (25°F) rise, m ³ /min. (scfm)‡	1214 (42887)	480 V	KH09370TO4D 10941
Combustion air, m ³ /min. (cfm)	257 (9059)	Alternator Standard Features	
Heat rejected to ambient air:		<ul style="list-style-type: none"> ● The pilot-excited, permanent magnet (PM) alternator provides superior short-circuit capability. ● All models are brushless, rotating-field alternators. ● 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. ● Superior voltage waveform from two-thirds pitch windings and skewed stator. ● Brushless alternator with brushless pilot exciter for excellent load response. 	
Engine, kW (Btu/min.)	160 (9099)	NOTE: See TIB-102 Alternator Data Sheets for alternator application data and ratings, efficiency curves, voltage dip with motor starting curves, and short circuit decrement curves.	
Alternator, kW (Btu/min.)	179 (10200)		

‡ Air density = 1.20 kg/m³ (0.075 lbm/ft³)

Controller



APM802 Controller

Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.

- Graphic display with touch screen and menu control provide easy local data access
- Measurements are selectable in metric or English units
- User language is selectable
- Two USB ports allow connection of a flash drive, mouse, or keypad
- Electrical data, mechanical data, and system settings can be saved to a flash drive
- Ethernet port allows connection to a PC type computer or Ethernet switch
- The controller supports Modbus® RTU and TCP protocols
- NFPA 110 Level 1 capability

Refer to G6-152 for additional controller features and accessories.

Modbus® is a registered trademark of Schneider Electric.

Codes and Standards

- Engine-generator set is designed and manufactured in facilities certified to ISO 9001.
- Generator set meets NEMA MG1, BS5000, ISO, DIN EN, and IEC standards, NFPA 110
- Engine generator set is tested to ISO 8528-5 for transient response.
- The generator set and its components are prototype-tested, factory-built, and production-tested.

Third-Party Compliance

- Tier 2 EPA-Certified for Stationary Emergency Applications

Available Approvals and Listings

- California OSHPD Approval
- CSA Certified
- IBC Seismic Certification
- UL 2200 Listing

Warranty Information

- A standard three-year or 1000-hour limited warranty for standby applications. Five-year basic, five-year comprehensive, and ten-year extended limited warranties are also available.
- A standard two-year or 8700-hour limited warranty for prime power applications.

Available Warranties for Standby Applications

- 5-Year Basic Limited
- 5-Year Comprehensive Limited
- 10-Year Major Components Limited

Standard Features

- Closed Crankcase Ventilation (CCV) Filters
- Customer Connection
- Fan Bearing Grease Extension
- Fuel/Water Separator
- Generator Heater
- Local Emergency Stop Switch
- Oil Drain and Coolant Drain Extension
- Operation and Installation Literature
- Spring Isolation Under the Skid

Available Options

Engine Type

- KDxxxx Tier 2 EPA-Certified Engine
- KDxxxx-F Fuel Optimized Engine

Approvals and Listings

- California OSHPD Approval
- CSA Certified
- IBC Seismic Certification
- UL 2200 Listing

Open Unit

- Exhaust Silencer, Critical (kits: PA-361617 qty. 2)
- Exhaust Silencer, Hospital (kits: PA-361626 qty. 2)
- Flexible Exhaust Connector, Stainless Steel

Controller

- Input/Output, Analog
- Input/Output, Digital
- Input/Output, Harness
- Load Shed
- Manual Key Switch
- Remote Emergency Stop
- Remote Serial Annunciator Panel

Cooling System

- Block Heater; 10500 W, 208 V, (Select 1 Ph or 3 Ph) *
 - Block Heater; 12000 W, 240 V, (Select 1 Ph or 3 Ph) *
 - Block Heater; 12000 W, 380 V, 3 Ph *
- * Required for Ambient Temperatures Below 5°C (41°F).

Electrical System

- Battery, AGM (kit with qty. 4)
- Battery Charger
- Battery Rack and Cables
- Line Circuit Breaker (loose)
- Line Circuit Breaker with Shunt Trip (loose)

Fuel System

- Flexible Fuel Lines
- Restriction Gauge (for fuel/water separator)

Literature

- General Maintenance
- NFPA 110
- Overhaul
- Production

Miscellaneous

- Air Cleaner, Heavy Duty
- Air Cleaner Restriction Indicator
- Automatic Oil Replenishment System
- Engine Fluids (oil and coolant) Added
- Rated Power Factor Testing

Warranty (Standby Applications only)

- 5-Year Basic Limited
- 5-Year Comprehensive Limited
- 10-Year Major Components Limited

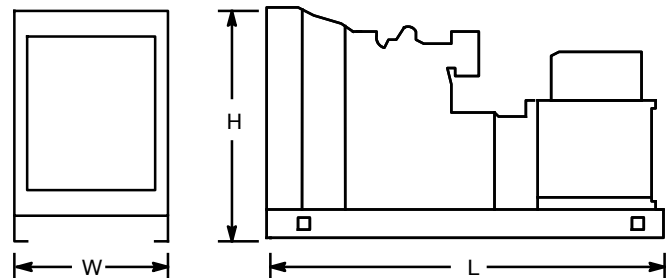
Other

-
-

Dimensions and Weights

Overall Size, max., L x W x H, mm (in.): 7648 x 3172 x 3451
(301.0 x 124.9 x 135.9)

Weight, radiator model, max. wet, kg (lb.): 32513 (71707)



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



Industrial Diesel Generator Set - KD3250
Tier 2 EPA-Certified for Stationary Emergency Applications

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

DISTRIBUTED BY:

© 2017 by Kohler Co. All rights reserved.