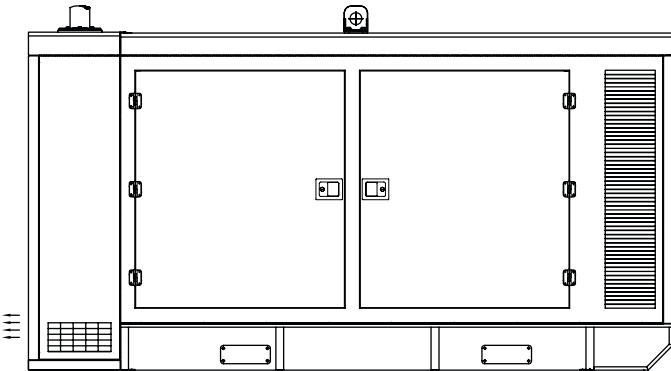




### Standard Features

- 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.
- Two-year limited warranty covers all systems and components.
- Industrial diesel engine with 12-volt battery charging alternator.
- Stamford single-bearing alternator with insulation class H.
- Unit-mounted radiator with 45 °C.
- Subbase fuel tank (8hrs @ 80% rated load).
- Vibration isolators.
- Dry type air filter.
- Fuel Water separator.
- Main line breaker.
- Starting battery and cables with inbuilt battery charger.
- CPCB certified sound enclosure.
- Conveniently located fuel level indication and fuel filling point.
- Single point lifting arrangement.
- Operation and installation literature.



### Generator Set Ratings

Genset	Engine	Alternator	Voltage	PH	Hz	Prime Rating	
						kW/kVA	Amps
KZA125	TBD226B-6II D1	UCI274V	240/415	3	50	100/125	174

**RATINGS:** All three-phase units are rated at 0.8 power factor.  
**PRIME POWER RATINGS:** Prime power ratings apply to installations where utility power is unavailable or unreliable. 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, overload power in accordance with ISO-3046/1 and BS 5514. For limited running time and base load ratings, consult the factory. Obtain the technical information bulletin (TIB-101) on ratings guidelines for the complete ratings definitions. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

# Alternator Specifications

- Alternator meets BS EN 60034 and the relevant section of other international standards such as BS5000, VDE 0530, NEMA MG1-32, IEC34, CSA C22.2-100, AS1359.
- Self-ventilated and dripproof of IP23 construction.
- Superior voltage waveform form a 2/3 pitch wound stator.

Specifications	Alternator
Model	UCI274V
Type	4 pole
Exciter type	Brushless
Leads, quantity type	12, Reconnectable
Voltage regulator	SX460
Insulation	
- Material	Class H
- Temperature rise	125°C, Prime
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Voltage regulation	+/- 1%
Rating Voltage	415V
Standby at 163°C, kVA	125
Prime at 125°C, kVA	125
Direct axis subtransient reactance (X <sup>d</sup> ), %	11

## Application Data

### Engine

Engine specifications	
Engine model	TBD226B-6II D1
Engine type	Turbo charged
Cylinder arrangement	6, in line
Displacement, L (cu. in.)	6.23 (380.2)
Bore and stroke, mm (in.)	105 x 120 (4.13 x 4.72)
Compression ratio	15.5:1
Piston speed, m/min. (ft./min.)	360 (1180.8)
Rated rpm	1500
Max.power at rated rpm, kWm (BHP)	129 (172.5)
Governor: type, make/model	Mechanical
Frequency regulation, no-load to full load	ISO 5%
Frequency regulation, steady state	+/- 1%
Frequency	Fixed
Air cleaner type, all models	Dry

### Exhaust

Exhaust System	
Exhaust Manifold type	Dry
ExhaustflowatratedkW,kg/hr	625.93
Exhaust temperature at rated kW, dry exhaust, °C (°F)	550 (1022)
Maximum allowable back pressure, kPa (in.Hg)	4 (1.18)
Exhaust outlet size at engine hookup, mm (in.)	59.1 (2.32)

### Engine Electrical

Engine Electrical System	
Battery charging alternator	12 Volt
Ground (negative/positive)	Negative
Volts, VDC	12
Amps, Ah	32
Battery type - sealed maintenance free (PLT)	
- Qty.	1
Battery voltage (DC)	12 Volt

### Fuel

Fuel System	
Fuel supply line, min. ID, mm (in.)	9 (0.35)
Fuel return line, mm. ID, mm (in.)	7 (0.27)
Max. lift engine-driven fuel pump, m (ft.)	0.012 (0.039)
Max.fuelflow,Lph(gph)	6.3(1.6)
Fuel prime pump	Manual
Fuelfilter:quantity,type	2,Primary
Recommended fuel	#2 Diesel
Fuel tank capacity, L (gal)	220 (58.1)

### Lubrication

Lubricating System	
Type	Full pressure
Oil pan capacity, L (qt.)	13 (13.7)
Oilpancapacitywithfilter,L(qt.)	13.72(14.5)
Oilfilter:quantity,type	1,Spiral paper element
Oil cooler	Water cooled

## Application Data

### Cooling

#### Radiator System

Ambient temperature, °C (°F)	45°C (113)
Engine jacket water capacity, L (gal.)	8.0 (2.1)
Radiator system capacity, including engine, L (gal.)	27 (7.1)
Engine jacket water flow, Lpm (gpm)	129 (34.1)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	40 (2273)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	600 (23.6)
Fan, kWm (HP)	3.9 (5.2)
Max. restriction of cooling air, intake and discharge side of radiator, Pa (in.H <sub>2</sub> O)	0.18 (0.7)

### Operation Requirements

#### Air Requirements

Radiator-cooled cooling air, m <sup>3</sup> /min (scfm)	308.6 (10897)
Combustion air, kg/hr	602
Heat rejected to ambient air :	
Engine, kW (Btu/min.)	18.88 (1073)
Generator, kW (Btu/min.)	12.06 (685)
Air density, kg/m <sup>3</sup> (lbm/ft <sup>3</sup> )	1.20 (0.075)

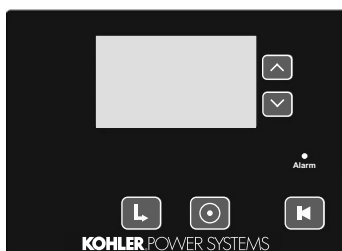
#### Fuel Consumption

Diesel, Lph (gph) at % load	Prime Rating
100%	25.3 (6.7)
75%	19.0 (5.0)
50%	12.6 (3.3)

#### Exhaust Emissions

Per ISO 8178-5 mode cycle	CPCB Norms
Noise level	Conforms to CPCB Norms

## Controller



### Advance Digital Control (ADC 2300)

#### Compact Controller

LCD display:

- Runtime hours
- Current
- Voltage
- Frequency
- Engine Temperature
- Engine oil pressure
- Battery V
- Kilowatt
- Fuel Level
- KVAR / PF

LCD display faults:

- High engine temperature
- Low oil pressure
- Over & under speed
- Over & under voltage
- Over & under frequency
- E-stop
- Low Fuel level
- Over Load
- High Coolant temperature
- Low Coolant level
- E-S lock out
- Auxiliary fault

Display warning:

- Low battery voltage
- High battery voltage

### Standard Features and Accessories

#### Standard Features

- Ease of reading with wide screen LCD
- Master switch: Run/Off-Reset/Auto
- Remote two-wire start/stop capability
- Superior electronics
- Factory-built and production-tested
- One-source responsibility for the generating system and accessories
- Automatic start with programmed cranking cycle
- Field software upgrade possibility

#### Environmental Specifications

- Operating temperature: -20°C to 70°C (-4°F to 158°F)
- Storage temperature: -60°C to 70°C (-76°F to 158°F)
- Humidity: 0-95% condensing

#### Power Requirements

- 12 VDC with fuse protection
- 250 mA @ 12 VDC

#### Accessories

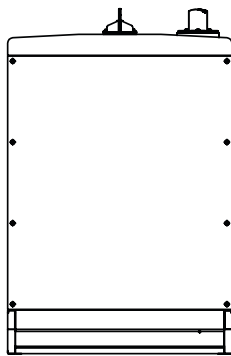
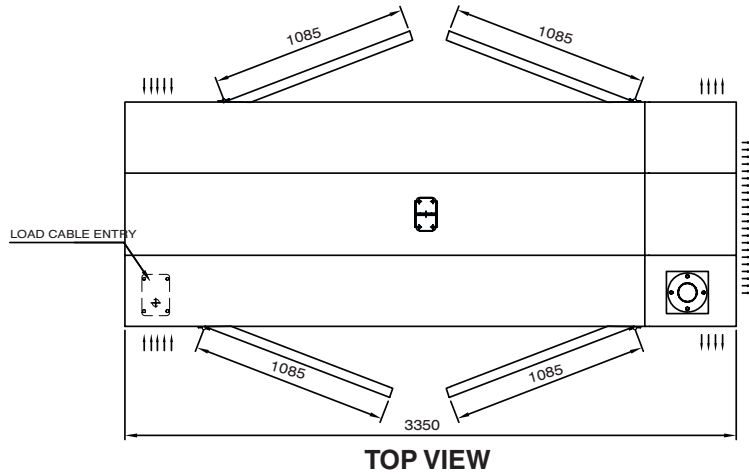
- Battery charger 12 V
- Mains sensing relay
- Earth leaking protection
- KWH meter
- Earth fault relay
- CBCT
- Multi-function meter

KOHLER CO., Kohler  
 Wisconsin 53044 USA  
 Phone 920-565-3381  
 Fax 920-49-1646  
 KohlerPower.com

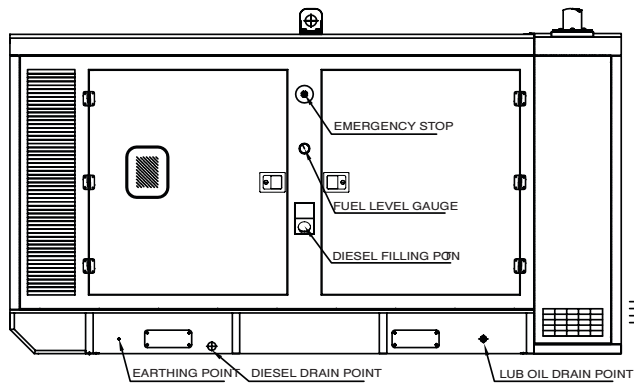
Kohler India Corporation Pvt Ltd  
 #138/6, 6th 'A' Cross  
 Raj Mahal Vilas Extension Sadashivnagar  
 Bangalore 560 080, India  
 Phone +91 80 2361 6208 / 6831 / 0231  
 Fax +01 80 2361 5972  
 E-mail: info@kohlerindia.com

**Dimensions and Weights**

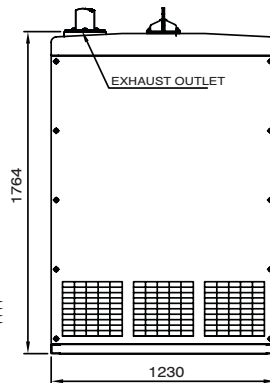
Overall Size, L x W x H, mm (in.) 3350 x 1230 x 1764 (131.9 x 48.4 x 69.5)  
 Wet, max., kg (lb.) 2490 (5489.5)  
 Dry, max., kg (lb.) 2250 (4960.4)



LHS



FRONT VIEW



RHS

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

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