

## KDE-275DE Diesel Generator Set



### General Features

- Engine (DEUTZ TCD 8.0), Radiator 50°C max, belt driven fans, with safety guard
- 24V charge alternator
- Alternator (Stamford, Leroy Somer & MeccAlte for option), single bearing alternator IP23, insulation class H/H
- Skid and vibration isolators
- Dry type air filter, fuel filter, oil filter
- Main line circuit breaker
- Standard control panel
- Two 12V batteries, rack and cable
- Ripple flex exhaust pipe, exhaust siphon, flange, industrial muffler

PHOTO FOR REFERENCE ONLY



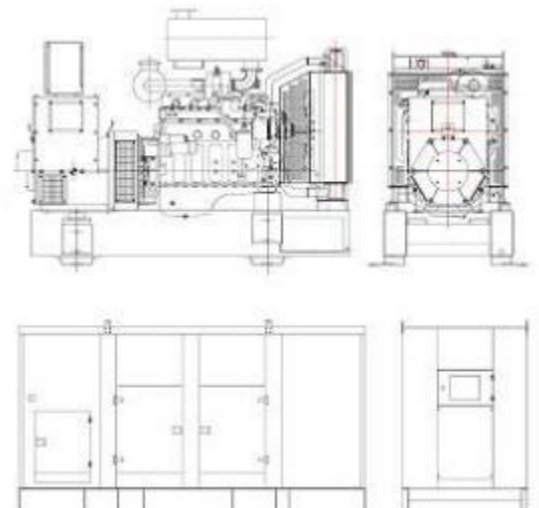
### Technical Data

|                            |              |
|----------------------------|--------------|
| Output Frequency           | 50 Hz        |
| Rated Speed                | 1500RPM      |
| Prime Power                | 250KVA/200KW |
| Standby Power              | 275KVA/220KW |
| Rated Voltage              | 400/230V     |
| Phase                      | 3            |
| Power Factor               | 0.8          |
| Fuel Consumption 100% Load | 51.6L/Hr     |
| Fuel Consumption 75% Load  | 39.9L/Hr     |
| Fuel Consumption 50% Load  | 28.1L/Hr     |
| Operation Altitude         | ≤ 1500m      |
| Ambient Temperature        | ≤ 50°C       |



### Dimension and Weight

| Genset Type    | Open Frame | Soundproof |
|----------------|------------|------------|
| Length(L) (mm) | 2600       | 3500       |
| Width(W) (mm)  | 1000       | 1350       |
| Height(H) (mm) | 1750       | 1850       |
| Weight (kg)    | 2100       | 3260       |



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**Engine Specification**

|                                  |                           |
|----------------------------------|---------------------------|
| Manufacturer / Model:            | DEUTZ TCD 8.0, 4-cycle    |
| Air Intake System:               | Turbo, CAC                |
| Fuel System:                     | Single injection pump     |
| Cylinder Arrangement:            | 6 in line                 |
| Displacement:                    | 7.8L                      |
| Bore and Stroke:                 | 110*136 (mm)              |
| Compression Ratio:               | 17:1                      |
| Rated RPM:                       | 1500rpm                   |
| Max. Standby Power at Rated RPM: | 250KW                     |
| Governor Type:                   | Electric                  |
| Exhaust Gas Flow:                | 42.5m <sup>3</sup> /min   |
| Exhaust Temperature:             | 530°C                     |
| Max Back Pressure:               | 50mbar                    |
| Max Intake Restriction:          | 30mbar                    |
| Burning Capacity:                | 15.2m <sup>3</sup> /min   |
| Cooling Air Flow:                | 270m <sup>3</sup> /min    |
| Oil Capacity:                    | 31L                       |
| Oil Consumption:                 | 0.02% of fuel consumption |
| Coolant Capacity (Engine only):  | 9.8L                      |
| Thermostat:                      | 83-98°C                   |
| Max Water Temperature:           | 110°C                     |

**Alternator Specification**

|                                     |  |
|-------------------------------------|--|
| Manufacturer / Model:               | STAMFORD UCDI 274K1                      |
| Number of Phase:                    | 3  |
| Connecting Type:                    | 3 Phase and 4 Wires, "Y" type connecting |
| Number of Bearing:                  | 1  |
| Protection Grade:                   | IP23                                     |
| Exciter Type:                       | Brushless, self-exciting                 |
| Insulation Class, Temperature Rise: | H/H                                      |
| Telephone Influence Factor (TIF):   | < 50                                     |
| THF:                                | < 2%                                     |
| Voltage Regulation, Steady State:   | ≤ ± 1%                                   |
| Alternator Capacity:                | 250KVA                                   |
| Alternator Efficiencies:            | 92.7%                                    |
| Air Cooling Flow:                   | 0.58m <sup>3</sup> /s                    |

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### Control System

#### Standard Deepsea DSE6020 Auto Mains Failure Control Panel

- Manual or Auto Start Module for single genset applications. Designed to work with electronic and non-electronic engines, providing advanced engine monitoring and protection features.
- Includes a back-lit LCD display which shows the status of the engine at all times. Monitors engine speed, frequency, voltage and run hours and also displays the warning and shutdown status.
- Includes extensive outputs and inputs making this product ideal for a wide variety of applications. It can either be programmed using the front panel or by using DSEPC software.



#### Optional Deepsea DSE7320 Auto Mains Failure Control Panel

- Auto Mains (Utility) Failure Control Module suitable for a wide variety of single genset applications.
- Displays warnings, shutdown and engine status info on the back-lit LCD screen, illuminated LEDs, remote PC. Monitors the mains (utility) supply. Includes USB, RS232 and RS485 ports for system expansion.
- Compatible with electronic and non-electronic engines and offers flexible inputs, outputs and engine protections to meet extensive industry requirements.
- Includes enhanced event and performance monitoring, remote communication to reduce engine wear. It can either be programmed using the front panel or by using DSEPC software.



#### Optional Deepsea DSE8610 Auto Paralleling Control Panel

- Synchronizing Auto Start Control Module for multi-genset loadshare system, designed to synchronize up to 32 gensets including electronic and non-electronic engines.
- Monitors the genset and indicates operational status and fault conditions, automatically starting or stopping the engine on load demand or fault condition.
- System alarms are annunciated on the LCD screen, illuminated LED and audible sounder.
- Records 250 events log for maintenance. Extensive monitoring, metering and protection features are included as well as comprehensive communication and system expansion options.
- Using DSE PC Software allows alteration of the operational sequences, timers, alarms with all communication ports active.



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## Optional

### Engine

- Water Jacket Preheater
- Water Separator
- Oil Pump
- Oil Preheater
- Battery Charger

### Fuel System

- Daily Fuel Tank
- External Fuel Tank
- Auto Fuel Filling System
- Fuel Level Sensor

### Control System

- Auto Remote Control Panel
- AMF Function Control Panel
- Auto Paralleling Control Panel
- Auto Transfer Switch (ATS)
- ABB breaker

### Alternator

- Anti Condensation Heater
- Permanent Magnet Generator
- Winding Temp Sensor

### Enclosure

- Rainproof Type
- Soundproof Rental Type
- Mobile Type

### Available Voltages

- 440/254V
- 415/240V
- 380/220V

## Reference Standards

**Generator Set:** ISO 8528, CE

**Engine:** ISO 3046, BS 5514, DIN 6271

**Alternator:** BS EN 60034, IEC34, BS5000, NEMA MG1-32, VDE 0530, CSA C22.2-100, AS1359

## Warranty

KNOX Power provides a full line of brand new and high quality products. Each and every unit is strictly factory tested.

Warranty is according to our standard conditions: A. 15 months, counted on the day KNOX sold to the first buyer; B. One year after installation; C. 1000 running hours (accumulated); subject to the earlier one.

Service and spare parts are available from KNOX Power or distributors in your location.