

## Generator Model

## APK-DD31

Generator Rating		Prime	Standby
Power	kVA	28	31
Power	kW	23	25
Current	A	40	45
Standard Voltage	V	400/230 3 Phase	
Revolution Per Minute	R.P.M.	1500	
Rated at power Factor	Cos Phi	0.8	

### Standard Features

- 4 Stroke, 1500 RPM, water-cooled heavy-duty diesel engine
- Automatic or manual start with built in protection system
- Flexible oil pipes and oil drain valve
- Pre-heater and water heater
- Lubrication oil and anti-freeze
- 4 Pole, synchro type, single bearing, brushless alternator
- Fully rated batteries and cables
- Base or roof lifting points
- Bunded base fuel tank
- Industrial rated silencer
- Electronic battery charger
- EPO (Emergency Push Off)
- 3 or 4 pole output breaker
- Electrical wiring diagram
- User manual and operating manual

### Optional Features

- 3 or 4 pole Automatic Transfer panel (ATS) electrically and mechanically interlocked
- Remote alarm volt free contacts
- Remote monitoring (RS232 / RS485)
- G99 Operation
- Battery isolator
- Canopy colour
- Low noise canopy down to 65dBA
- Parallel operation
- Residential silencer
- Air flow variations
- Extended fuel tank
- Remote fuel tank with/without automatic day tank fill system

### Additional Services Available

- Site surveys
- Hiab delivery
- Generator positioning
- Air handling and exhaust extension supply and installation
- Commissioning
- Maintenance contract

**Prime Power:** Supplying of electrical power at variable load for an unlimited number of hours in the event of normal utility power failure according to ISO85281. 10% overload capability is available.

**Stand by Power:** Supplying of electrical power at variable load, in the event of normal utility power failure according to ISO85281. This rating is maximum power, no overload capability is available.

## Engine Specification

Brand		DIAMOND DIESEL
Model		498 D
Engine Power Stand By	(kWm / hp)	25/34
Revolution Per Minute	(R.P.M)	1500
Total Displacement	(L)	2.98
Cylinders Orientation		4 Vertical inline
Bore x Stroke	(mm x mm)	98 x 105
Compression Orientation		18:1
Governor Type		Mechanical
Aspiration System		Natural
Injection		Direct
Cooling		Water Cooled
Electrical System	(VDC)	12
Lub-Oil Capacity	(L)	9
Engine Coolant Capacity	(L)	14
Fuel Tank Capacity	(L)	62
Maximum Exhaust Temperature	(°C)	550
Maximum Exhaust Gas Flow	(m3/hr)	166
Maximum Allowed Back Pressure	(kPa)	6
Cooling Air Flow	(m3/min)	7
Fuel Consumption 50%	(L/h)	3.5
Fuel Consumption 75%	(L/h)	5.2
Fuel Consumption 100%	(L/h)	7.1

## Alternator Specification

Standard Voltage	(V)	400/230
Frequency	(Hz)	50
Stationary Voltage Regulation	(±)	1%
Short Circuit Current		>300%
Insulation		H/H
Protection		IP 23
Efficiency	(%)	86.2
Overloading		110% For 1 Hour
Power Factor	(cos Phi)	0.8
Total Harmonic Distortion rate		THF <2%
Connection Type		Star
Number of poles		4
Number of Bearings		Single

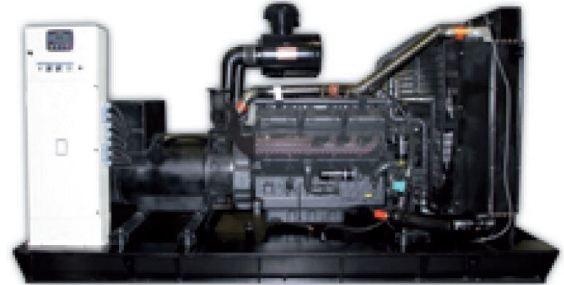
[www.abilitypower.co.uk](http://www.abilitypower.co.uk)

### Dimensions with canopy

Length (L)	mm	2000
Height (H)	mm	1450
Width (W)	mm	950
Wet Weight	kg	970
Fuel Tank Capacity	L	62

### Dimensions without Canopy

Length (L)	mm	1500
Height (H)	mm	1450
Width (W)	mm	950
Wet Weight	kg	760
Fuel Tank Capacity	L	62



Please note above images are an example actual unit may vary

### Standard D500 Control Panel Features

- Diesel and gas genset support
- 400Hz operation support
- 400 event logs, full snapshot
- All parameters front panel editable
- 3 level configuration password
- 128x64 graphical LCD display
- Downloadable language
- Waveform display of V & I
- Harmonic analysis of V & I
- Synchro scope & check synch
- Allows closed transfers
- 16Amp MCB & GCB outputs
- 8 configurable digital outputs
- Outputs expandable to 40
- 4 configurable analogue inputs
- Both CANBUS-J1939 & MPU
- 3 configurable service alarms
- Multiple nominal conditions
- Multiple automatic exerciser
- Weekly operation schedule
- Dual mutual standby with equal aging of gensets
- Manual "speed fine adjust" on selected ECUs
- Automatic fuel pump control
- Disable protections feature
- Excess power protection
- Reverse power protection
- Overload IDMT protection
- Load shedding, dummy load
- Multiple load management
- Current unbalance protection
- Voltage unbalance protection
- Fuel filling & fuel theft alarms
- Battery back-up real time clock
- Idle speed control
- Battery charge run enabled
- Contactor & MCB drive
- 4 quadrant genset power counters
- Mains power counters
- Fuel filling counter
- Fuel consumption counter
- Modem & Ethernet diagnostics configurable through USB, RS-485, Ethernet and GPRS
- Free configuration program
- Allows SMS controls
- Ready for central monitoring
- Ethernet and GPRS
- Mobile genset support
- Automatic GSM geo-location
- GPS connectivity (USB & RS232)
- Dynamic DNS support
- Easy USB firmware upgrade
- IP65 rating with standard gasket