

Diesel
Generator Set



- 20 kVA
- 25 kVA
- 35 kVA
- 44 kVA
- 50 kVA
- 55 kVA



Description

SEAPOWERS Power Generation commercial generator set is a fully integrated power generation system, providing optimum performance, reliability, and versatility for stationary standby, prime power and continuous duty applications.

Features

SEAPOWERS heavy-duty engine - Rugged 4-cycle industrial diesel delivers reliable power, low emissions and fast response to load changes.

Alternator : Low reactance 2/3 pitch windings; low waveform distortion with non-linear loads, fault clearing short-circuits capability, and class H insulation.

Cooling System: The standard integrated kit model radiator system designed and tested for nominal ambient temperatures, simplifies facility design requirements for heat rejected.

Canopy Types : Optionally it is possible to make it protective and soundproof against adverse climatic conditions

Control System : Datakom electronic control is standard equipment and provides total genset system integration, including auto remote start/stop, alarm and status message display.

Warranty and Service : Backed by a comprehensive warranty and worldwide after-sales support, 10 years of spare parts supplying.

Stand by Rating (ESP): It is the way that generators operate under variable load at certain intervals. It can work as a backup power. It is not suitable to work under extreme load.

Prime Rating (PRP): Applicable for supplying power to varying electrical load for unlimited hours. PRP is in accordance with ISO 8528. 10 % overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO 3046.

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GENERATOR SET SPECIFICATIONS							
Governor Regulation Class	ISO 8528 G3						
Voltage Regulation, No Load to Full Load	±1%						
Random Voltage Variation	±1%						
Frequency Regulation	Isochronous						
Random Frequency Variation	± 0.25%						
EMS Compatibility	In compliance with BS 800 and VDE levels G and N						
ENGINE SPECIFICATIONS							
Engine Brand	Baudouin Engine						
Aspiration Type	Turbocharged						
Engine Rated Speed	1500 rpm						
Bore	89 mm						
Stroke	92 mm						
Displacement	2,3 L						
Cylinder Block	4 Cylinder						
Oil Capacity	7.1 L						
Coolant Capacity for Engine / Radiator and Pipes	5 / 3,6 L (20-25 KVA)	5 / 4,4 L (35-44 KVA)	55 / 3,4 L (50-55 KVA)				
Starting Voltage	12 V						
Fuel System	Direct Injection						
Fuel Filter	Strata Pore Fuel Filter						
Air Cleaner Type	Heavy Duty Air Cleaner						
Compression Ratio	17.5 : 1						
Cycle	4 Stroke						
Cooling System	Liquid (Water + 50% Antifreeze)						
Governor Type	Electronic						
	Power	20 kVA	25 kVA	35 kVA	44 kVA	50 kVA	55 kVA
Fuel Consumption	at 25% of generator set prime output	1,9 L/hr	2,0 L/hr	2.4 L/hr	2.8 L/hr	3.3 L/hr	3.2 L/hr
	at 50% of generator set prime output	2,6 L/hr	3,2 L/hr	4.0 L/hr	4.7 L/hr	5.4 L/hr	6,0 L/hr
	at 75% of generator set prime output	3,6 L/hr	4,5 L/hr	5.7 L/hr	7.0 L/hr	8.0 L/hr	8,9 L/hr
	at 100% of generator set prime output	4,7 L/hr	6,1 L/hr	7.6 L/hr	9.5 L/hr	10.7 L/hr	11,9 L/hr
	at 100% of generator set stand by output	5,2 L/hr	7,1 L/hr	8.4 L/hr	10.8 L/hr	11.7 L/hr	13,3 L/hr
ALTERNATOR SPECIFICATIONS							
Alternator Brand	Megatron						
Type	Brushless, Revolving Field						
Frequency	50 Hz						
Winding Pitch	2/3						
Number of Bearing	Single Bearing						
Protection	IP23						
Insulation System	Class H						
Standard Temperature Rise	Standart 125°C, Stand by 163°C						
Exciter Type	Self - Excitation or Other Excitation by PMG						
Phase Rotation	A (U), B (V), C (W)						
Alternator Cooling	Direct Drive Centrifugal Blower Fan						
AC Waveform Total Harmonic Distortion (THDV)	No Load <1.5%. Non Distorting Balanced Linear Load <5%						
Telephone Influence Factor (TIF)	<50% per NEMA MG1-22.43						
Telephone Harmonic Factor (THF)	<2%						

Seapower reserves the right to change or modify product design, construction, specifications, or materials without prior notice.

Genset Model	Engine Model	Prime rating	Stand by rating
MT 20 B&M	4M06G20/5	18,2 kVA	20 kVA
MT 25 B&M	4M06G25/5	23 kVA	25 kVA
MT 35 B&M	4M06G35/5	32 kVA	35 kVA
MT 44 B&M	4M06G44/5	40 kVA	44 kVA
MT 50 B&M	4M06G50/5	46 kVA	50 kVA
MT 55 B&M	4M06G55/5	50 kVA	55 kVA

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 languages
- Waveform display of V & I
- Harmonic analysis of V & I
- 16Amp MCB & GCB outputs
- 8 configurable digital inputs
- 6 configurable digital outputs
- 3 configurable analog inputs
- Both CANBUS-J1939 & MPU
- 3 configurable service alarms
- 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
- Combat mode support
- Multiple nominal conditions
- Contactor & MCB drive
- 4 quadrant genset power counters
- Mains power counters
- Fuel filling counter
- Fuel consumption counter
- Modem diagnostics display
- Configurable through USB, RS-232 and GPRS
- Free configuration program
- Allows SMS controls
- Ready for central monitoring
- Mobile genset support
- Automatic GSM geo-location
- GPS connectivity (RS232)
- Easy USB firmware upgrade
- IP65 rating with optional gasket

CONTROL SYSTEM

The D-500LITE MK2 is a cost effective modular genset controller ready for internet monitoring through plug-in modules.

Functionalities

- AMF unit
- ATS unit
- Remote Start Controller
- Manual Start Controller
- Engine Controller

Topologies

- 3 ph 4 w, star & delta
- 3 ph 3 w, 2 CTs
- 2 ph 3 w
- 1 phase 2 wires

Communication

- USB Device
- J1939-CANBUS
- Geo-locating through GSM
- Internet Central Monitoring
- SMS Message Sending
- E-mail Sending
- Free Pc Software: RainbowPlus
- Modbus RTU (2400-57600baud)
- Modbus TCP/IP

Remote Monitoring (OPTIONAL)

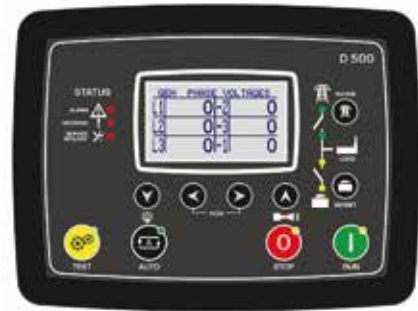
- Single server supports up to 60'000 devices
- Provides data security, data is sent to only server
- Uses internet-based interactive World map
- Real time display of status of devices are shown on the map, and on side panel
- Hierarchical configuration and clustering
- Remote control of devices
- Supports all Datakom products, which are integrated with DKG 210 gateway
- Supports all devices, which supports Modbus protocol, by integrating DKG 210 gateway
- Data recording, analysis and reporting
- Tablet and smartphone interfaces

PLUG-IN Modules (OPTIONAL)

- GSM Modem (2G-3G-4G)
- Ethernet 100Mbps
- Wi-Fi (802.11 b/g/n)
- RS-485 (2400-57600baud)
- RS-232 (2400-57600baud)

Measurements

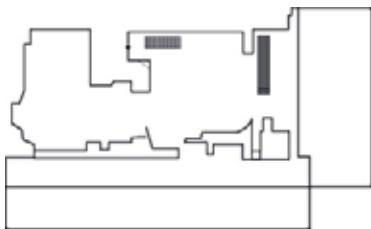
- Mains & genset PN/PP voltages
- Mains & genset frequency
- Mains & genset phase currents
- Mains & genset neutral currents
- Mains & genset, phase & total, kW, kVA, kVA, pf
- Engine speed
- Battery voltage



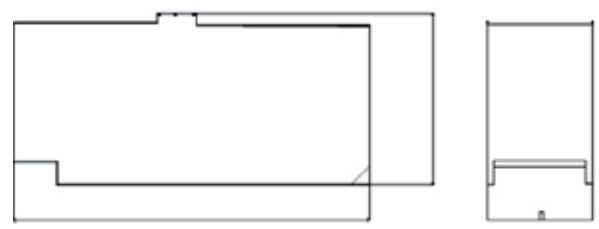
D-500LITE MK2 Control Operator / Displaypanel

Canopy Standart Specifications

- Compact design connection with non-welded nuts andbolts.
- Integrated canopy,generator set,exhaust system fueltank.
- Body made from steel components treated with polyesterpowder coating
- Easy access to all service points
- Exhaust system inside canopy
- Large doors on each side
- Control panel viewing window in a lockable access door
- Emergency stop push button mounted on cabin exterior
- Fuel fill and battery can only be reached via lockableaccess doors.
- Customer options available to meet your applicationsneeds.
- Katana makes its generating sets noise level tests in accordance with directive 2000/14/EC validation of thenoise level test has been aproved by the notified bodySzutest (CE conformity assessment body).



Open Type



Enclosure

Power	Type	Dry Weight (kg)	Lenght (mm)	Width (mm)	Height (mm)	Tank Capacity (L)
20 kVA	Open type	500	1600	800	1350	70
	Canopy	620	1900	800	1350	70
25 kVA	Open type	520	1600	800	1350	70
	Canopy	640	1900	800	1350	70
30 kVA	Open type	640	1750	900	1400	110
	Canopy	750	2050	900	1600	110
44 kVA	Open type	695	1750	900	1450	110
	Canopy	810	2050	900	1650	110
50 kVA	Open type	745	2000	900	1450	120
	Canopy	890	2250	900	1650	110
55 kVA	Open type	785	2000	900	1450	120
	Canopy	920	2250	900	1650	110