



MARINE



INDUSTRY



MEDICAL



DATA CENTER



TRANSPORT



EMERGENCY

Diesel Generator Set

 **Baudouin**
MOTEURS

70 kVA

88 kVA

110 kVA

150 kVA

165 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.

Diesel Generator Set

70 kVA | 88 kVA | 110 kVA | 150 kVA | 165 kVA



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	105 mm					
Stroke	130 mm (70-150-165 KVA)		118 mm (88-110 KVA)			
Displacement	4.5 L (70 KVA)	4.087 L (88 KVA)	4.09 L (110 KVA)	6,75 L (150-165 KVA)		
Cylinder Block	4 Cylinder (70-88-110 KVA)		6 cylinder (150-165 KVA)			
Oil Capacity	9 L (70 KVA)	12/14 L (88-110 KVA)		15 / 17 L (150-165 KVA)		
Coolant Capacity for Engine / Radiator and Pipes	5,3 / 5 L (70 KVA)	9.4/8,5 L (88 KVA)	9,4 / 14.2 L (110 KVA)	8 / 12 L (150-165 KVA)		
Starting Voltage	12 V					
Fuel System	Direct Injection					
Fuel Filter	Strata Pore Fuel Filter					
Air Cleaner Type	Heavy Duty Air Cleaner					
Compression Ratio	18:1 (70-150-165 KVA)		17.5 : 1 (88-110 KVA)			
Cycle	4 Stroke					
Cooling System	Liquid (Water + 50% Antifreeze)					
Governor Type	Electronic					
Fuel Consumption	Power	70 kVA	88 kVA	110 kVA	150 kVA	165 kVA
	at 25% of generator set prime output	4.5 L/hr	5.24 L/hr	6.02 L/hr	9 L/hr	9.3 L/H
	at 50% of generator set prime output	7.8 L/hr	9.1 L/hr	10.6 L/hr	15.9 L/hr	16.7 L/H
	at 75% of generator set prime output	11,0 L/hr	13.5 L/hr	16 L/hr	23 L/hr	24.6 L/H
	at 100% of generator set prime output	14.6 L/hr	18.8 L/hr	21.2 L/hr	30.2 L/hr	32.6 L/H
	at 100% of generator set stand by output	16.1 L/hr	21.3 L/hr	24.4L/hr	33.1 L/hr	36.1 L/H
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 70 B&M	4M11G70/5	63,6 kVA	70 kVA
MT 88 B&M	4M10G88/5	80 kVA	88 kVA
MT 110 B&M	4M10G110/5	100 kVA	110 kVA
MT 150 B&M	6M11G150/5	136,4 kVA	150 kVA
MT 165 B&M	6M11G165/5	150 kVA	165 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)

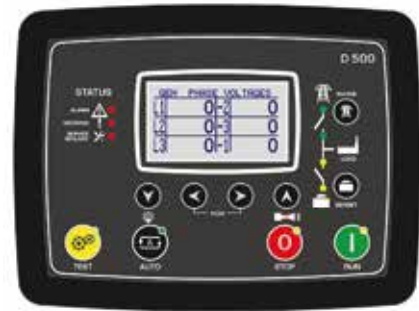
- Single server supports up to 60'000 devices
- Provides data security, data is sent to only server
- Uses internet-based interactive World map
- Real time display of status of devices are shown on the map, and on side panel
- Hierarchical configuration and clustering
- Remote control of devices
- Supports 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

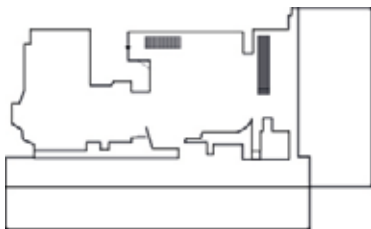
- Mains & genset PN/PP voltages
- Mains & genset frequency
- Mains & genset phase currents
- Mains & genset neutral currents
- Mains & genset, phase & total, kW, kVA, kVAr, pf
- Engine speed
- Battery voltage



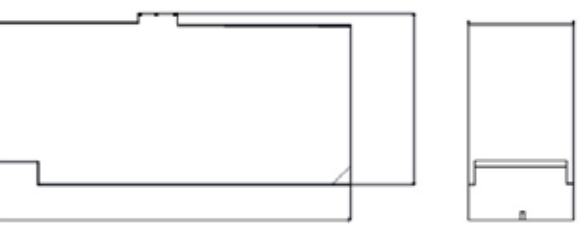
D-500LITE MK2 Control
Operator / Displaypanel

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)
70 kVA	Open type	1100	2500	1000	1600	180
	Canopy	1320	2500	1000	1800	180
88 kVA	Open type	1160	2500	1000	1600	180
	Canopy	1380	2500	1000	1800	180
110 kVA	Open type	1200	2500	1000	1600	180
	Canopy	1400	2500	1000	1800	180
150 kVA	Open type	1430	2750	1050	1600	198
	Canopy	1780	3100	1050	1900	198
165 kVA	Open type	1450	2750	1050	1600	198
	Canopy	1850	3100	1050	1900	198