

DIESEL GENERATOR SET: 1800 KVA



16M33 Engine Series

Unique Advantages of Perfect Baudouin DG Set:

- French Technology With Make In India Product.
- Flexible & Creative Customized Solutions To Meet Customer Needs,
- Single Window Solution -3s (Sale-service- Spare Parts) Erection, Installation
- Cast Iron Cylinder Block With Rugged Body Construction Designed To Minimize Vibrations
- Hardened Steel Forged Crankshaft With Induction Hardening
- Cast Iron Wet Liners, Lube Oil Cooled Aluminum Alloy Pistons With High Performance Piston Rings
- Separate Cast Iron Cylinders Heads With 4 Valves For Efficiency And Ease Of Maintenance
- Cast Iron Centrifugal Freshwater Pump
- Full Flow Multilevel Type Oil Filters Along With Electrical Pump To Pre-lubricate Engine, Reduce Friction And Better Start-ability
- Multilevel Fuel Filter With Water Separator To Protect Engine
- Exhaust Manifold And Turbocharger Provided With Shield To Isolate Heat
- More Than 50% Block Loading Capacity
- 24/7 Pan India Service Support

Standard Scope Comprising:

Diesel Engine/ AC Generator/ Base frame/ Standard Control Panel/ Radiator/ Silencer/
Battery & Battery Cable/ AVMs/ First Fill of Lube Oil/ First fill of Coolant/ DG Set Controller/ Fuel Tank/
Wiring Harness/ Sensors

One Stop Solution (Optional):

Customized Power Solutions, Installation, Commissioning, Operations Contract, AMC/ CAMC , Renting Power,
Hybrid Solution, Electric Board Approval, Electrical Options AMF/ Auto Synchronizing Panel

Genset Specification

Genset Rating (KVA)	1850	
Genset Rating (Kw)	1400	
Phase/ Voltage (V)	3/ 415	
Power Factor	0.8	
Frequency (Hz & RPM)	50 & 1500	
Governor Method	Electronic	
Governing Class	G3	
Starting System	24V DC	
Recommended Battery Capacity (AH)		

TECHNICAL SPECIFICATIONS OF 1850 KVA DG SET

Engine Specifications

Specifications	1850 KVA	
Engine : Model, Type	16M33G2000/5 Turbocharged - After cooled	
No. Of Cylinders	16	
Cylinder Arrangement	V	
Displacement, L	52.3	
Bore And Stroke, Mm	150 x 185	
Compression Ratio	15 : 01	
Governor Type	Electronic	
Governor Class	G3	
Air Cleaner Type, Qty	Dry, 1	
Max. Power KWm (BHP) @ Rated Speed (RPM)	1620 (2202.58)	

Diesel Fuel Consumption

100% Load (LPH)	368.3	
75% Load (LPH)	280.1	

Fuel System

Fuel Prime Pump	Mechanical	
Recommended Fuel	HSD	
Fuel Tank Capacity, L	990	

Lubrication System

System Type	Forced Lubrication	
Lube Oil Type	CI4 + 15W40	
Oil Pan Capacity With Filter, L	175	

Exhaust System

Maximum allowable back pressure, KPa (in. Hg)	7.5 +/- 2 (56.25 mm of Hg)	
Silencer Type, Quantity	Residential, 1	

Cooling System

Coolant Capacity Including Engine, L	400	
Water Pump Type	Centrifugal	

Engine Electrical System

Starter Motor Rated Voltage VDC	24	
Battery Charging Alternator	24 V, 180 Amp.	
Ground (Negative/positive)	Negative	
Battery Type-	Maintenance Free	
Amp/hour Quantity	200 AH, 2 Nos.	
Battery Voltage, VDC	24	

Alternator Specifications:

Specifications	1850 KVA	
Type	4 Pole	
Exciter Type	Brushless	
Voltage Regulator	VG 3	
Insulation		
-Material	Class H	
-Temperature Rise, Prime	125°C	
Bearing: Quantity, Type	1, Sealed	
Coupling	Flexible disk	
Voltage Regulation	+/-1%	
Excitation	Self excitation	
Frequency, Fixed, Hz	50	
Full Load Inductive/ Resistive Current - 3 Phase	2573.80 / 2059	
Prime At 125° C, KVA	1850 KVA	

Regulatory Compliance

Specifications	1850 KVA
As Per ISO 8178-5 Mode Cycle (Engine Emission) Noise Level Measured At 1 Meter Distance – in free field condition	CPCB-II Compliant < 75 dB (A)

Canopy Specification:

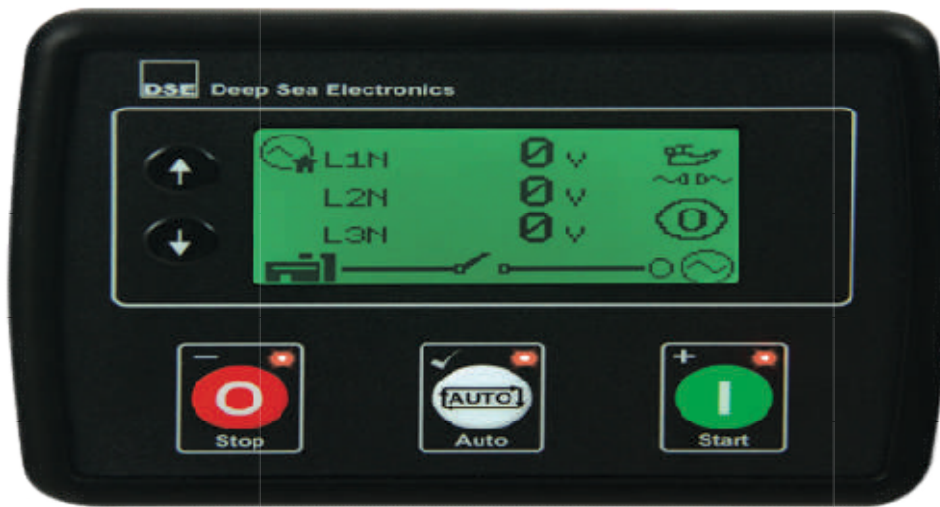
- The enclosure is fabricated out of CRCA sheet.
- The sheet metal components are hot dipped in TANKS pre-treated before powder coating.
- Enclosure is powder coated (inside as well outside) with a special pure polyester based powder.
- The doors are gasketed with high quality EPDM gaskets to avoid leakage of sound
- The door handles are lockable type.
- Sound proofing of enclosure is done with high quality rock wool/mineral wool/acoustic foam

Base Frame:

- Engine and alternator are mounted, coupled and aligned on a common Base Frame of ISMC Channel.

Fuel Tank:

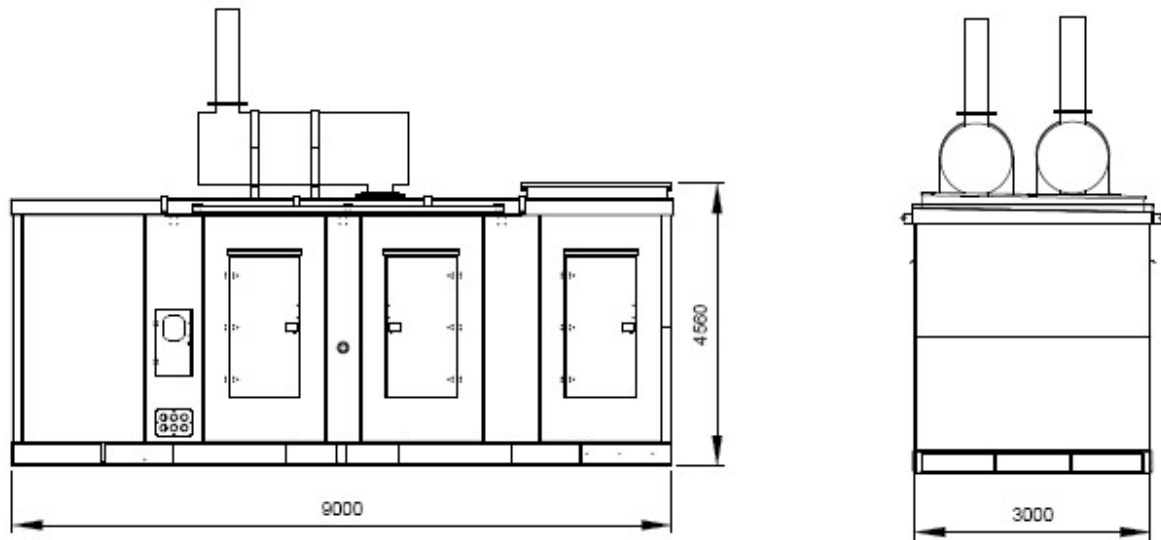
- Fuel tank 990 liters fabricated from sheet metal complete with drain valve, air vent and inlet and outlet connection.
The fuel tank shall be floor mounting type placed Inside the acoustic enclosure



Controller: DSE 6120 MKII

KEY FEATURES OF DSE 6120 CONTROLLER

Con based LCD display	4 configurable digital inputs
True RMS Voltage	Generator running hours counter
Current and Power monitoring	Single Phase / Three phase sensing
USB Communications	Generator Power Monitoring like, Kilo watts / KV/ Amp / Ar / Power factor
Engine parameter monitoring.	Generator Protections like, Over load, Over voltage , Low Voltage, Single phasing
Fully configurable inputs for use as alarms or a range of different functions.	Engine Protection like, Low RPM, High RPM, Low Lube oil , High Temperature
Engine ECU interface to electronic engines	Event Log (250)
The DSE Configuration Suite PC Software allows alteration of selected operational sequences, timers, alarms and operational sequences.	Generator monitoring like, Battery Voltage, Engine run time scheduler ,
Operating Temperature : -30 °C +70 °C (-22 °F +158 °F)	Maintenance Alarm
Operating voltage : 0 V to 70 V DC (Maximum continuous operating voltage of 35 V DC)	Automatic transfers between Generator and utility (Mains) transfer facility is available
COMMUNICATION PORTS :	Remote Start / stop facility (optional)
USB Slave Port : Type B USB 2.0 For connection to PC running DSE Configuration Suite Max distance 6 m (20 feet)	IP42 (front of module when installed into the control panel WITHOUT being sealed to the panel)
USB cable Type A to Type B. (This is the same cable as often used between a PC and a USB printer)	IP65 (front of module when installed into the control panel with the optional



Dimensions and Weight

Overall Size, LxWxH (mm)/Dry, max (kg)

9000x3000x4560/ 19000 kg

NOTE : Drawing provided is for reference only and should not be used for planning installation. Please contact the Company or latest updated details. All the data is as per respective manufacturers' specification.

PERFECT reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever