

BARDIBAS MUNICIPALITY

Office of municipal executive

Madhesh Pradesh, Mahottari, Nepal

Technical specification of 15 KVA Diesel generator (DG set)

S.N.	Description	Requirements
Alternator specifications:		
1	Voltage (V)	415v
2	Frequency	50Hz
3	Phase	3 phase
4	Current @0.8 PF (amps)	20.86 amp
5	Exciter type	Brushless
6	Leads: type	fixed type
7	Voltage regulator	Solid state
8	Insulation type	Class H
9	Bearing: Quantity, type	1 ,sealed type
10	One step load acceptance	100% of rating

Generator specifications:		
1	Genset Output in KVA/KW	15KVA/12KW
2	Engine rating or Maximum power at rated RPM in KW/BHP	15kw/20.5HP
3	Rated RPM	1500 RPM
4	No. of Cylinder	2
5	Governor type	Mechanical
6	Exhaust system	Should be residential type to keep surrounding noise free and clean
7	Maximum allowable back pressure, KPa	4.5Kpa

Engine electrical system:		
1	Charging alternator voltage/Current (DC)	12v/25Amps
2	Starter motor rated voltage (DC)	12v
3	Battery voltage(DC)/Capacity(AH)	12V/70Ah

Fuel system:		
1	Recommended fuel	HSO
2	Fuel tank capacity (Ltr.)	More than or equal to 60 Ltr
3	Fuel consumption- LPH at % load	
	100%	4.2 L/Hr
	75%	3.2 L/Hr

Others:		
1	Essentials accessories	Emergency stops, Anti vibration mounts.
2	Instruction	All instruction in the equipment shall be in English.
3	Manual	One copy of operator and owners instruction and maintenance manual in English shall be supplied with each equipment.
4	Training	Supplier shall include authorization letter from manufacturing company.
5	Cooling system	Air cooled system
6	Warranty	Manufacturer shall provide minimum one year of warranty.
7	Emission standard	The emission standard of generator should be of latest Nepal emission standard.
8	Delivery	Three units of 15KVA diesel generator set shall be delivered and installed at different locations of Bardibas municipality ward no.6

NOTE: The major items are indicated by bold and highlighted letters/alphabet in the technical specifications.