

Nepal Electricity Authority
(An Undertaking of Government of Nepal)
Distribution & Consumer Services Directorate
Sudurpaschim Provincial Office
Attariya, Kailali



Technical Specification of 100 kVA Diesel Generator

S.N.	Description	Requirement
Alternator Specification:		
1	Voltage	380-400V
2	Frequency	50Hz
3	Current @ 0.8 PF (Amps)	139.1
4	Type	4 Pole, Rotating fied
5	Exciter Type	Brushless (Permanient magnet optional)
6	leads:Quantity .type	6.fixed 12 reconnectable (Optional)
7	Voltage regulator	Solid State
8	Insulation	Class H
9	Temperature rise	125 Deg.C (Class H)
10	Bearing:Quantity .type	1, Sealed
11	Coupling	Flexible disc Close coupled
12	Voltaee regulation : No load to full load	2 Phase sensing $\pm$ 1%
13	One step load acceptance	100% of rating
14	Unbalancelead capability	25% of rated current

Generator Specifications:		
1	Gensel Output (KVA/KW)	100/80
2	Engine rating or Max.Power at rated RPM.in KW(BHP)	93 (126.5)
3	No.of Cylinders / Cylinder arrangement	4 / inline
4	Compression ratio	16.8
5	Rated RPM	1500
6	Govemor Type	Mechanical
7	Over speed trip(rpm)	1650
8	Air cleaner type / Qty	Dry / 01
9	Exhaust system	
10	Maximum allowable back pressure, kPa	4.5

Engine Electrical System:

1	Charging alternator Voltage/ Current (DC)	12V / 35Amps
2	Starter Motor rated voltage (DC)	12
3	Battery Voltage (DC) / Capacity(AH)	12V, 88AH

Fuel System:

1	Recommended Fuel	HSO
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2	Fuel tank capacity (Ltr.)	350
3	Fuel consumption - LPH at % load	
	100%	23.6
	75%	17.40
	50%	13.0
	25%	7.2

Lubricating Oil system :

1	Lube oil sump capacity	10.0
2	Oil change period (Hrs)	500
3	Oil consumption (%of SEC)	0.2
4	Oil filter quantity (Nos) / type	01/spin on type
5	Oil Cooler	Water cooled

Cooling Svstem :

1	Cooling system is designed for max ambient temp, Deg.C at rated load	50
2	Radiator System capacity, including engine, (L)	25 Ltr
3	Water pump type	Centrifugal, Gear Driven

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नगर कार्यपालिकाको कार्यालय
अत्तरिया, कैलाली
सुदूरपश्चिम प्रदेश नेपाल
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