

highest bid value should meet this criterion.

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specification for

D.G. Set

(Power Gen)

Date - 24/12/24

Power Generator - DG Set (up To 900 KVA) (1 pieces)

Technical Specifications/तकनीकी विशिष्टियाँ

* जेम केटेगरी विशिष्टि के अनुसार / As per GeM Category Specification

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
Power Generator INSTALLATION CONFIGURATIONS	Power Generator installation configurations as defined in CPWD General Specifications for Electrical works - Part VII (DG Set)	Fixed (Power Generators are permanently installed)"
OUTPUT CAPACITY RATING/ PHASE	Nominal Rated Capacity (kVA)	25
	No of Phase (Single Phase-3-5kVA) (Single Phase or Three Phase-5 & 7-5, 10,15, 20, 25, 30 & 40 kVA) (Three Phase-50 to 900 kVA)	Three Phase

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Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
ENGINE	Rated Engine Power (kWm)	110 % of the required powered at STP(Standard Temperature Pressure) i.e equal to (Nominal Rated Capacity (KVA) of power generator Any Auxiliary power Consumption by the Power generator) x Power factor(0.8) / Alternator efficiency Or higher
	Type of Engine cooling	Liquid Cooled
	Type of governer	Mechanical, Electronic Or higher
	Number of cylinders (nos)	3
	Rated RPM of Engine (RPM)	1500
	Fuel	High Speed Diesel (HSD)
	Starting voltage (volt)	12
	Salient Features of Engine	Naturally aspirated engine
GOVERNING CLASS	"Maximum Change of Speed as a Percentage of Rated Speed on suddenly taking-off the rated load(Transient) "	15
	"Maximum Recovery Time in Seconds on suddenly taking-off the rated load(Transient) "	15.0 (second)
	Maximum Change of Speed as a Percentage of Rated Speed on suddenly taking-off the rated load(Permanent)	5
	"Maximum Change of Speed as a Percentage of Rated Speed On a change of load, both on and off, by all steps of 25 percent of the rated load (Transient) "	4
	"Maximum Recovery Time in Seconds on a change of load, both on and off, by all steps of 25 percent of the rated load(Transient) "	5.0 (second)
	"Maximum Change of Speed as a Percentage of Rated Speed On a change of load, both on and off, by all steps of 25 percent of the rated load (Permanent)	1.5
ALTERNATOR	Alternator Voltage Rating	415.0 (Volt)
	Efficiency at rated Power factor at 75% of full Load	98.0 - 100.0 Or higher (percent)
	Conformity to Indian Standard (for Alternator)	Generally conforming to IS:13364 (Part-2) latest (Above 20 KVA)
	Voltage Regulation Grade	VG 3 Or higher

Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
	Alternator IP Rating	IP 23 Or higher
CONTROL PANEL	Control Panel	AMF Control Panel
	IP Rating of Control Panel	IP 55 Or higher
	Display meters in the control panel (with appropriate rating and accuracy class) - inclusive in the scope of supply	Multifunctional Digital display meter (displaying Voltage, Current, Frequency, Power Factor)
	Other devices in the control panel (with appropriate rating) - inclusive in the scope of supply	Required switches and cutout, MCB, MCCB, Contactor, Circuit breaker, Battery charger
	Displayed parameters/Features	Engine Speed, Lube oil pressure, Coolant/cylinder head Temperature, Engine running hours, Engine battery voltage, Engine Running status, Generator Voltage (Ph-Ph), Generator Voltage (Ph-N), Generator Current (R, Y, B), Generator apparent Power (kVA), Generator active Power (kW), Powerfactor, Frequency, Fuel level, Event log, Control supply Voltage
	Indicators	Low Lube oil pressure, High water / coolant / cylinder head temperature, Lpw fuel level, Over speed
	Audio Alarm	Low Lube oil pressure, High water / coolant / cylinder head temperature, Low fuel level, Over speed
ACOUSTIC ENCLOSURE	Sheet Thickness(mm)	1.6, 1.8, 2 Or higher
	Thickness of insulation	100.0 - 120.0 Or higher (millimeter)
	Density of insulation (kg/cubic m)	100.0 - 100.0 Or higher
	Noise level at 1 meter (dB)	75
Fuel Tank	Fuel Tank Capacity	60.0 (liter)
	Number of Fuel tank	1
	Fuel Tank Sheet Material Thickness(mm)	2, 3 Or higher
	Fuel Tank Features	Fuel Tank capacity is sufficient for 8 hrs of running at full load, NA for 990 liter
BATTERY	Battery Type & Specification	"Low Maintenance free to IS: 14257 for high cranking performance"
	Battery capacity (Ah)	88
	No of batteries	1
SALIENT FEATURES	Salient Features of Power Generator	Glass window on Accoustic Enclosure in front of the Control Panel, Emergency Stop outside the Accoustic Enclosure
TRAILER	Trailer	NA for Fixed/Skid Mounted Power Generator
	Pay load of the Trailer	2000 Or higher (kilogram)

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Specification	Specification Name/विशिष्टि का नाम	Bid Requirement/बिड के लिए आवश्यक (Allowed Values)/अनुमत मूल्य
	Number of Axlels	0
	Number of wheels	'NA' for without trailer
	Wheel Tyre size	0.0 (inch)
	Brakes	NA for Fixed/Skid Mounted Power Generator, Hydraulic, Electrical Or higher
	Trailer Complying to CMVR act and Regulation	NA for Fixed/Skid Mounted Power Generator
	Salient Features of trailer	NA
SCOPE OF INSTALLATION	Installation	Without installation, with installation - inclusive in the scope of supply Or higher
WARRANTY/SERVICE S	Warranty on Complete power genertor/DG Set	36 Or higher (month)
	Warranty in running hours	5000.0 - 5000.0 Or higher (hour)
	Number of preventive maintenance visits offered in an year during warranty period (Supply of all consumables is the buyer's responsibilty)*	3
TEST REPORTS	Type of lab which carried out Test of Complete Product to prove the conformity of product as per specification	Certificates required as per CPCB
	Test report Available for (Test/approval)	COP Certificate for engine, Type Approval Certificate for the specified rating of the Power Generator from any of the designated agency authorized by CPCB
	Agree to provide all relevant documents Test Report/supporting document /reports etc to the buyer at the time of bidding or on demand	YES

Additional Specification Parameters - Power Generator - DG Set (up To 900 KVA) (1 pieces)

Specification Parameter Name	Bid Requirement (Allowed Values)
Engine 1)Capacity of engine(cc) 2)Number of strokes 3)Specific fuel consumption(gm/kWh) 4)Overload capacity	1) 3660 2) 4 3)200 to 265 4)Engine is capable of delivering an output of 10% in excess of rated KVA for a period of 1 hour in any period of 12 hours continuous running
Class of Governer	A2 or higher

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Specification Parameter Name	Bid Requirement (Allowed Values)
Alternator 1)Rating of AC Generator(KVA) 2)Power factor of AC generator 3)Efficiency at rated power factor at 75% of full load 4)Type of alternator	1)25 2)0.8 3)98 percent 4)Brushless
ACOUSTIC ENCLOSURE 1)ACOUSTIC ENCLOSURE(inclusive in the scope of supply)	1)Yes power generator supplied with ACOUSTIC ENCLOSURE
1)Make of Engine 2)Model number of Engine	1) Greaves 2) 3G11TAG31

* Bidders offering must also comply with the additional specification parameters mentioned above.