Contract|अनुबंध



Schedule Name। अनुसूची नाम:Schedule 1,Schedule 2,Schedule 4,Schedule 5

Contract No|अनुबंध क्रमांक: GEMC-511687747845960 **Generated Date|अनुबंध तिथि:** 18-Jul-2023

Bid/RA/PBP No. |बोली/आरए/पीबीपी संख्या: <u>GEM/2023/B/3487049</u>

Organisation Details संगठन विवेरण		Buyer Details खरीदार विवरण		
Type प्ररूप : Ministry मंत्रालय : Department विभाग : Organisation Name संगठन का नाम : Office Zone कार्यालय क्षेत्र:	Central PSU Ministry of Coal Materials Management Bharat Coking Coal Limited Bccl Dhanbad	Designation पद : Contact No. संपर्क नंबर : Email ID ईमेल आईडी : GSTIN जीएसटीआईएन : Address पता :	Manager I 94705-95938- sonu.gupta@nic.in 20AAACB7934MFZB MM Department, level 3, Commercial Building, Koyla Bhawan, Koyla Nagar, DHANBAD, JHARKHAND-826005, India	
Financial Approval Detail वित्तीय स्वी	कृति विवेरण	Paying Authority D	etails भुगतान प्राधिकरण विवरण	
IFD Concurrence आईएफडी सहमति :	Yes	Role:	PAO	
Designation of Administrative Approval प्रशासनिक अनुमोदन का पदनाम:	GM MM	Payment Mode भुगतान का तरीका:	Offline	
Designation of Financial Approval वित्तीय अनुमोदन का पदनाम :	Hod pay	Designation पद : Email ID ईमेल आईडी : GSTIN जीएसटीआईएन :	Senior Manager pay8.bccl.dhn@gembuyer.in 20AAACB7934MFZB MM Department, level 3, Commercial Building, Koyla	
		Address पता:	Bhawan, Koyla Nagar, DHANBAD, JHARKHAND-826005, India	
		Payment Timelines। भगत	Payments shall be made to the seller within 21 days of iss ानof consignee receipt-cum-acceptance certificate (CRAC) ar	
		समयसीमा:	on-line submission of bills (This is in supersession of 10-d time as provided in clause 12 of GeM GTC)	

Seller Details विक्रैता विवरण	
GeM Seller ID जेम विक्रैता आईडी :	9010190000994723
Company Name कंपनी का नाम :	HARISON GENERATORS PRIVATE LIMITED
Contact No. संपर्क नंबर :	09915999332
Email ID ईमेल आईडी :	CONTACTRAMANSEHGAL@GMAIL.COM
Address पता :	Plot Number C-58,,Focal Point Industrial Area Patiala,Fiocal Point,Focal Point Patiala,
Address 4dr.	Patiala, PUNJAB-147001, -
MSME Registration number एमएसएमई पंजीकरण संख्या :	UDYAM-PB-17-0005195
MSE Social Category एमएसई सामाजिक श्रेणी :	General
MSE Gender एमएसई लिग श्रेणी :	Male
GSTIN जीएसटीआईएन:	03AAECH6842C1ZZ

*GST / Tax invoice to be raised in the name of|जिसके नाम के पक्ष में GST/TAX इनवॉइस पेश किया जाएगा - Consignee

Delivery Instructions|वितरण निर्देश : NA

Product Details|उत्पाद विवरण

#	Item Description आइटम विवरण	Ordered Quantity आइटम विवेरण	Unit इकाई	Unit Price (INR) इकाई मूल्य (INR)	Tax Bifurcation (INR) कर विभाजन (INR)	Price (Inclusive of all Duties and Taxes in INR) मूल्य (INR में सभी शुल्क और कर सहित)
1	Product Name।उत्पाद का नाम : DURKATO Power Generator- DG set of 5 AMF Control Panel Brand।ब्रांड : DURKATO Brand Type।ब्रांड प्रकार : Registered Brand Catalogue Status।केटलॉग की स्थिति: OEM verified catalogue Selling As।केसे बेचा जा रहा है : OEM Category Name & Quadrant।श्रेणी का नाम और चतुर्थांश : Power Generator - DG Set (up to 900 KVA) (Q2) Model।मॉडल: HARISONHG5KVA HSN Code।एवएसएन कोड: HSN not specified by seller	5	pieces	137,600	NA	688,000
2	Product Name उत्पाद का नाम : DURKATO Power Generator- DG set of 7.5 AMF Control Panel Brand ब्रांड : DURKATO Brand Type ब्रांड प्रकार : Registered Brand Catalogue Status केटलॉग की स्थिति: OEM verified catalogue Selling As केसे बेचा जा रहा है : OEM Category Name & Quadrant श्रेणी का नाम और चतुर्थांश : Power Generator - DG Set (up to 900 KVA) (Q2) Model मॉडल: HARISONHG7.5KVA	2	pieces	279,020	NA	558,040

HSN	Code एचएसएन	ा कोड: HSN not specified	by seller	ĺ			1			
Bran Bran Cata 3 Sellir Cate KVA) Mod	d ब्रांड : DURK/ d Type ब्रांड प्रव logue Status ng As कैसे बेचा gory Name & (Q2) el मॉडल: HARI	ATO जर: Registered Brand कैटलॉग की स्थिति: OEM veri जा रहा है : OEM	: चतुर्थांश : Power Generator - DG Set (up to 9		1	pieces	310,00	00 NA		310,000
Bran Bran Cata 4 Sellir Cate KVA) Mod	d ब्रांड : DURK/ d Type ब्रांड प्रव logue Status ing As कैसे बेचा gory Name & (Q2) el मॉडल: HARI	ATO जर : Registered Brand कैटलॉग की स्थिति: OEM veri जा रहा है : OEM	- 'चतुर्थांश : Power Generator - DG Set (up to 9		1	pieces	400,00	00 NA		400,000
Total Or	der Value कुल	। ऑर्डर मूल्य (in INR)					1			1,956,040
Consi S.No क्र.सं.	gnee Detai	il परेषिती विवेरण Consi	gnee।परेषिती		Item वस्तु		Lot No. लॉट नंबर	Quantity मात्रा	Delivery Start After दिनोंक के बाद डिलीवरी शुरू करना है	Delivery To Be Completed By वितरण पूरा कब तक करना है
				DURKATO Power Generator- DG set o AMF Control Pane		of 5	-	5	18-Jul-2023	16-Sep-2023
1	Contact संपर्व	पद : - र आईडी : con1.bccl.jh@ge 5 : 62876-95727- टीआईएन : 20AAACB7934N	1FZB Store, Ekra, BCCL, Post Office- BANSJORA,		DURKATO Power Generator- DG set of 7.5 AMF Control Panel		-	2	18-Jul-2023	16-Sep-2023
·	Address पता Dhanbad, Jha				URKATO Powe erator- DG set /IF Control Par	of 20	-	1	18-Jul-2023	16-Sep-2023
				Gene	URKATO Powe erator- DG set /IF Control Par	of 30	-	1	18-Jul-2023	16-Sep-2023
	uct Specific	ation for DURKATC Sub-Spec।उप-	Power Generator- DG set of 5 AN	MF Co	ntrol Pane	I				
विनिर्देश		विनिर्देश	Value मूल्य							
INSTALL	enerator ATION URATIONS	Power Generator installation configurations as defined in CPWD General Specifications for Electrical works - Part VII (DG Set)	Fixed (Power Generators are permanently	' installe	ed)"					
		Nominal Rated Capacity (kVA)	5							
OUTPUT CAPACITY RATING/ PHASE		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)	Single Phase							
		Make of Engine	KOHLER							
		Model Number of Engine	KD441							
		Capacity of Engine (cc)	441							
	Rated Engine Power (kWm)100 % of the required powered at STP(Standard Temperature Pressure) i.e equal to (Nomin generator + Any Auxilary power Consumption by the Power generator) x Power factor(0.8)								of power	

		Type of Engine cooling	Air Cooled
		Type of governer	Mechanical
		Number of cylinders (nos)	1
	ENGINE	No of Strokes (nos)	4
		Rated RPM of Engine (RPM)	3000
		Fuel	High Speed Diesel (HSD)
		Overload capacity	Engine is capable of delivering an output of 10% in excess of rated KVA for a period of one hour in any period of 12 hours continous running
		Specific Fuel Consumption (gm/kWh)	200 to 265
		Starting voltage (volt)	12
		Salient Features of Engine	Naturally aspirated engine,Direct injection Fuel System
		Class of governer	A2 or better
		"Maximum Change of Speed as a Percentage of Rated Speed on suddenly taking-off the rated load(Transient) "	10
		"Maximum Recovery Time in Seconds on suddenly taking-off the rated load(Transient) "	10 second
		Maximum Change of Speed as a Percentage of Rated Speed on suddenly taking-off the rated load(Permanent)	3
	GOVERNING CLASS	"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) "	3
		"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) "	3 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
ſ		AC GENERATOR (ALTERNATOR) Make	NSM
		AC GENERATOR (ALTERNATOR) model Number	NSM
		Alternator Voltage Rating	230 Volt
		Rating of AC Generator (KVA)	5

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	Power Factor of AC generator	0.8
ALTERNATOR	Efficiency at rated Power factor at 75% of full Load	77.9 percent
	Conformity to Indian Standard (for Alternator)	Generally conforming to IS:13364 (Part-1) latest (Upto 20 kVA)
	Type of alternator	Brushless
	Voltage Regulation Grade	VG 3
	Alternator IP Rating	IP 23
	Class of Insulation	н
	Salient features of Alternator	NA
	Control Panel	AMF Control Panel
	Control Panel Location	Inside the canopy
	IP Rating of Control Panel	IP 53
CONTROL PANEL	Display meters in the control panel (with appropriate rating and accuracy class) - inclusive in the scope of supply	Voltmeter,Ammeter,Frequency meter,Power Factor meter,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
	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,Low fuel level,Over speed
	Audio Alarm	Low Lube oil pressure,High water / coolant / cylinder head temperature,Low fuel level,Over speed
	Acoustic Enclosure (inclusive in the scope of supply)	Yes, Power Generator supplied with Acoustic Enclosure
	Sheet Thickness(mm)	1.2
ACOUSTIC ENCLOSURE	Thickness of insulation	25 millimeter
	Density of insulation (kg/cubic m)	28
	Noise level at 1 meter (dB)	73
	Fuel Tank Capacity	20 liter
	Number of Fuel tank	1
Fuel Tank	Fuel Tank Sheet Material Thickness(mm)	2
	Fuel Tank Fabricated Material	M.S Sheet
	Fuel Tank Features	Fuel Tank capacity is sufficient for 8 hrs of running at full load
	Battery Type & Specification	"Low Maintenance free to IS: 14257 for high cranking performance"
BATTERY	Dettern or a site (Ab)	32
BATTERY	Battery capacity (Ah)	
BATTERY	No of batteries	1

SALIENT FEATURES	Additional Features	NA
	Trailer	NA for Fixed/Skid Mounted Power Generator
	Pay load of the Trailer	0 kilogram
	Number of Axlels	0
	Number of wheels	'NA' for without trailer
	Wheel Tyre size	0 inch
	Brakes	NA for Fixed/Skid Mounted Power Generator
TRAILER	Trailer Complying to CMVR act and Regulation	NA for Fixed/Skid Mounted Power Generator
	Maximum permissible Speed of Trailer(Km/hr)	0
	Trailer unladen weight	0 kilogram
	Trailer overall length	0 millimeter
	Gross Towing Weight (including Power Generator)	0 kilogram
	Salient Features of trailer	NA
	General Technical Requirements (GTR) / Commissioning(Part- 1)	a) Power Generator shall be complete with Diesel Engine, Alternator and AMF/MANUAL Control Panel along with Acoustic Enclosure. Diesel engine and alternator shall be closely coupled or provided with flexible coupling and mounted on a base plate / M.S. frame of robust in construction.
	General Technical Requirements (GTR) / Commissioning(Part- 2)	b) Anti-Vibration mountings shall be provided for complete Power Generator in case of flexible coupling. In case of direct coupling Anti-Vibration mountings shall be provided for the Engine as well as the alternator.
	General Technical Requirements (GTR) / Commissioning(Part- 3)	c) Power Generator should have protection against under voltage, over voltage, under frequency, over frequency, low battery voltage, over current, earth-fault, short circuit, phase sequence change etc.
	General Technical Requirements (GTR) / Commissioning(Part- 4)	d) Automatic Mains Failure (AMF) control panel, where applicable, shall be able to start up the Power Generator and transfer the load on to the Power Generator on mains failure without requiring any human intervention. Similarly on restoration of mains supply, it shall be able to transfer the load to mains supply and switch off the Power Generator automatically.
	General Technical Requirements (GTR) / Commissioning(Part- 5)	e) Control Panel (Manual / AMF), where applicable, shall be equipped with suitable Voltmeter, Ammeter, Frequency meter, power factor meter (these items can be alternatively supplied in one multifunctional digital display meter), battery charger, indicators, various switches and cutout / MCB / MCCB / Contactor / Circuit breaker for the DG output of appropriate rating and accuracy class as per trade practice for better utility.
	General Technical Requirements (GTR) / Commissioning(Part- 6)	f) Supply and installation of a change-over Switch / MCCB of suitable rating for Power Generator with manual control panel, where applicable, is inclusive in the scope of supply.
General Technical Requirements (GTR) / Commissioning	General Technical Requirements (GTR) / Commissioning(Part- 7)	g) Acoustic Enclosure shall be made of Pre-treated and Powder coated CRCA Sheet. The sheet shall be Pre-treated and Powder coated with weather-proof paint. The Acoustic Enclosure shall be vermin proof. The enclosure shall accommodate the (daily servic fuel tank of the Power Generator to make the system compact.
	General Technical Requirements (GTR) / Commissioning(Part- 8)	h) Power Generators shall meet the requirements of Environmental (Protection) Rules 1986 as laid down by Min. of Environment 8 Forests read with GSR 371 (E) dated 17.5.2002,GSR 520(E)dated 1.7.2003, No.448 (E)dated 12.07.2004, GSR 771(E) dated 11.12.201 GSR 232(E)dated 31.03.2014,Gazette Notification No.167 dated. 31.03.2014 and Gazette Notification No. 578 dated. 11.11.2014 in respect of noise and emission norms. The latest amendments to above GSRs shall be applicable as and when amended by Ministry of Environment and Forest.
	General Technical Requirements (GTR) / Commissioning(Part-	i) Standard set of tools consisting of a set of 3 spanners, one screw driver, one standard plier and one nose plier of appropriate siz shall be provided along with each Power Generator.

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	General Technical Requirements (GTR) / Commissioning(Part- 10)	j) Supply of Fuel tank of suitable capacity, sufficient for minimum 8 hours running/990 liters(whichever is lower) the Power Generator, is inclusive in the scope of supply. Fuel Tank shall be complete with fuel piping (between fuel tank and diesel engine), valves, level indications and all standard accessories. MS pipes, heavy class of suitable dia conforming to IS 1239 (Part-1) - latest shall be used for fuel piping.
	General Technical Requirements (GTR) / Commissioning(Part- 11)	Buyer's Responsibilities: i. Mains ACB for AMF operation shall be provided by the buyer for DG set rating above 600 KVA and above .For DG set other ratings seller shall provide mains and DG contactor/breaker, ii. Exhaust piping, extra civil work, distribution board shall be provided by the buyer. iii. Consumables such as filters, lube oil at the time of servicing during warranty period shall be provided by the buyer. iv. Obtaining necessary approvals, if any, is the responsibility of the buyer.
	Above General Technical Requirements (GTR) / Commissioning have been seen, read, understood and agreed to comply	Yes
	Installation	with installation - inclusive in the scope of supply
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-1)	a) Installation of Power Generator when offered by the vendor is inclusive in the scope of supply and shall be done by the seller. The installation work of Power Generator and its constituent parts shall be generally conforming to CPWD General Specification for Electrical Works, Part - VII - latest. b) Foundation shall be constructed by the seller. Foundation shall be of PCC type with the ratio of 4:2:1. The length and breadth of the foundation shall be 300 mm more from the respective length and breadth of the Power Generator. The height of the foundation shall be 400 mm, i.e., 200 mm below and 200 mm above the ground level. All the materials / labour required for foundation work shall be supplied by the seller.
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-2)	c) Supply, laying and termination of interconnecting power and control cable shall be done by the seller. The cable supplied shall be ISI marked heavy duty PVC insulated, armoured cable, with PVC outer Sheath of Type ST-2 (FR Grade, Category C1), with aluminium conductor having insulation of PVC compound type -C, suitable for rated voltage upto and including 1100 volts and conforming to IS: 1554 (Part-1) latest. For 3-Phase Power Generators, 3.5 core or higher core cables shall be used. Total length of the cable supplied by the seller shall be within 30 meters for each Power Generator with manual control panel and within 60 metres for each Power Generator with MAMF control panel. The current rating of the cables shall be as indicated below: 2C, 6 Sq mm for Single Phase, 3.5 & 5.0 KVA 2C, 10 Sq mm for Single Phase, 7.5 & 10 KVA 2C, 25 Sq mm for Single Phase, 15 KVA 2C, 35 Sq mm for Single Phase, 20 KVA 2C, 70Sq mm for Single Phase, 25 KVA 2C, 95Sq mm for Single Phase, 30 KVA 2C, 120Sq mm for Single Phase, 40 KVA 4C, 4 Sq mm for Three Phase,
SCOPE OF INSTALLATION	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-3)	d) 10 KVA 4C, 6 Sq mm for Three Phase, 15 KVA 4C, 10 Sq mm for Three Phase, 20 & 25 KVA 4C, 16 Sq mm for Three Phase, 30 KVA 3.5C, 25 Sq mm for Three Phase, 40 KVA 3.5C, 35 Sq mm for Three Phase, 50 KVA 3.5C, 70 Sq mm for Three Phase, 62.5 & 75 KVA 3.5C, 95 Sq mm for Three Phase, 82.5 KVA 3.5C, 120 Sq mm for Three Phase, 100 KVA 3.5C, 185 Sq mm for Three Phase, 125 KVA 3.5C, 95 Sq mm for Three Phase, 160 KVA 3.5C, 2 Run of 120 Sq mm for Three Phase, 180 KVA 3.5C, 2 Run of 150 Sq mm for Three Phase, 200 KVA 3.5C, 2 Run of 185 Sq mm for Three Phase, 225 KVA 3.5C, 2 Run of 240 Sq mm for Three Phase, 200 KVA 3.5C, 4 Run of 240 Sq mm for Three Phase, 380 & 400 KVA 3.5C, 4 Run of 240 Sq mm for Three Phase, 500, 600 & 750 KVA 3.5C, 6 Run of 240 Sq mm for Three Phase, 900 KVA
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-4)	e) Construction of suitable earthing station and necessary connections shall be done by the seller. All the materials / labour required for construction of earthing station shall be supplied by the seller. The total number of earthing pits/stations shall be 4, i.e., 2 for neutral and 2 for body-earthing. Netutral earthing shall be done with copper Plate and Body earthing shall be done with G.I. plate / Copper. The consignee should choose installation site in such a way that the earthing stations can be made within 10 metres of the Power Generator. Earthing station shall be typically constructed as per prevalent standard practices and shall be generally conforming to CPWD General specification for Electrical Works, Part - VII & Part - I - latest. e) Installation of Fuel Tank including foundation / stand shall be done by the seller. f)The warranty is applicable upto specified value of month/hours whichever occurs first's.
	Above Scope of installation for Diesel Generating Set when offered by the vendor has been seen, read, understood and agreed to comply	Yes
	Warranty on Complete power genertor/DG Set	24 month
	Warranty in running hours	5000 hour
WARRANTY/SERVICES	Number of preventive maintenance visits offered in an year during warranty period (Supply of all consumables is the buyer's responsibilty)*	2

	Response Time to attend the complaint during Warranty	2 day
	Time Duration for Repairing /Replace the defect during Warranty	5 day
	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 REPORTS	Test report Available for (Test/approval)	Type Approval Certificate for the specified rating of the Power Generator from any of the designated agency authorized by CPCB,COP Certificate for engine,Type test report and Endurance test report for Engine as per IS: 10001 latest / IS: 10002 latest,Type test report for Alternator as per IS:13364 (Part-1) latest / IS:13364 (Part-2) latest to prove conformity to the specifications
	Agree to provide all relevant documents Test Report/supporting document /reports etc to the buyer at the time of bidding or on demand	YES
	1) Power Generator- DG set of 7.5 AMF Control Panel
Specification বিনির্देश	Sub-Spec उप- विनिर्देश	Value 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)"
	Nominal Rated Capacity (kVA)	7.5
OUTPUT CAPACITY RATING/ PHASE	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
	Make of Engine	HARISON
	Model Number of Engine	HG1P2R2M
	Capacity of Engine (cc)	3168
	Rated Engine Power (kWm)	100 % of the required powered at STP(Standard Temperature Pressure) i.e equal to (Nominal Rated Capacity (KVA) of power generator + Any Auxilary power Consumption by the Power generator) x Power factor(0.8) / Alternator efficience
	Type of Engine cooling	Liquid Cooled
	Type of governer	Electronic
	Number of cylinders (nos)	4
ENGINE	No of Strokes (nos)	4
	Rated RPM of Engine (RPM)	1500
	Fuel	High Speed Diesel (HSD)
	Overload capacity	Engine is capable of delivering an output of 10% in excess of rated KVA for a period of one hour in any period of 12 hours continous running
	Specific Fuel Consumption (gm/kWh)	200 to 265
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	Starting voltage (volt)	12
	Salient Features of Engine	Naturally aspirated engine, Direct injection Fuel System
	Class of governer	A2 or better
	"Maximum Change of Speed as a Percentage of Rated Speed on suddenly taking-off the rated load(Transient) "	10
	"Maximum Recovery Time in Seconds on suddenly taking-off the rated load(Transient) "	10 second
	Maximum Change of Speed as a Percentage of Rated Speed on suddenly taking-off the rated load(Permanent)	4
GOVERNING CLASS	"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) "	4 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
	AC GENERATOR (ALTERNATOR) Make	LEROY SOMER/MECCALTE
	AC GENERATOR (ALTERNATOR) model Number	LEROY SOMER/MECCALTE
	Alternator Voltage Rating	415 Volt
	Rating of AC Generator (KVA)	7.5
	Power Factor of AC generator	0.8
ALTERNATOR	Efficiency at rated Power factor at 75% of full Load	84.9 percent
	Conformity to Indian Standard (for Alternator)	Generally conforming to IS:13364 (Part-1) latest (Upto 20 kVA)
	Type of alternator	Brushless
	Voltage Regulation Grade	VG 3
	Alternator IP Rating	IP 23
	Class of Insulation	н
	Salient features of	

	Alternator	NA
	Control Panel	AMF Control Panel
	Control Panel Location	Inside the canopy
	IP Rating of Control Panel	IP 55
CONTROL PANEL	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,Low fuel level,Over speed
	Audio Alarm	Low Lube oil pressure,High water / coolant / cylinder head temperature,Low fuel level,Over speed
	Acoustic Enclosure (inclusive in the scope of supply)	Yes, Power Generator supplied with Acoustic Enclosure
	Sheet Thickness(mm)	1.2
ACOUSTIC ENCLOSURE	Thickness of insulation	30 millimeter
	Density of insulation (kg/cubic m)	30
	Noise level at 1 meter (dB)	74
	Fuel Tank Capacity	90 liter
	Number of Fuel tank	1
Fuel Tank	Fuel Tank Sheet Material Thickness(mm)	2
	Fuel Tank Fabricated Material	M.S Sheet
	Fuel Tank Features	Fuel Tank capacity is sufficient for 8 hrs of running at full load
	Battery Type & Specification	"Low Maintenance free to IS: 14257 for high cranking performance"
BATTERY	Battery capacity (Ah)	80
	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
	Additional Features	NA
	Trailer	NA for Fixed/Skid Mounted Power Generator
	Pay load of the Trailer	500 kilogram
	Number of Axlels	0
	Number of wheels	'NA' for without trailer
	Wheel Tyre size	0 inch
	Brakes	NA for Fixed/Skid Mounted Power Generator
TRAILER	Trailer Complying to CMVR act and Regulation	NA for Fixed/Skid Mounted Power Generator
	Maximum permissible Speed of	0

	Trailer(Km/hr)	
	Trailer unladen weight	0 kilogram
	Trailer overall length	0 millimeter
	Gross Towing Weight (including Power Generator)	0 kilogram
	Salient Features of trailer	NA
	General Technical Requirements (GTR) / Commissioning(Part- 1)	a) Power Generator shall be complete with Diesel Engine, Alternator and AMF/MANUAL Control Panel along with Acoustic Enclosure. Diesel engine and alternator shall be closely coupled or provided with flexible coupling and mounted on a base plate / M.S. frame of robust in construction.
	General Technical Requirements (GTR) / Commissioning(Part- 2)	b) Anti-Vibration mountings shall be provided for complete Power Generator in case of flexible coupling. In case of direct coupling Anti-Vibration mountings shall be provided for the Engine as well as the alternator.
	General Technical Requirements (GTR) / Commissioning(Part- 3)	c) Power Generator should have protection against under voltage, over voltage, under frequency, over frequency, low battery voltage, over current, earth-fault, short circuit, phase sequence change etc.
	General Technical Requirements (GTR) / Commissioning(Part- 4)	d) Automatic Mains Failure (AMF) control panel, where applicable, shall be able to start up the Power Generator and transfer the load on to the Power Generator on mains failure without requiring any human intervention. Similarly on restoration of mains supply, it shall be able to transfer the load to mains supply and switch off the Power Generator automatically.
	General Technical Requirements (GTR) / Commissioning(Part- 5)	e) Control Panel (Manual / AMF), where applicable, shall be equipped with suitable Voltmeter, Ammeter, Frequency meter, power factor meter (these items can be alternatively supplied in one multifunctional digital display meter), battery charger, indicators, various switches and cutout / MCB / MCCB / Contactor / Circuit breaker for the DG output of appropriate rating and accuracy class as per trade practice for better utility.
	General Technical Requirements (GTR) / Commissioning(Part- 6)	f) Supply and installation of a change-over Switch / MCCB of suitable rating for Power Generator with manual control panel, where applicable, is inclusive in the scope of supply.
General Technical Requirements (GTR) / Commissioning	General Technical Requirements (GTR) / Commissioning(Part- 7)	g) Acoustic Enclosure shall be made of Pre-treated and Powder coated CRCA Sheet. The sheet shall be Pre-treated and Powder coated with weather-proof paint. The Acoustic Enclosure shall be vermin proof. The enclosure shall accommodate the (daily service) fuel tank of the Power Generator to make the system compact.
	General Technical Requirements (GTR) / Commissioning(Part- 8)	h) Power Generators shall meet the requirements of Environmental (Protection) Rules 1986 as laid down by Min. of Environment & Forests read with GSR 371 (E) dated 17.5.2002, GSR 520(E)dated 1.7.2003 , No.448 (E)dated 12.07.2004 , GSR 771(E) dated 11.12.2013 GSR 232(E)dated 31.03.2014, Gazette Notification No.167 dated. 31.03.2014 and Gazette Notification No. 578 dated. 11.11.2014 in respect of noise and emission norms. The latest amendments to above GSRs shall be applicable as and when amended by Ministry of Environment and Forest.
	General Technical Requirements (GTR) / Commissioning(Part- 9)	i) Standard set of tools consisting of a set of 3 spanners, one screw driver, one standard plier and one nose plier of appropriate size shall be provided along with each Power Generator.
	General Technical Requirements (GTR) / Commissioning(Part- 10)	j) Supply of Fuel tank of suitable capacity, sufficient for minimum 8 hours running/990 liters(whichever is lower) the Power Generator, is inclusive in the scope of supply. Fuel Tank shall be complete with fuel piping (between fuel tank and diesel engine), valves, level indications and all standard accessories. MS pipes, heavy class of suitable dia conforming to IS 1239 (Part-1) - latest shall be used for fuel piping.
	General Technical Requirements (GTR) / Commissioning(Part- 11)	Buyer's Responsibilities: i. Mains ACB for AMF operation shall be provided by the buyer for DG set rating above 600 KVA and above .For DG set other ratings seller shall provide mains and DG contactor/breaker, ii. Exhaust piping, extra civil work, distribution board shall be provided by the buyer. iii. Consumables such as filters, lube oil at the time of servicing during warranty period shall be provided by the buyer. iv. Obtaining necessary approvals, if any, is the responsibility of the buyer.
	Above General Technical Requirements (GTR) / Commissioning have been seen, read, understood	Yes

	and agreed to comply	
	Installation	with installation - inclusive in the scope of supply
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-1)	a) Installation of Power Generator when offered by the vendor is inclusive in the scope of supply and shall be done by the seller. The installation work of Power Generator and its constituent parts shall be generally conforming to CPWD General Specification for Electrical Works, Part - VII - latest. b) Foundation shall be constructed by the seller. Foundation shall be of PCC type with the ratio 4:2:1. The length and breadth of the foundation shall be 300 mm more from the respective length and breadth of the Power Generator. The height of the foundation shall be 400 mm, i.e., 200 mm below and 200 mm above the ground level. All the material / labour required for foundation work shall be supplied by the seller.
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-2)	c) Supply, laying and termination of interconnecting power and control cable shall be done by the seller. The cable supplied shall ISI marked heavy duty PVC insulated, armoured cable, with PVC outer Sheath of Type ST-2 (FR Grade, Category C1), with aluminiu conductor having insulation of PVC compound type -C, suitable for rated voltage upto and including 1100 volts and conforming to IS: 1554 (Part-1) latest. For 3-Phase Power Generators, 3.5 core or higher core cables shall be used. Total length of the cable supplied by the seller shall be within 30 meters for each Power Generator with manual control panel and within 60 metres for eac Power Generator with AMF control panel. The current rating of the cables shall be as indicated below: 2C, 6 Sq mm for Single Phase, 3.5 & 5.0 KVA 2C, 10 Sq mm for Single Phase, 7.5 & 10 KVA 2C, 25 Sq mm for Single Phase, 15 KVA 2C, 35 Sq mm for Single Phase, KVA 2C, 70Sq mm for Single Phase, 25 KVA 2C, 95Sq mm for Single Phase, 30 KVA 2C, 120Sq mm for Single Phase, 40 KVA 4C, 4 Sq mm for Three Phase,
SCOPE OF NSTALLATION	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-3)	d) 10 KVA 4C, 6 Sq mm for Three Phase, 15 KVA 4C, 10 Sq mm for Three Phase, 20 & 25 KVA 4C, 16 Sq mm for Three Phase, 30 KV/ 3.5C, 25 Sq mm for Three Phase, 40 KVA 3.5C, 35 Sq mm for Three Phase, 50 KVA 3.5C, 70 Sq mm for Three Phase, 62.5 & 75 KVA 3.5C, 95 Sq mm for Three Phase, 82.5 KVA 3.5C, 120 Sq mm for Three Phase, 100 KVA 3.5C, 185 Sq mm for Three Phase, 125 KVA 3.5C, 300 Sq mm for Three Phase, 160 KVA 3.5C, 2 Run of 120 Sq mm for Three Phase, 180 KVA 3.5C, 2 Run of 150 Sq mm for Three Phase, 200 KVA 3.5C, 2 Run of 185 Sq mm for Three Phase, 225 KVA 3.5C, 2 Run of 240 Sq mm for Three Phase, 380 & 400 KVA 3.5C, 4 Run of 240 Sq mm for Three Phase, 500, 600 & 750 KVA 3.5C, 6 Run of 240 Sq mm for Three Phase, 900 KVA
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-4)	e) Construction of suitable earthing station and necessary connections shall be done by the seller. All the materials / labour required for construction of earthing station shall be supplied by the seller. The total number of earthing pits/stations shall be 4, i.e., 2 for neutral and 2 for body-earthing. Netutral earthing shall be done with copper Plate and Body earthing shall be done with G.I. plate / Copper. The consignee should choose installation site in such a way that the earthing stations can be made within 10 metres of the Power Generator. Earthing station shall be typically constructed as per prevalent standard practices and shall be generally conforming to CPWD General specification for Electrical Works, Part - VII & Part - I - latest. e) Installation of Fuel Tank including foundation / stand shall be done by the seller. f)The warranty is applicable upto specified value of month/hours whicher occurs first's.
	Above Scope of installation for Diesel Generating Set when offered by the vendor has been seen, read, understood and agreed to comply	Yes
	Warranty on Complete power genertor/DG Set	24 month
	Warranty in running hours	5000 hour
WARRANTY/SERVICES	Number of preventive maintenance visits offered in an year during warranty period (Supply of all consumables is the buyer's responsibilty)*	2
	Response Time to attend the complaint during Warranty	2 day
	Time Duration for Repairing /Replace the defect during Warranty	5 day
	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 REPORTS	Test report Available	Type Approval Certificate for the specified rating of the Power Generator from any of the designated agency authorized by CPCB,COP Certificate for engine,Type test report and Endurance test report for Engine as per IS: 10001 latest / IS: 10002 latest,Ty

Agree to provide all relevant documents Test Report/supporting document /reports etc to the buyer at the time of bidding or on demand

Product Specification for DURKATO Power Generator- DG set of 20 AMF Control Panel Specification | Sub-Spec|उप-Value | मूल्य विनिर्देश विनिर्देश Power Generator installation configurations as Power Generator defined in CPWD INSTALLATION Fixed (Power Generators are permanently installed)" General CONFIGURATIONS Specifications for Electrical works -Part VII (DG Set) Nominal Rated 20 Capacity (kVA) No of Phase (Single OUTPUT CAPACITY Phase-3-5kVA) (Single Phase or RATING/ PHASE Three Phase-5 & 7-5, Three Phase 10,15, 20, 25, 30 & 40 kVA) (Three Phase-50 to 900 kVA) Make of Engine HARISON Model Number of HG3P3R0M Engine Capacity of Engine 3168 (cc) Rated Engine Power 100 % of the required powered at STP(Standard Temperature Pressure) i.e equal to (Nominal Rated Capacity (KVA) of power (kWm) generator + Any Auxilary power Consumption by the Power generator) x Power factor(0.8) / Alternator efficience Type of Engine Liquid Cooled cooling Type of governer Electronic Number of cylinders 4 (nos) ENGINE No of Strokes (nos) 4 Rated RPM of Engine 1500 (RPM) Fuel High Speed Diesel (HSD) Engine is capable of delivering an output of 10% in excess of rated KVA for a period of one hour in any period of 12 hours continous Overload capacity running Specific Fuel Consumption 200 to 265 (gm/kWh) Starting voltage 12 (volt) Salient Features of Naturally aspirated engine, Direct injection Fuel System Engine Class of governer A2 or better "Maximum Change of Speed as a Percentage of Rated 10 Speed on suddenly taking-off the rated load(Transient) " "Maximum Recovery Time in Seconds on suddenly taking-off 10 second the rated

	load(Transient) "	
	Maximum Change of Speed as a Percentage of Rated Speed on suddenly taking-off the rated	4
GOVERNING CLASS	load(Permanent)	
GOVERNING CLASS	"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) "	3.5 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
	AC GENERATOR (ALTERNATOR) Make	LEROY SOMER/MECCALTE
	AC GENERATOR (ALTERNATOR) model Number	LEROY SOMER/MECCALTE
GOVERNING CLASS	Alternator Voltage Rating	415 Volt
	Rating of AC Generator (KVA)	20
Power Factor of AC generator	0.8	
Efficiency at rated Power factor at 75% of full Load	87.7 percent	
	Conformity to Indian Standard (for Alternator)	Generally conforming to IS:13364 (Part-1) latest (Upto 20 kVA)
	Type of alternator	Brushless
	Voltage Regulation Grade	VG 3
	Alternator IP Rating	IP 23
	Class of Insulation	н
	Salient features of Alternator	NA
	Control Panel	AMF Control Panel
	Control Panel Location	Inside the canopy
	IP Rating of Control Panel	IP 55
CONTROL PANEL	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,Low fuel level,Over speed
	Audio Alarm	Low Lube oil pressure,High water / coolant / cylinder head temperature,Low fuel level,Over speed
	Acoustic Enclosure (inclusive in the scope of supply)	Yes, Power Generator supplied with Acoustic Enclosure
	Sheet Thickness(mm)	1.2
ACOUSTIC ENCLOSURE	Thickness of insulation	30 millimeter
	Density of insulation (kg/cubic m)	30
	Noise level at 1 meter (dB)	73
	Fuel Tank Capacity	90 liter
	Number of Fuel tank	1
Fuel Tank	Fuel Tank Sheet Material Thickness(mm)	2
	Fuel Tank Fabricated Material	M.S Sheet
	Fuel Tank Features	Fuel Tank capacity is sufficient for 8 hrs of running at full load
	Battery Type & Specification	"Low Maintenance free to IS: 14257 for high cranking performance"
BATTERY	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
	Additional Features	NA
	Trailer	NA for Fixed/Skid Mounted Power Generator
	Pay load of the Trailer	0 kilogram
	Number of Axlels	0
	Number of wheels	'NA' for without trailer
	Wheel Tyre size	0 inch
	Brakes	NA for Fixed/Skid Mounted Power Generator
TRAILER	Trailer Complying to CMVR act and Regulation	NA for Fixed/Skid Mounted Power Generator
	Maximum permissible Speed of Trailer(Km/hr)	0
	Trailer unladen weight	0 kilogram
	Trailer overall length	0 millimeter
	Gross Towing Weight (including Power Generator)	0 kilogram
	Salient Features of trailer	NA
	General Technical Requirements (GTR) / Commissioning(Part- 1)	a) Power Generator shall be complete with Diesel Engine, Alternator and AMF/MANUAL Control Panel along with Acoustic Enclosure. Diesel engine and alternator shall be closely coupled or provided with flexible coupling and mounted on a base plate / M.S. frame of robust in construction.

	General Technical Requirements (GTR) / Commissioning(Part- 2)	b) Anti-Vibration mountings shall be provided for complete Power Generator in case of flexible coupling. In case of direct coupling Anti-Vibration mountings shall be provided for the Engine as well as the alternator.
	General Technical Requirements (GTR) / Commissioning(Part- 3)	c) Power Generator should have protection against under voltage, over voltage, under frequency, over frequency, low battery voltage, over current, earth-fault, short circuit, phase sequence change etc.
	General Technical Requirements (GTR) / Commissioning(Part- 4)	d) Automatic Mains Failure (AMF) control panel, where applicable, shall be able to start up the Power Generator and transfer the load on to the Power Generator on mains failure without requiring any human intervention. Similarly on restoration of mains supply, it shall be able to transfer the load to mains supply and switch off the Power Generator automatically.
	General Technical Requirements (GTR) / Commissioning(Part- 5)	e) Control Panel (Manual / AMF), where applicable, shall be equipped with suitable Voltmeter, Ammeter, Frequency meter, power factor meter (these items can be alternatively supplied in one multifunctional digital display meter), battery charger, indicators, various switches and cutout / MCB / MCCB / Contactor / Circuit breaker for the DG output of appropriate rating and accuracy class as per trade practice for better utility.
	General Technical Requirements (GTR) / Commissioning(Part- 6)	f) Supply and installation of a change-over Switch / MCCB of suitable rating for Power Generator with manual control panel, where applicable, is inclusive in the scope of supply.
General Technical Requirements (GTR) / Commissioning	General Technical Requirements (GTR) / Commissioning(Part- 7)	g) Acoustic Enclosure shall be made of Pre-treated and Powder coated CRCA Sheet. The sheet shall be Pre-treated and Powder coated with weather-proof paint. The Acoustic Enclosure shall be vermin proof. The enclosure shall accommodate the (daily service) fuel tank of the Power Generator to make the system compact.
	General Technical Requirements (GTR) / Commissioning(Part- 8)	h) Power Generators shall meet the requirements of Environmental (Protection) Rules 1986 as laid down by Min. of Environment & Forests read with GSR 371 (E) dated 17.5.2002,GSR 520(E)dated 1.7.2003 , No.448 (E)dated 12.07.2004 , GSR 771(E) dated 11.12.2013 GSR 232(E)dated 31.03.2014,Gazette Notification No.167 dated. 31.03.2014 and Gazette Notification No. 578 dated. 11.11.2014 in respect of noise and emission norms. The latest amendments to above GSRs shall be applicable as and when amended by Ministry of Environment and Forest.
	General Technical Requirements (GTR) / Commissioning(Part- 9)	i) Standard set of tools consisting of a set of 3 spanners, one screw driver, one standard plier and one nose plier of appropriate size shall be provided along with each Power Generator.
	General Technical Requirements (GTR) / Commissioning(Part- 10)	j) Supply of Fuel tank of suitable capacity, sufficient for minimum 8 hours running/990 liters(whichever is lower) the Power Generator, is inclusive in the scope of supply. Fuel Tank shall be complete with fuel piping (between fuel tank and diesel engine), valves, level indications and all standard accessories. MS pipes, heavy class of suitable dia conforming to IS 1239 (Part-1) - latest shall be used for fuel piping.
	General Technical Requirements (GTR) / Commissioning(Part- 11)	Buyer's Responsibilities: i. Mains ACB for AMF operation shall be provided by the buyer for DG set rating above 600 KVA and above .For DG set other ratings seller shall provide mains and DG contactor/breaker, ii. Exhaust piping, extra civil work, distribution board shall be provided by the buyer. iii. Consumables such as filters, lube oil at the time of servicing during warranty period shall be provided by the buyer. iv. Obtaining necessary approvals, if any, is the responsibility of the buyer.
	Above General Technical Requirements (GTR) / Commissioning have been seen, read, understood and agreed to comply	Yes
	Installation	with installation - inclusive in the scope of supply
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-1)	a) Installation of Power Generator when offered by the vendor is inclusive in the scope of supply and shall be done by the seller. The installation work of Power Generator and its constituent parts shall be generally conforming to CPWD General Specification for Electrical Works, Part - VII - latest. b) Foundation shall be constructed by the seller. Foundation shall be of PCC type with the ratio of 4:2:1. The length and breadth of the foundation shall be 300 mm more from the respective length and breadth of the Power Generator. The height of the foundation shall be 400 mm, i.e., 200 mm below and 200 mm above the ground level. All the materials / labour required for foundation work shall be supplied by the seller.
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in	c) Supply, laying and termination of interconnecting power and control cable shall be done by the seller. The cable supplied shall be ISI marked heavy duty PVC insulated, armoured cable, with PVC outer Sheath of Type ST-2 (FR Grade, Category C1), with aluminium conductor having insulation of PVC compound type -C, suitable for rated voltage upto and including 1100 volts and conforming to IS: 1554 (Part-1) latest. For 3-Phase Power Generators, 3.5 core or higher core cables shall be used. Total length of the cable supplied by the seller shall be within 30 meters for each Power Generator with manual control panel and within 60 metres for each Power Generator with AMF control panel. The current rating of the cables shall be as indicated below: 2C, 6 Sq mm for Single Phase,

	the scope of supply(Part-2)	3.5 & 5.0 KVA 2C, 10 Sq mm for Single Phase, 7.5 & 10 KVA 2C, 25 Sq mm for Single Phase, 15 KVA 2C, 35 Sq mm for Single Phase, 2 KVA 2C, 70Sq mm for Single Phase, 25 KVA 2C, 95Sq mm for Single Phase, 30 KVA 2C, 120Sq mm for Single Phase, 40 KVA 4C, 4 Sq mm for Three Phase,
SCOPE OF INSTALLATION	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-3)	d) 10 KVA 4C, 6 Sq mm for Three Phase, 15 KVA 4C, 10 Sq mm for Three Phase, 20 & 25 KVA 4C, 16 Sq mm for Three Phase, 30 KVA 3.5C, 25 Sq mm for Three Phase, 40 KVA 3.5C, 35 Sq mm for Three Phase, 50 KVA 3.5C, 70 Sq mm for Three Phase, 62.5 & 75 KVA 3.5C, 95 Sq mm for Three Phase, 82.5 KVA 3.5C, 120 Sq mm for Three Phase, 100 KVA 3.5C, 185 Sq mm for Three Phase, 125 KVA 3.5C, 300 Sq mm for Three Phase, 160 KVA 3.5C, 2 Run of 120 Sq mm for Three Phase, 180 KVA 3.5C, 2 Run of 150 Sq mm for Three Phase, 200 KVA 3.5C, 2 Run of 185 Sq mm for Three Phase, 225 KVA 3.5C, 2 Run of 240 Sq mm for Three Phase, 380 & 400 KVA 3.5C, 4 Run of 240 Sq mm for Three Phase, 500 KVA 3.5C, 4 Run of 240 Sq mm for Three Phase, 500 KVA 3.5C, 4 Run of 240 Sq mm for Three Phase, 900 KVA
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-4)	e) Construction of suitable earthing station and necessary connections shall be done by the seller. All the materials / labour required for construction of earthing station shall be supplied by the seller. The total number of earthing pits/stations shall be 4, i.e., 2 for neutral and 2 for body-earthing. Netutral earthing shall be done with copper Plate and Body earthing shall be done with G.I. plate / Copper. The consignee should choose installation site in such a way that the earthing stations can be made within 10 metres of the Power Generator. Earthing station shall be typically constructed as per prevalent standard practices and shall be generally conforming to CPWD General specification for Electrical Works, Part - VII & Part - I - latest. e) Installation of Fuel Tank including foundation / stand shall be done by the seller. f)The warranty is applicable upto specified value of month/hours whicheve occurs first's.
	Above Scope of installation for Diesel Generating Set when offered by the vendor has been seen, read, understood and agreed to comply	Yes
	Warranty on Complete power genertor/DG Set	24 month
	Warranty in running hours	5000 hour
WARRANTY/SERVICES	Number of preventive maintenance visits offered in an year during warranty period (Supply of all consumables is the buyer's responsibilty)*	2
	Response Time to attend the complaint during Warranty	2 day
	Time Duration for Repairing /Replace the defect during Warranty	5 day
	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 REPORTS	Test report Available for (Test/approval)	Type Approval Certificate for the specified rating of the Power Generator from any of the designated agency authorized by CPCB,COP Certificate for engine,Type test report and Endurance test report for Engine as per IS: 10001 latest / IS: 10002 latest,Typ test report for Alternator as per IS:13364 (Part-1) latest / IS:13364 (Part-2) latest to prove conformity to the specifications
	Agree to provide all relevant documents Test Report/supporting document /reports etc to the buyer at the time of bidding or on demand	YES
Product Specific	ation for DURKATC	Power Generator- DG set of 30 AME Control Panol
Specification	Sub-Spec उप-) Power Generator- DG set of 30 AMF Control Panel Value।मूल्य
वनिर्देश	বিনির্देश Power Generator installation	

Power Generator INSTALLATION CONFIGURATIONS	configurations as defined in CPWD General Specifications for Electrical works - Part VII (DG Set)	Fixed (Power Generators are permanently installed)"
	Nominal Rated Capacity (kVA)	30
INSTALLATION	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
	Make of Engine	HARISON
	Model Number of Engine	HG3P3R4M
	Capacity of Engine (cc)	3168
	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 Auxilary power Consumption by the Power generator) x Power factor(0.8) / Alternator efficience
	Type of Engine cooling	Liquid Cooled
	Type of governer	Electronic
	Number of cylinders (nos)	4
INGINE	No of Strokes (nos)	4
	Rated RPM of Engine (RPM)	1500
	Fuel	High Speed Diesel (HSD)
	Overload capacity	Engine is capable of delivering an output of 10% in excess of rated KVA for a period of one hour in any period of 12 hours continous running
	Specific Fuel Consumption (gm/kWh)	200 to 265
	Starting voltage (volt)	12
	Salient Features of Engine	Naturally aspirated engine,Direct injection Fuel System
	Class of governer	A2 or better
	"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 second
	Maximum Change of Speed as a Percentage of Rated Speed on suddenly taking-off the rated load(Permanent)	4
GOVERNING CLASS	"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) "	4 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
	AC GENERATOR (ALTERNATOR) Make	LEROY SOMER/MECCALTE
	AC GENERATOR (ALTERNATOR) model Number	LEROY SOMER/MECCALTE
	Alternator Voltage Rating	415 Volt
	Rating of AC Generator (KVA)	30
	Power Factor of AC generator	0.8
ALTERNATOR	Efficiency at rated Power factor at 75% of full Load	90.7 percent
	Conformity to Indian Standard (for Alternator)	Generally conforming to IS:13364 (Part-2) latest (Above 20 KVA)
	Type of alternator	Brushless
	Voltage Regulation Grade	VG 3
	Alternator IP Rating	IP 23
	Class of Insulation	н
	Salient features of Alternator	NA
	Control Panel	AMF Control Panel
	Control Panel Location	Inside the canopy
	IP Rating of Control Panel	IP 55
CONTROL PANEL	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,Low fuel level,Over speed
	Audio Alarm	Low Lube oil pressure,High water / coolant / cylinder head temperature,Low fuel level,Over speed
	Acoustic Enclosure (inclusive in the scope of supply)	Yes, Power Generator supplied with Acoustic Enclosure
	Sheet	1.2

ACOUSTIC ENCLOSURE	Thickness of insulation	30 millimeter
	Density of insulation (kg/cubic m)	30
	Noise level at 1 meter (dB)	74
	Fuel Tank Capacity	115 liter
	Number of Fuel tank	1
Fuel Tank	Fuel Tank Sheet Material Thickness(mm)	2
	Fuel Tank Fabricated Material	M.S Sheet
	Fuel Tank Features	Fuel Tank capacity is sufficient for 8 hrs of running at full load
	Battery Type & Specification	"Low Maintenance free to IS: 14257 for high cranking performance"
BATTERY	Battery capacity (Ah)	90
	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
	Additional Features	NA
	Trailer	NA for Fixed/Skid Mounted Power Generator
	Pay load of the Trailer	0 kilogram
	Number of Axlels	0
	Number of wheels	'NA' for without trailer
	Wheel Tyre size	0 inch
	Brakes	NA for Fixed/Skid Mounted Power Generator
	Trailer Complying to CMVR act and Regulation	NA for Fixed/Skid Mounted Power Generator
INIER	Maximum permissible Speed of Trailer(Km/hr)	0
	Trailer unladen weight	0 kilogram
	Trailer overall length	0 millimeter
	Gross Towing Weight (including Power Generator)	0 kilogram
	Salient Features of trailer	NA
	General Technical Requirements (GTR) /	a) Power Generator shall be complete with Diesel Engine, Alternator and AMF/MANUAL Control Panel along with Acoustic Enclosure. Diesel engine and alternator shall be closely coupled or provided with flexible coupling and mounted on a base plate /
	Commissioning(Part- 1)	M.S. frame of robust in construction.
	General Technical Requirements (GTR) / Commissioning(Part-	b) Anti-Vibration mountings shall be provided for complete Power Generator in case of flexible coupling. In case of direct coupling Anti-Vibration mountings shall be provided for the Engine as well as the alternator.
	2) General Technical	
	Requirements (GTR) / Commissioning(Part-	c) Power Generator should have protection against under voltage, over voltage, under frequency, over frequency, low battery voltage, over current, earth-fault, short circuit, phase sequence change etc.
	3)	
	General Technical Requirements (GTR) / Commissioning(Part-	d) Automatic Mains Failure (AMF) control panel, where applicable, shall be able to start up the Power Generator and transfer the load on to the Power Generator on mains failure without requiring any human intervention. Similarly on restoration of mains supply, it shall be able to transfer the load to mains supply and switch off the Power Generator automatically.
	4)	

General Technical Requirements (GTR) / Commissioning	General Technical Requirements (GTR) / Commissioning(Part- 5) General Technical Requirements (GTR) / Commissioning(Part- 6) General Technical Requirements (GTR) / Commissioning(Part- 7) General Technical Requirements (GTR) / Commissioning(Part- 8) General Technical Requirements (GTR) / Commissioning(Part- 9) General Technical Requirements (GTR) / Commissioning(Part- 10) General Technical Requirements (GTR) / Commissioning(Part- 10) General Technical Requirements (GTR) / Commissioning(Part- 11) Above General Technical Requirements (GTR) / Commissioning(Part- 11)	e) Control Panel (Manual / AMF), where applicable, shall be equipped with suitable Voltmeter, Ammeter, Frequency meter, power factor meter (these items can be alternatively supplied in one multifunctional digital display meter), battery charger, indicators, various switches and cutout / ACE / MCCB / Circuit breaker for the DG output of appropriate rating and accuracy class as per trade practice for better utility. f) Supply and installation of a change-over Switch / MCCB of suitable rating for Power Generator with manual control panel, where applicable, is inclusive in the scope of supply. g) Acoustic Enclosure shall be made of Pre-treated and Powder coated CRCA Sheet. The sheet shall be Pre-treated and Powder coated with weather-proof paint. The Acoustic Enclosure shall be vermin proof. The enclosure shall accommodate the (daily service) fuel tank of the Power Generator to make the system compact. h) Power Generators shall meet the requirements of Environmental (Protection) Rules 1986 as laid down by Min. of Environment & Forests read with GSR 371 (E) dated 17.2002, GSR 520(E)dated 1.2.2003, No.448 (E)dated 1.2.07.2004, GSR 771(E) dated 11.1.2014 in respect of noise and emission norms. The latest amendments to above GSRs shall be applicable as and when amended by Ministry of Environment and Forest. i) Standard set of tools consisting of a set of 3 spanners, one screw driver, one standard plier and one nose plier of appropriate size shall be provided along with each Power Generator. j) Supply of Fuel tank of suitable capacity, sufficient for minimum 8 hours running/990 liters(whichever is lower) the Power Generator, is inclusive in the scope of supply, Fuel Tank shall be complete with fuel piping (between fuel tank and diesel engine), valves, level indications and all standard accessories. MS pipes, heavy class of suitable dia conforming to IS 1239 (Part-1) - latest shall be used for fuel piping. Buyer's Responsibilities: I. Mains ACB for AMF operation shall be provided by the buyer for DG set rating abov
	read, understood and agreed to comply	
	Installation	with installation - inclusive in the scope of supply
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-1)	a) Installation of Power Generator when offered by the vendor is inclusive in the scope of supply and shall be done by the seller. The installation work of Power Generator and its constituent parts shall be generally conforming to CPWD General Specification for Electrical Works, Part - VII - latest. b) Foundation shall be constructed by the seller. Foundation shall be of PCC type with the ratio of 4:2:1. The length and breadth of the foundation shall be 300 mm more from the respective length and breadth of the Power Generator. The height of the foundation shall be 400 mm, i.e., 200 mm below and 200 mm above the ground level. All the materials / labour required for foundation work shall be supplied by the seller.
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-2)	c) Supply, laying and termination of interconnecting power and control cable shall be done by the seller. The cable supplied shall be ISI marked heavy duty PVC insulated, armoured cable, with PVC outer Sheath of Type ST-2 (FR Grade, Category C1), with aluminium conductor having insulation of PVC compound type -C, suitable for rated voltage upto and including 1100 volts and conforming to IS: 1554 (Part-1) latest. For 3-Phase Power Generators, 3.5 core or higher core cables shall be used. Total length of the cable supplied by the seller shall be within 30 meters for each Power Generator with manual control panel and within 60 metres for each Power Generator with AMF control panel. The current rating of the cables shall be as indicated below: 2C, 6 Sq mm for Single Phase, 3.5 & 5.0 KVA 2C, 10 Sq mm for Single Phase, 7.5 & 10 KVA 2C, 25 Sq mm for Single Phase, 15 KVA 2C, 35 Sq mm for Single Phase, 20 KVA 2C, 70Sq mm for Single Phase, 25 KVA 2C, 95Sq mm for Single Phase, 30 KVA 2C, 120Sq mm for Single Phase, 40 KVA 4C, 4 Sq mm for Three Phase,
SCOPE OF INSTALLATION	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in the scope of supply(Part-3)	d) 10 KVA 4C, 6 Sq mm for Three Phase, 15 KVA 4C, 10 Sq mm for Three Phase, 20 & 25 KVA 4C, 16 Sq mm for Three Phase, 30 KVA 3.5C, 25 Sq mm for Three Phase, 40 KVA 3.5C, 35 Sq mm for Three Phase, 50 KVA 3.5C, 70 Sq mm for Three Phase, 62.5 & 75 KVA 3.5C, 95 Sq mm for Three Phase, 82.5 KVA 3.5C, 120 Sq mm for Three Phase, 100 KVA 3.5C, 185 Sq mm for Three Phase, 125 KVA 3.5C, 300 Sq mm for Three Phase, 160 KVA 3.5C, 2 Run of 120 Sq mm for Three Phase, 180 KVA 3.5C, 2 Run of 150 Sq mm for Three Phase, 200 KVA 3.5C, 2 Run of 185 Sq mm for Three Phase, 225 KVA 3.5C, 2 Run of 240 Sq mm for Three Phase, 250 & 275 KVA 3.5C, 3 Run of 185 Sq mm for Three Phase, 320 KVA 3.5C, 3 Run of 240 Sq mm for Three Phase, 380 & 400 KVA 3.5C, 4 Run of 240 Sq mm for Three Phase, 500, 600 & 750 KVA 3.5C, 6 Run of 240 Sq mm for Three Phase, 900 KVA
	Scope of installation for Diesel Generating Set when offered by the vendor - inclusive in	e) Construction of suitable earthing station and necessary connections shall be done by the seller. All the materials / labour required for construction of earthing station shall be supplied by the seller. The total number of earthing pits/stations shall be 4, i.e., 2 for neutral and 2 for body-earthing. Netutral earthing shall be done with copper Plate and Body earthing shall be done with G.I. plate / Copper. The consignee should choose installation site in such a way that the earthing stations can be made within 10 metres of the Power Generator. Earthing station shall be typically constructed as per prevalent standard practices and shall be generally conforming to CPWD General specification for Electrical Works, Part - VII & Part - I - latest. e) Installation of Fuel Tank

	the scope of supply(Part-4)	including foundation / stand shall be done by the seller. f)The warranty is occurs first's.	s applicable upto specified value of month/hours whichever	
	Above Scope of installation for Diesel Generating Set when offered by the vendor has been seen, read, understood and agreed to comply	Not Applicable as Installation not offered		
	Warranty on Complete power genertor/DG Set	24 month		
	Warranty in running hours	5000 hour		
WARRANTY/SERVICES	Number of preventive maintenance visits offered in an year during warranty period (Supply of all consumables is the buyer's responsibilty)*	2		
	Response Time to attend the complaint during Warranty	2 day		
	Time Duration for Repairing /Replace the defect during Warranty	5 day		
	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 REPORTS	Test report Available for (Test/approval)	Type Approval Certificate for the specified rating of the Power Generator from any of the designated agency authorized by CPCB,COP Certificate for engine,Type test report and Endurance test report for Engine as per IS: 10001 latest / IS: 10002 latest,Type test report for Alternator as per IS:13364 (Part-1) latest / IS:13364 (Part-2) latest to prove conformity to the specifications		
	Agree to provide all relevant documents Test Report/supporting document /reports etc to the buyer at the time of bidding or on demand	YES		
ePBG Detail ईपी	बीजी विवरण			
			State Bank of India	
ePBG Percentage(%)	ईपीबीजी प्रतिशत (%) :		10.00	
The bidder shall furnis	h ePBG as applicable as	per bid's terms and conditions बोली लगाने वाले को बोली के नियमों और शर्तों के अनुर	सार लागू ईपीबीजी प्रस्तुत करना होगा	
Terms and Cond	itions नियम और शर्ते			
1. General Terms ar	NUMPY/PERION accurs frants. Above Scope of invalidation for Direct Generating Statuthen agrees to comply both Applicable as installation not offered Warrany on agrees to comply both Applicable as installation not offered Warrany on agrees to comply 24 month Warrany on agrees to comply 5000 hour Number of generation as year 2 day Number of generation as year 2 day Number of boxers 2 day Those builds for boxers 2 day Those builds for boxe			
1.2 This Contract betw Conditions (GTC) u	veen the Seller and the unless otherwise supers	Buyer, is for the supply of the Goods and/ or Services, detailed in the sche	dule above, in accordance with the General Terms and	
	Specific Terms and Co	onditions-		

2.1 *Scope of Supply*: Scope of supply (Bid price to include all cost components) : Supply Installation Testing and Commissioning of Goods Nominated Inspection Agency: On behalf of the Buyer organization, any one of the following Inspection Agency would be conducting inspection of stores before acceptance: Pre-dispatch Inspection at Seller Premises (applicable only if pre-dispatch inspection clause has been selected in ATC):

N/A

Post Receipt Inspection at consignee site before acceptance of stores: GM(E&M) I/C OR HIS AUTHORIZED REPRESENTATIVE

2.3 Certificates

Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.

2.4 Certificates.

The bidder is required to upload, along with the bid, all relevant certificates such as BIS licence, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.

2.5 Warranty.

Warranty period of the supplied products shall be 2 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

2.6 Past Project Experience:

Proof for Past Experience and Project Experience clause: For fulfilling the experience criteria any one of the following documents may be considered as valid proof for meeting the experience criteria:a. Contract copy along with Invoice(s) with self-certification by the bidder that service/supplies against the invoices have been executed.b. Execution certificate by client with contract value.c. Any other document in support of contract execution like Third Party Inspection release note, etc.Proof for Past Experience and Project Experience clause: For fulfilling the experience criteria any one of the following documents may be considered as valid proof for meeting the experience criteria:a. Contract copy along with Invoice(s) with self-certification by the bidder that service/supplies against the invoices have been executed.b. Execution certificate by client with contract value.c. Any other documents may be considered as valid proof for meeting the experience criteria:a. Contract copy along with Invoice(s) with self-certification by the bidder that service/supplies against the invoices have been executed.b. Execution certificate by client with contract value.c. Any other document in support of contract execution release note, etc.

2.7 Generic.

Actual delivery (and Installation & Commissioning (if covered in scope of supply)) is to be done at following address

DETAILS MENTIONED IN BUYER ADDED BID SPECIFIC ATC DETAILS MENTIONED IN BUYER ADDED BID SPECIFIC ATC

2.8 Generic

Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.

2.9 Generic.

Installation, Commissioning, Testing, Configuration, Training (if any - which ever is applicable as per scope of supply) is to be carried out by OEM / OEM Certified resource or OEM authorised Reseller.

2.10 Generic.

Manufacturer Authorization:Wherever Authorised Distributors/service providers are submitting the bid, Authorisation Form /Certificate with OEM/Original Service Provider details such as name, designation, address, e-mail Id and Phone No. required to be furnished along with the bid

2.11 Generic.

Supplier shall ensure that the Invoice is raised in the name of Consignee with GSTIN of Consignee only.

2.12 Generic.

The successful bidder has to supply all essential accessories required for the successful installation and commissioning of the goods supplied. Besides standard accessories as per normal industry practice, following accessories must be part of supply and cost should be included in bid price:

ANY STANDARD ACCESSORIES REQUIRED FOR INSTALLATION & COMMISSIONING

2.13 Generic

1. The Seller shall not assign the Contract in whole or part without obtaining the prior written consent of buyer.

2. The Seller shall not sub-contract the Contract in whole or part to any entity without obtaining the prior written consent of buyer.

3. The Seller shall, notwithstanding the consent and assignment/sub-contract, remain jointly and severally liable and responsible to buyer together with the assignee/ subcontractor, for and in respect of the due performance of the Contract and the Sellers obligations there under.

2.14 Generic.

Without prejudice to Buyer's right to price adjustment by way of discount or any other right or remedy available to Buyer, Buyer may terminate the Contract or any part thereof by a written notice to the Seller, if:

i) The Seller fails to comply with any material term of the Contract.

ii) The Seller informs Buyer of its inability to deliver the Material(s) or any part thereof within the stipulated Delivery Period or such inability otherwise becomes apparent.

iii) The Seller fails to deliver the Material(s) or any part thereof within the stipulated Delivery Period and/or to replace/rectify any rejected or defective Material(s) promptly. iv) The Seller becomes bankrupt or goes into liquidation.

v) The Seller makes a general assignment for the benefit of creditors.

vi) A receiver is appointed for any substantial property owned by the Seller.

vii) The Seller has misrepresented to Buyer, acting on which misrepresentation Buyer has placed the Purchase Order on the Seller.

2.15 Buyer Added Bid Specific ATC:

Buyer Added text based ATC clauses

1)Installation shall be done at the below locations in BCCL

	1	2	3	4	5	

sl	Areas	5 KVA DG Se ts	7.5 KV A DG Sets	10 KV A DG S ets	20 KVA DG Set s	30 KV A DG S ets	
1	Barora	1	0	1	0	0	
2	Govind pur	0	0	1	0	0	
3	Katras	0	0	1	0	0	
4	Kusund a	1	1	1	0	0	
5	РВ	0	0	2	0	0	
6	Bastac olla	0	0	1	0	0	1
7	Lodna	0	0	2	0	0	
8	сѵ	0	0	2	0	0	
9	DCW	0	0	1	0	0	
10	SCW	0	0	1	0	0	
11	PCW	0	0	1	0	0	
12	BCW	0	0	0	1	0	
13	EJA	0	0	0	0	1	
14	WJA	1	0	1	0	0	1
15	Sijua	2	1	0	0	0	
16	BII		0	1	0	0	
	Total (Nos)	5	2	16	1	1	

2) DELIVERY COMPLETION DATE WILL MEAN DATE OF ISSUE OF INSTALLATION/COMMISSIONING CERTIF ICATE BY GM(E&M) I/C OR HIS AUTHORIZED REPRESENTATIVE.

3)Satisfactory performance The PO copy submitted for past project experience shall be supported by s atisfactory Performance certificate. issued by respective Buyer Organization n. Considering the practical difficulties in obtaining the Performance Reports in cases where provenness of the offered product is being ascertained on the basis of supply made i n other subsidiaries of CIL or other PSUs/Govt Department/Private Organizations, the bidder shall submit a self-certificate in the following format along with proof of payment ag ainst the Purchase Order/ Rate Contract add commissioning certificates (in case of equipment, P&M etc where erection & commissioning is required):

"The items covered in the purchase order/ rate contract(s) copies enclosed with our offer have been fully executed and have performed satisfactorily as per the provisions of the r espective purchase order/ rate contract(s) and all the complaints lodged by the purchaser, if any, have been attended to and no complaints/ claims are pending."

4) HSN CODE & GST rate in % only should be submitted in letter head along with the bid.

5)Bidder shall upload a sheet/chart clearly indicating quoted rating of DG Sets, Make and Model of DG Sets, corresponding Make and Model of Engines and Make of Alternator as offered.

6) Bidder shall upload Valid COP Certificate with Type Approval Certificate/reference no. for specified rating, Make, Model of DG sets &/or Engines for compliance to Noise and Em ission norms issued from agency authorized by CPCB.

7)Bidder shall upload Type test report with Endurance test report of Offered Make Engines of DG sets as per relevant IS and Type test report for Offered Make Alternators of DG S ets as per relevant IS.

8) Scope of Installation(Bidder's scope): Civil foundation, supply, laying and termination of requisite Cables as per requirement, Provision of Earth pits with connections.

2.16 Forms of EMD and PBG: Bidders can also submit the EMD with Account Payee Demand Draft in favour of

BHARAT COKING COAL LIMITED payable at DHANBAD

Bidder has to upload scanned copy / proof of the DD along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date / Bid Opening date.

2.17 Generic.

Bidder shall submit the following documents along with their bid for Vendor Code Creation:

a. Copy of PAN Card.

b. Copy of GSTIN.

c. Copy of Cancelled Cheque.

d. Copy of EFT Mandate duly certified by Bank.

Note: This is system generated file. No signature is required. Print out of this document is not valid for payment/ transaction purpose.

नोट: यह सिस्टम जनरेटेड फाइल है। कोई हस्ताक्षर की आवश्यकता नहीं है। इस दस्तावेज़ का प्रिटे आउट भुगतान/लेनदेन उद्देश्य के लिए मान्य नहीं है।