



سَرُسُرُهُ ثَمَّ: FNK-I/IUL/2018/027

وسرم مرور مروع وروم مرور مروع ورور مروع

בְישׁת נֵּשִׁשׁ הַ בְּבֶרֶעֶּ בִּרְבֶּלֶבֶת הְרְבֵּבֶּעָׁרְ הַרְבָּבֶּעָׁרְ הַרְבָּבֶּעָׁרְ הַרְבָּבָּעָרְ הַרְבָּבָעָרְ בְּבָּבָּעָרְ הַרְבָּבָעָרְ הַרְבָּבָעָרְ הַרְבָּבָעָרְ הַרְבָּבָעָרִ בְּבָּעָרִישְׁרָ בִּיִּינְיִינְיִי

Description	Unit	Qty
450kVA/360 kW prime rated diesel generator set with parameters 0.8 P.F, 415 Volts, 3 Phase, 4 wires, 50 Hz at 1500 r.p.m. Powered by Cummins engine coupled with Stamford Alternator. The Generator set shall be powered by a Cummins engine origin (UK, USA) or assembled/manufactured by an Original Cummin's Licenced OEM manufactured/assembler. The engine must produce a mechanical power output (kW _m) which should meet the required electric power (kW _e) of 450kW and must be coupled with a 450kW Stamford Alternator with pre-installed Droop CT and remote mounted control panel.	1	No
The controller should be Deepsea model: 8860 engine controller. Motorised TP, 800A ACB c/w UVT Coil AC 230 V, brand "MERLIN GERIN") or equivalent.		
 Engine to be complete with following auxilliary items: Heavy electrical flywheel SAE flywheel housing Air filters, Lubricating Oil Filters, Fuel Filters and all other such filter required for operation of the engine 		
 Low lubricating oil pressure switch High engine temperature switch lub oil sender Water Temperature Sender 		
 Starting equipment fitted to engine, consisting of: 24 Volt charging altenator (Brushless) 24 Volt starting motor Fuel Shut-off solenoid 		
The engine to be fitted with a close tolerance Cummins Electronic Governing system, which should include efc, actuators, magnetic pickups, etc, including wiring		
	Volts, 3 Phase, 4 wires, 50 Hz at 1500 r.p.m. Powered by Cummins engine coupled with Stamford Alternator. The Generator set shall be powered by a Cummins engine origin (UK, USA) or assembled/manufactured by an Original Cummin's Licenced OEM manufactured/assembler. The engine must produce a mechanical power output (kW _m) which should meet the required electric power (kW _e) of 450kW and must be coupled with a 450kW Stamford Alternator with pre-installed Droop CT and remote mounted control panel. The controller should be Deepsea model: 8860 engine controller. Motorised TP, 800A ACB c/w UVT Coil AC 230 V, brand "MERLIN GERIN") or equivalent. Engine to be complete with following auxilliary items: Heavy electrical flywheel SAE flywheel housing Air filters, Lubricating Oil Filters, Fuel Filters and all other such filter required for operation of the engine Low lubricating oil pressure switch High engine temperature switch High engine temperature switch Hub oil sender Water Temperature Sender All necessary items to run and to protect the engine Starting equipment fitted to engine, consisting of: 24 Volt charging altenator (Brushless) 24 Volt starting motor Fuel Shut-off solenoid Heavy duty lead acid batteries, supplied in a dry charged condition Governing System The engine to be fitted with a close tolerance Cummins Electronic	ASOKVA/360 kW prime rated diesel generator set with parameters 0.8 P.F., 415 Volts, 3 Phase, 4 wires, 50 Hz at 1500 r.p.m. Powered by Cummins engine coupled with Stamford Alternator. The Generator set shall be powered by a Cummins engine origin (UK, USA) or assembled/manufactured by an Original Cummin's Licenced OEM manufactured/assembler. The engine must produce a mechanical power output (kW _m) which should meet the required electric power (kW _e) of 450kW and must be coupled with a 450kW Stamford Alternator with pre-installed Droop CT and remote mounted control panel. The controller should be Deepsea model: 8860 engine controller. Motorised TP, 800A ACB c/w UVT Coil AC 230 V, brand "MERLIN GERIN") or equivalent. Engine to be complete with following auxilliary items: • Heavy electrical flywheel • SAE flywheel housing • Air filters, Lubricating Oil Filters, Fuel Filters and all other such filter required for operation of the engine • Low lubricating oil pressure switch • High engine temperature switch • Iub oil sender • Water Temperature Sender • All necessary items to run and to protect the engine • Starting equipment fitted to engine, consisting of: • 24 Volt charging altenator (Brushless) • 24 Volt starting motor • Fuel Shut-off solenoid • Heavy duty lead acid batteries, supplied in a dry charged condition • Governing System The engine to be fitted with a close tolerance Cummins Electronic





00111	OTATION EMITTED		، ۵۰ م ورگرارم
	Cooling Equipment		
	Cooling equipment compromising a heavy-duty tropical radiator, together with pusher type cooling fan and guards to be fitted. The radiator core should be elecroplated with silver solder tin plated to prevent early failure due to corrosion. Coupon plated radiators are acceptable. Radiator has to be mounted on vibration mounts with enough strength to withstand the radiator and vibrations.		
	Radiator must be designed to adequately cool the generator at an ambient temperature of 50°C		
	• Exhaust system		
	450 mm of stainless steel below type flexible exhaust, together with suitable flanges and fittings shall be supplied for each silencer.		
	Alternator		
	The alternator shall be brushless revolving type alternator, having class H insulation on both the stator and field windings. It shall be built and rated to BS 5000, tropically impregnated with voltage regulation being in the order of +/- 1.5% from no load to full load under the steady state conditions assuming a speed variation not exceeding 4% on the engine. Anti-Condensation Coil to be fitted in the Alternator.		
	Generator arrangement and drive		
	The simplex type base plate is of heavy duty rolled steel constructed, bolted and electrically welded, drilled on the underside to allow the fitting of foundation bolts. The engine and the alternator are to be mounted on a base plate and vibration mounts to be mounted underside of the base plate. The vibration mounts are to be supplied as loose item.		
	• Finishing		
	After assembling the genset zinc coated self-etching primer should be applied to the complete set.		
1.2	Fuel system	1	No
	A fuel day tank of 12 hours capacity complete with level indicator, drain plug, filler, fuel return with fuel outlet connections and a fuel filter fitted with outlet connection is to be mounted. These mounts are to be supplied as loose item. All necessary fittings to be supplied in conformity with fuel flow diagram.		
1.3	Factory testing	1	No
	The generator should be fully tested at the manufacturer workshop in the presence of client/appointees to check the ratings, overload, functional tests on a dummy load prior to dispatch <i>in case the bidder is unable to provide factory test</i> as required the bidder shall provide an extended warranty of one extra year than mentioned in item no 1.6 of this document.		
1.4	Literature and drawings consisting of :	1	Lot
	1 No x Manual on How to handle the generation equipment1 Nos x Electrical wiring diagram		
	l an e :		

• 1 No x Engine operation and maintenance manual





وسرك كالمرؤيد عاش ورجاء

COR	PORATION LIMITED		2000 1000
	1 No x Engine parts catalogue		
	1 No x Generator parts catalogue		
	1 No x Generator operation and maintenace manual		
	1 No x Generator AVR manual		
	1 No x Governor control unit manual		
	1 No x Engine shop manual		
1.5	Accessories		
	The Components shall meet the British Standard and ISO standards. Items are		
	for the above mentioned generator sets.		
1.5.1	Primary silencer barrel (to match engine exhaust)	1	No
1.5.2	Secondary silencer barrel (to match engine exhaust)	1	No
1.5.3	3m Exhaust pipe dia (to match engine exhaust)	2	No
1.5.4	Elbows having dia (to match the engine exhaust)	3	No
1.5.5	Flanges having dia (to match the engine exhaust)	6	No
1.5.6	Bolts, Nuts and Washers for the Flanges. (Each set shall include 1 bolt, 2 washers,1spring washer 2 Nuts)	1	Lot
1.5.7	Split type rockwool insulation lagging suitable for 75 to 125mm dia. Exhaust pipes. The lagging shall be covered with High Quality Aluminium foil.	1	Lot
1.6	Warranty Generator set should carry a warranty of one year or 1,500 running hours from the date of commissioning, whichever comes first	1	Lot

رْمَرْرُوْسُرُو مَرْمُونِ

- جهُنم سهُ وَرُمْ مَرْدُو وَسَرُ مُرُدُ: وِسَهُ وَرُو الْ مُنَامُونُ الْمُدُّ الْمُدُّرُ الْمُدُّرُ الْمُدُّر الْمُرُدُّ الْمُرِ الْمُدُّرِدُ الْمُرْمُدُّدُ الْمِرْسُرُوسِ وَمِسْ الْمِرْسُرُوسُ وَمِنْ الْمِرْسُرُونُ
 - - 2/22/2 (202 4/2/2 5/4/5 0
 - ٠ مسروسرد برندورو ٥ مسروسرد برندورو
 - ۵ د ده د د کرم ده کرد کرد د ک
 - ع بر مربو، ج مربع مربع مربع عربي O
 - - سَوْرُدُ لَا كُوْرُودُ عُلَامِلُو سَوْسُورُ اللهُ





وسركا كالمرؤ مرساس ووجاء

ور ور ورده مرور مرسم مرسود در درسوور درد. مرور مرسم مرسود در درسوور درد.

• رُدُ: 60 بُرسرُغ

60 × (31 512 / 31 250 512)

• مُنم وَمُرْسُورُوسُ وَرُورُهُ (وَرُوسُ): 25 بُرسْرُجُ

25 × (בּרִבֶּע המפר על בּרִבּעה / בֹרִינ בּרִבּעה)

- פשתעור ברים מתשים: 10 ברתם (פשתעור הפרתם שמפת שתובת בעול בתם את הרבים
 - سُوْرِنْ مُرْ مُرْمُرُو سُوعِ فِي 50 بُرِسُوْ

مُعْرِضً مِنْ دُورُورُولُولِ جِيرِي وَمُعْرِسُولُ كَانُورُ دُوعُ مُنْ مُنْ عُرْفُ الْمُورُونُ

وسرم شرد ع مراه م

وسركا كالجيم الموسوع

رِدِرُوَّىر مَرْمُوَّى مِر: FNK-I/IUL/2018/027

روودى دۇسرىر

33





وسركا كالمريك كالمراث ورجاء

2001 2001/10 دُودُ مُرْوَدُ وَالْرُورُ اللَّهُ مُرْدُورُ وَدُرُوسٌ اللَّهُ اللَّهُ اللَّهُ مُرْدُرُ مُرْدُ وَوُرُكُ مُرْدُو شَوْمُ 3018260 سَرَسُ مُو وَيُو مِرْسُرُ عَرِيْهُ مِرْسُونُ لِي مِرْسُ وَيُمِيْ سَمْ سَرَوْهُ سَرُومُ tender@fenaka.com.mv

15 ئۇھىمرىم 2018

٢٩ جُمَادَى الْأُولِي ٢٩