



ސަރުކާރުގެ ނަންބަރު: FNK-K(T)/FNK/IUL/2017/191

ދިވެހިރާއްޖެ

400 ފަޕް ވޮލްޓް ޖެނަރޭޓަރ ސެޓް ޖެނަރޭޓް ކޮންޓްރޯލަރ ސެޓް

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S/N:	Description	Brand	Unit	Qty
1	<p>400 kW prime rated Diesel Engined Generator set with parameters : 0.8 P.F, 415 Volts, 3 Phase, 4 Wires, 50 Hz at 1500 r.p.m.</p> <p>The Generator set shall be powered by a Cummins engine origin (UK, USA) or assembled/manufactured by an Original Cummin's Licenced OEM manufacturer or assembler.</p> <p>The engine must produce a mechanical power output (kW_m) which should meet the required electric power (kW_e) of 400 KW and must be coupled with a 400 kW stamford Altenator with pre-installed Droop CT, with remote mounted control panel.</p> <p>The controller should be Deepsea model: 8810 engine controller. Motorised TP, 800 A, ACB c/w UVT Coil AC 230 V, ("MERLIN GERIN") or equivalent.</p>		1	Nos
	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		
	• All necessary items to run and to protect the engine		
	• Starting equipment fitted to engine, consisting of :		
	▪ 24 Volt charging alternator (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 Governing system, which should include efc, actuators, magnetic pickups, etc, including wiring		
	• Cooling Equipment		
	Cooling equipment comprising a heavy-duty tropical radiator, together with pusher type cooling fan and guards to be fitted. The radiator core should be electroplated with silver solder tin plated to prevent early failure due to corrosion. Coupon plated radiators are acceptable. the radiator has to be mounted on the vibration mounts and it should have enough strength to with stand the radiator.		
	• 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	Nos
	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/apointees 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 10 of this document.			
1.4	Literature and drawings consisting of :		1	Lot
	• 1 No x Manual on How to handle the generation equipment			
	• 1 Nos x Electrical wiring diagram			
	• 1 No x Engine operation and maintenance manual			
	• 1 No x Engine parts catalogue			
	• 1 No x Generator parts catalogue			
	• 1 No x Generator operation and maintenance manual			
	• 1 No x Generator AVR manual			
	• 1 No x Governor control unit manual			

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26 ޖުލައި 2017

14 ޖުލައި 2017