



Office of the Executive Engineer
F.M Division-1, Dhaka WASA
29, K.M Das Lane, Hatkhola, Dhaka-1203.

Estimate

Name of Work: Repair, Servicing & Periodical Maintenance of existing Mitsubishi and others brand inverter (Variable Frequency Drive) of different pumping stations under F.M. division-1(Lot-1).

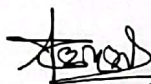
SL No	Description of Item	Rate Basis	Unit	Qty	Rate	Price
	Periodical or Preventive Maintenance-servicing of Mitsubishi Brand 90KW VFD at different pump stations under MODS Circle-1 area. All works should be done at the presence of the engineer in charge. Necessary safety precautions should be taken for the maximum safety of pump motor and other electro-mechanical apparatus. After servicing works all equipments should be undertaken at running condition. All works should be done by the experinced and skill technician of concern supplier or vendor. Contractor will provide one year free service and troubleshooting for VFD from date of periodical maintenance.					
1	Disconnection & re-connectoin of Variable frequency drive (VFD) from electric LTCT meter.	Approved Rate	Nos	60	2,050.001	123,000.060
2	Dismantling of IGBT module from VFD and cleaning with techspray, testing re-installation.	Do	Nos	60	540.001	32,400.060
3	Dismantling of Control board/card from VFD and cleaning Control Card by Electrical Cleaner Techspray. Electrostatic Discharge vacume to reduce static build up will used for VFD.	Do	Nos	60	510.001	30,600.060
4	Dismantling of EMC Filter from VFD, Filter check and cleaning. After cleaning should be re-installed on VFD.	Do	Nos	60	650.001	39,000.060
5	Un-installation of DIM Module from VFD then testing and cleaning.	Do	Nos	60	650.001	39,000.060
6	Dismantling Rectifier from VFD then cleaning by Electrical Cleaner Techspray.	Do	Nos	60	550.001	33,000.060
7	Dismantling of APP Card of VFD then testing cleaning by Electrical Cleaner Techspray.	Do	Nos	60	550.001	33,000.060
8	Dismantling of Main Card from VFD then checking & cleaning by Electrical Cleaner Techspray.	Do	Nos	60	560.001	33,600.060
9	Drive switch Card Isolate from VFD then cleaning by Electrical Cleaner Techspray.	Do	Nos	60	540.001	32,400.060
10	Dismantling Fan Power card from VFD then cleaning by Electrical Cleaner Techspray.	Do	Nos	60	450.001	27,000.060
11	Dismantling Main cooling fanfrom VFD then cleaning by Electrical Cleaner Techspray.	Do	Nos	60	630.001	37,800.060
12	Isolating fio Charging resistor from VFD then testing cleaning by Electrical Cleaner Techspray and fitting fixing.	Do	Nos	60	470.001	28,200.060
13	Isolate Key Pad from VFD then testing cleaning by Electrical Cleaner techspray.	Do	Nos	60	530.001	31,800.060
14	Isolate CT Sensor from VFD then testing cleaning by Electrical Cleaner Techspray.	Do	Nos	60	480.001	28,800.060
15	Dismantling -discharging Electrolytic Capacitors from VFD then checking & cleaning by Electrical Cleaner Techspray.	Do	Nos	60	520.001	31,200.060

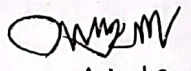
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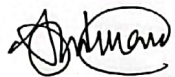
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16	Un-installation of Power board of VFD then testing cleaning by Electrical Cleaner Techspray.	Do	Nos	60	540.001	32,400.060
17	Disconnecting CT Set from VFD then cleaning by Electrical Cleaner Techspray.	Do	Nos	60	430.001	25,800.060
18	Dismantling DC Reactor from VFD then testing cleaning by Electrical Cleaner Techspray.	Do	Nos	60	600.001	36,000.060
19	Isolate PC**SED2 Set from VFD then testing & cleaning by Electrical Cleaner.	Do	Nos	60	480.001	28,800.060
20	Disconnecting TX-Open module from VFD then checking & cleaning by Electrical Cleaner.	Do	Nos	60	550.001	33,000.060
21	All VFD component/spare fitting and fixing in VFD Box.	Do	Nos	60	1,100.001	66,000.060
22	The complete VFD should be cleaned by electric hand blower machine.	Do	Job	120	750.001	90,000.120
Total(TK)=						892,801.380
Total in words (TK): Eight Lac Ninety Two Thousand Eight Hundred One Point Three Eight Zero Only.						


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 মোঃ আবুল হোসেন
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 এফ.এম. বিভাগ-১, ঢাকা ওয়াসা।


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 SK. Arif Rahman Jetu
 Executive Engineer
 F.M. Division-1, Dhaka WASA