

Schedule of work

Name of work: Re-winding of motor, overhauling of pumps and repairing of fire pump control panel, located in the fire pump house of IACS, Jadavpur.

SI No.	Item description	Quantity	Unit	Rate	Amount
1)	<p>Re-winding of the existing 55 KW motor</p> <p>(1) Dismantelling/stripping of the burntout winding from both stator and rotor slots. (2) Clean the slots. (3) Repairing of core and other internals (if required). (4) Check the rotor bars and end rings for any cracks and other abnormality and repairing of the same (if any) (5) Re-insulate the the slots with F-class insulation. (6) Re-winding of both stator and rotor with ISI standard electrolytic grade super enameled copper conductor with F-class insulation conforming to IS13730. The profile, shape and dimationof the manufactured coil shall be identical with the original coil. (7) The winding must be impregnated with two coats of baking type insulated vernish and heat treated, as required. (8) Paint the stator outer body with enamel paint. (9) End of the winding shall be brought to the terminal block with sleeve leads of proper size. (10) Replacement of terminal studs, terminal blocks etc., as required.</p>	1	Nos.		
	The above job includes warranty obligation to the bidder as per the terms of the NIT				
2)	<p>Replacement of cyllindrical roller bearing at DE side (NU-215) and Deep groove ball bearing at NDE side (6215) of the motor. Installation, alignment,coupling, testing and commissioning of the motor in the existing base.</p> <p>Make: SKF/FAG</p>	2	Nos.		
3)	<p>Supplying of 3.5 core 50 sq.mm PVC sheathed/XLPE insulated armoured aluminium power cable of 1.1 KV grade as per IS : 7098 (part-1) 1988.</p> <p>Make: Polycab/Gloster/KEI/Havells</p>	28	meters		
4)	<p>Laying and fixing of one number PVC insulated and PVC sheathed/XLPE power cable of 1.1 KV grade of following size on wall surface as required.</p> <p>a) Above 35 sq.mm. and upto 95 sq.mm.</p>	28	meters		
5)	<p>Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed/ XLPE aluminium conductor cable of 1.1 KV grade as required.</p> <p>a) 3.5 core 50 sq.mm</p>	8	nos.		
6)	<p>Removal of the pump from its installation base. Overhauling of pump includes cleaning and servicing of the shaft, impeller, bearing housing, shaft key etc. Replacement of bearings (if found damaged), bearing bush, oil seals, terminal gland, casing wear ring, mechanical seal and O-Rings etc. ,as required.</p>	2	Nos.		
7)	<p>Fabrication of star-delta starter which comprises of Star Contactor (1 No.): 3 pole, Coil voltage 415V,utilization category AC-3, rated operational current: 50A (MNX-50). Delta contactor(1 No.): 3 pole, Coil voltage 415V,utilization category AC-3, rated operational current: 70A (MNX-70) . Main contactor(1 No.): 3 pole, Coil voltage 415V,utilization category AC-3, rated operational current: 70A (MNX-70). Confirming to IS/IEC 60947-4-1 and IEC 60947-4-1. Timer (1 No.): Electronic star-delta type, having coil voltage: 220V AC , contact output:5A, Relay output: 1NO (star) 1NO(Delta), timing range 3-120s.Auxiliary transition contactor (1 No.): 3 pole, Coil voltage 415V,utilization category AC-3, (MX-0). The above job includes control wiring with suitable size (25 mm² / 1.5 mm²) FR-PVC insulated flexible copper conductor and ferrule marking, as required.</p> <p>Make: L&T MNX serise, as per Type-2 co-ordination</p>	1	set		
8)	<p>Supplying & fixing of following rating,breaking capacity,3 pole thermomagnetic release MCCB, suitable for motor starter application, with terminal spreader in existing panel board including drilling holes in the panel , making connection etc. complete as required.</p> <p>a) 120A, 65 KA</p> <p>Make: L&T DM or D-sine range</p>	1	No.		
9)	<p>Supplying and fixing of 3-pole thermal overload relay (MN-5) having range: 45-75A with in-built single phasing protection, manual and auto reset mode.</p> <p>Make: L&T MN serise, as per Type-2 co-ordination</p>	1	No.		
10)	<p>Supplying and fixing 150/5A, 5VA window type CT having accuracy class-1, as per IS: 1248.</p> <p>Make: Kappa,Meco, AE, L&T</p>	3	Nos.		

SI No.	Item description	Quantity	Unit	Rate	Amount								
11)	<p>Repairing retrofitting and painting of the existing LT panel:</p> <p>(1) Dismantelling of the existing compartmentalized LT panel (1770 mm X 457 mm X 1880 mm) from its base.</p> <p>(2) Removing of the busbar, switchgear and other accessories from the panel inside.</p> <p>(3) Replace the sheet metal (damaged portion only) with 2mm thick CRCA sheet steel (if required). This job includes cutting, grinding and fabrication of the sheet metal.</p> <p>(4)The whole panel assembly shall be properly de-greased, phosphated and painted with powder coated paint by seven tank method, as per IS 13871 (1993).</p> <p>(5) Re-install the bus-bar, switchgear and other panel accessories after thorough servicing.</p> <p>(6) Re-install the panel in its existing base including earthing and termination of the outgoing cables, as required.</p> <p>(7) Supply and fixing of new electrolytic grade hard drawn tinned plated copper bus-bar having diamention: 25 mm X 8mm X1050mm.</p> <p>(8) Supplying and fixing of minor components like fuse base, fuse carrier, insulator, PVC sleeving etc. as per requirement.</p>	1	set										
				Total									
Rupees.....only													
<p>NOTE:The quoted rate shall be inclusive of all taxes & duties, levies, cess etc i/c GST also. Nothing extra will be paid to the Contractor except the accepted rate.</p>													
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