

Name of Work :Supply ,erection, testing and commissioning of 80 HP Submerged centrifugal pump in verticle mounting 2 nos and allied equipments for Dhumkwadi Lift Irrigation Scheme , (Tarli Lift Irrigation Scheme Tal: Patan Dist. Satara.)

Item No	Description	Qty.	Per	Rate	Amount
1	Submerged centrifugal pump in verticle mounting (2 Nos): Providing & installing at site of works non elog type, complete with striner, suction bell column assembly discharge case/Discharge Tea, Flexibke coupling, base frame foundation, Guide raite etc.& giving test to full capacity 1.Discharge per pump - 252.8 m3/hr. 2. Head Range - 60 to 95 m 3. Max. Syn. RPM- 3000 4. Delivery pipe Dia. - 200mm 5 No of Max Stage - Single 6 Duty point Head-69.35 7. Motor kw-64	2	No		
2	Reflux Valve Providing & installing at site of works and testing of NRV with by pass arrangement , suitably designed to sustain water surges in the pipeline (Non-slam type characteristic) conforming to following specifications. Dia. =200mm, PN 1.6	2	No		
3	Butterfly Valve Providing & installing at site of works and testing double flanged butterfly valves conforming to relevant IS/BS 5155 with electric Actuator & inbuilt starters conforming to following specifications . Dia. =200mm, PN 1.6	2	No		
4	Kinetic air valve Providing & installing at site of works and testing KAV(with isolating sluice valve) of Dia. =40 mm, PN 1.6 for releasing air from delivery pipes.	2	No		
5	Dismantling joint : Providing & installing at site of works & testing of dismantling joints in pump delivery pipeline complete conforming to the following specifications. Dia. 200mm	2	No		

6	Delivry Pipeline : Providing & Jointing at site of works & testing Delivry Pipeline including jointing of all in between walves & to rising main/monifold complete suitable for following specifications as per IS 1239/5822 a) Diam : 200mm b) wall thickness :8mm c) Length: 30 Mtr for each pump	60	mtr		
7	L.T. Panel :Supplying and erecting L.T. Panel suitable for 64 kw x 2 nos of motors. In sheet metal enclosure incorporating, ACB, MCCB, CT, PT , MF meter, Ammeters, voltmeters, Selector switches, Phase indicatiing lamps , switch fuse unit with necessary material duly painted , type tested. [Refer RA (a)]	1	No		
8	Capacitor :Supplying and erecting bank of All Polypropylene condensers (APP type) with the standard capacities of 2,3,5,7,10,12.5 and 15 kVAR units of P.F. correction for operation on 3 phase 50 cycles 400/440V. (+10%) with externally discharging resistances, earthing terminals and built on angle iron or channel iron frame work and provided with terminal cover box complete erected on provided iron bracket or on floor duly tested by licensee. (for motors) 20 Kvar x 2 Nos = 40 Kvar	40	Kvar		
9	ATS starter - Providing erecting and giving test and trial of Fully Automatic, Auto Transformer Starter with Air Break Contactor, assembled locally with contactors of approved make in 14 SWG sheet steel fabricated, floor mounted type cubical panel, suitable for operation on 380 - 440 Volts, 3 Phase, 50 Hz, fitted with accessories as below. The incoming and outgoing cable end boxes shall be on either sides of main panel. The cable entries from auto transformer shall be totally enclosed in sheet metal. The starter shall have screened louvers on both sides.suitable for 64 Kw.motor 1) Oil Immersed ATS with 50%, 65%,80% tapping 2) ACB of AC 3 duty 3) Bimetallic overload relay, Timer,Master Timer 4) Ammeter with CTs & selector Switch 5) No volt coil 6) MPR solid state with CTs 6) Indication lamp 'ON' & 'OFF' Thermostate, door lock & control fuses. Starter for motor HP 120 HP (300/150/150)	2	Nos		

10	Cables : Supplying, erecting & terminating PVC aluminium cable suitable for 90 kw motor installed on floating barge . PVC cables for connecting panel to ATS & 20kvar capacitors with necessary control cables . along with 5.48 sq mm (12 SWG) G.I. earth wire complete erected with glands & lugs, on float/ wall/ trusses/pole or laid in provided trench/ pipe. [Refer RA (a)] with allied accessories i.e terminations , cable tray & supporters.	1	lot		
11	Earthing: Providing earthing with Galvanised cast iron earth plate with G.I. strip of required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joint required as per specification No size 60 x 60 x 0.6 cm complete with all materials, testing & recording the results as per specification. [Refer RA (a)]	1	No		
12	Spares & Tools: Manufacture will supply one spare pump with motor in all respect ready to install and standard tools for pumpset	1	Job		
13	Fire Fighting System: Adequate Fire Fighting System for total pump house as per fire norms Please specify items and the cost item wise.	1	Job		
14	Testing, Commissioning, trials and operation etc. for pumping machinery	30	days		

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