

INDIAN INSTITUTE OF TECHNOLOGY KANPUR
Dean of Infrastructure & Planning

NIT No.- QT/30-04-2024-03

N/W SITC of 02 x 1.5 tr Ceiling/wall type FCU (Modular) and annual servicing/ maintenance work of 07 x 2.0 tr FCU at SL-114 and SL-111

S. No.	Description	Qty	Unit	Rate	Amount
1	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled/condenser water piping plumbing i/c fabrication of bends / elbows, tees, reducers etc.) inside the building (with necessary clamps, wooden/puf support, vibration isolators, primer/ enamel paint, fittings but excluding valves, strainers, gauges etc.) as per specifications and as required complete in all respect. Note:- The Pipes of sizes 150mm & below shall be M.S. 'C' class as per IS : 1239 and pipes size above 150mm shall be welded black steel pipe heavy class as per IS: 3589 , from minimum 6.35mm thick M.S. Sheet for pipes upto 350 mm dia. and from minimum 7mm thick MS sheet for pipes of 400 mm dia and above.				
2	25 mm	6	Mtr		
3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes , having thermal stability for hot & cold-water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				
4	25 mm	6	Mtr		
5	Providing, laying & fixing of reinforce fiber flexible/soft PVC pipe of size given below etc. complete as reqd.				
6	20 mm	2	Mtr		

7	Cutting & dismantling of damaged and defective insulation , removing the thermocole , nitrile, PUF insulation or cladding from chilled water MS pipe line of size mentioned below including hessian cloth, wire mesh, sand, cement, plaster, cleaning of pipe including shifting /dispose the waste material outside the premises of I.I.T. K. campus or desired location as reqd..				
8	20 mm to 100 mm dia.	20	Mtr		
9	Cutting & dismantling of condenser / chilled water pipe line with grinder/welding machine/gas cutter for drain out the water from supply and return pipe line and making good after leakage repairing i/c re-filling of water in pipe line size from 20 mm to 400 mm dia. including isolation of defective pipeline, valve operation, testing & commissioning etc. as required.				
10	20 mm to 100 mm dia.	1	Job		
11	SITC of modular type Fan Coil Unit (floor/wall-mounted) , The unit shall be complete with grills, insulated enclosure, drain tray, comprising of blower, 2/3 speed motor with fan speed controller, 2/3 row copper coil section, washable filter section, 2 way motorized valve with actuator, and brass flair fitting for copper pipe connection, i/c all necessary support /hangers, vibration isolators etc. complete as reqd.				
12	1.5 TR	2	Nos		
13	Providing and fixing Digital type thermostat for FCUs/AHUs commissioning i/c dismantling old if any etc. complete as required	2	Nos		
14	Providing and fixing of brass ball valve with Y-strainer of following size with compatible to proportioning Copper/MS pipe i/c all necessary support/hangers and dismantling old of any complete as required				
15	20mm	2	nos		
16	Providing and fixing of Brass ball valve of following size with compatible to proportioning Copper/MS pipe i/c all necessary accessories, support/hangers, including old dismantling if any complete as reqd				
17	20mm	2	nos		
18	Providing and fixing of SS ball valve of following size with compatible to proportioning Copper/MS pipe i/c all necessary				

	accessories, support/hangers, including old dismantling if any complete as reqd				
19	20mm	2	nos		
20	Providing and fixing of Brass Air-Vent of following size with compatible Copper/MS pipe i/c all necessary accessories and dismantling old of any complete as reqd				
21	25mm	2	nos		
22	Providing and fixing of Single-Phase Plug top ISI marked for AC (FCU) unit etc i/c dismantling old plug top if any complete as required.				
23	3 pin- 6 Amp	2	nos		
24	Supply and fixing of copper piping 5/8" or 6/8" with 19 mm thick Class "O" Nitrile insulation on surface/recessed with flair nut, clamps etc. complete as required	4	mtr		
25	Providing and fixing of Thermal protecting layer (double coat) painting over exposed MS/copper pipe insulation outer surface with approved make chemical, shade and glass cloth as per standard specification complete as required				
26	20mm	4	mtr		
27	25mm	6	mtr		
28	32mm	10	mtr		
29	40mm	10	mtr		
30	Providing, laying, testing and commissioning of following size un-armoured ZLPE insulated Copper conductor power/control cable of following size on surface/recessed complete as required				
31	3 Core x 1.5 sq mm	12	mtr		
32	Supply and installation UPVC mini trunking (casing-capping) and flexible conduit of following size white-system with independent cover without central part etc. as reqd				
33	Flexi conduit 20mm	4	mtr		
34	UPVC trunking 20mm x 12mm	4	mtr		

35	Providing and fixing double scaffolding system (cup lock type) on the exterior side of building/structure, above ground level, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm dia M.S. tube, placed 1.5meter center to center, horizontal & vertical tubes joint with cup & lock system with M.S. Tubes, M.S. tube challis, M.S. clamps and staircase system in the scaffolding for working platform etc. complete as per directions and approval of Engineer-in-charge.	15	Sqm		
36	Dismantling of fan coil unit of Hi-wall/wall/floor mounted or ceiling suspended type up to 3.5 TR capacity including filter valves etc. Complete as required.	9	Nos		
37	Servicing , descaling , overhauling, testing and commissioning of FCU (wall/floor/ceiling mounted type) of following capacity including Dismantling, motor oiling , cleaning fans filter, descaling coil, valves and removing leakage, painting of rusted parts etc., as complete required.				
38	Upto 2.0 TR Capacity	8	Nos		
39	Installation testing& commissioning of FCU (Hi-Wall/Floor/Wall Mounted or ceiling suspended type of following size at new location including fastener, hangers, supports etc. complete as reqd. (Labour without supports)				
40	Up to 2.0 TR Capacity with accessories	8	Nos		
41	Rewinding of burnt single phase FCU fan motor of following capacity with material (i.e copper wire, varnish and associated insulation material) as per original design of standard manufacturer, including dismantling and refixing of motor with accessories in existing FCU along with connecting, testing and commissioning as reqd.				
42	Up to 2.0 TR Capacity	4	Nos		
43	Drain out with drain valves the water from supply & return pipe line and making good including isolation of defective pipeline, valve operation, re-filling of water in pipe line, testing & commissioning complete as required.				
44	20 mm to 100 mm dia.	1	Job		
45	Complete Overhauling , descaling , oiling and greasing of any type valve including dismantling, cleaning , refixing and replacement of defective strainer mesh (SS) with new one, gasket, nut, bolts, painting, welding work as required.				

46	Size up to 80 mm	2	Nos		
47	Providing, and fixing, testing & commissioning the Capacitor of following capacity in the existing FCU i/c all necessary accessories & dismantling old if any complete as reqd.				
48	4.0 mfd	4	Nos		
49	Supply & fixing , insulation on existing pipe overhead/underground of following size with 25 mm thick Aliminium faces nitril rubber /XLPE foam pipe section fixing with dentride and tightening of insulation section PVC tape to be wrapped all around the joints, of insulation etc complete as required .				
50	25 mm	4	Mtr		
51	32 mm	10	Mtr		
52	40 mm	10	Mtr		
	Sub Total				
	Add GST @				
	Total				



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