

**PONDICHERRY UNIVERSITY  
ELECTRICAL WING**

**SCHEDULE OF WORK**

**Name of Work:** Providing power supply to the Air conditioner units for the Faculty room, strengthening the incoming supply and replacing the damaged DB's in Science Block I & II at Pondicherry University.

Sl. No.	Description of Item	Qty.	Unit	Rate	Amount
1.	Supplying and fixing of following sizes of PVC conduit along with accessories in surface/recess conduit including cutting the wall and making good the same in case of recessed conduit as reqd. a. 20 mm b. 25 mm c. 32mm	150m 200m 130m	Mtr Mtr Mtr		
2.	Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface/recessed steel/ PVC conduit as required. a. 3 x 4 sq mm b. 6 x 4 sq mm c. 9 x 4 sq mm	200m 175m 130m	Mtr Mtr mtr		
3.	Providing and fixing cable management system of size 50mm x 50mm with suitable accessories such as couplers, end caps, cable retainer at an interval of 0.5 meter as required. make: MK / Legrend	100m	mtr		
4.	Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.	60nos	Each		
5.	Supplying, installation, testing and commissioning of surface/ recess mounting, following way, double door vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly phosphatized and powder painted, inclusive of 200 amps tinned copper busbar, common neutral link, earth bar, din bar for mounting MCB's, detachable gland/ knock out plate, and interconnections between incomer and busbars of following ways (but without incomer and MCB's) as reqd. (Legrend/Hager). 8 way MDS Cat no. 6077 51	10nos	Each		

6.	<p>Supplying and fixing following rating, 'C' series, miniature circuit breaker suitable for lighting and other loads in the existing MCB DB complete with connections, testing and commissioning etc. as reqd. (Legrand/Hager).</p> <p>a. 6 amp to 32 amp single pole MCB.</p> <p>b. 63 amp 3 pole MCB.</p> <p>c. 100amps 3 pole MCB</p> <p>d. Single pole blanking plate.</p>	130nos	Each		
7.	<p>Fabrication, supply, installation, testing and commissioning of MV compartmentalized Floor mounted front operated cubicle panel board, fabricated out of 2mm thick MS sheet steel, totally enclosed dust and vermin proof, suitable for operation on 3 phase 415 V, 4 wire AC supply system, with suitable busbar capacity, having suitable cable entry arrangement with detachable gland plate, duly powder coated, including supply and fixing the following switch gear, interconnection with suitable size aluminium strips/bar connections, suitable base frame earthing labeling etc with cable chamber, Aluminium busbar chamber conforming to section-4 of CPWD specification for Electrical work part IV substation 1982. etc., <b>including dismantling the old existing Panel boards and cables</b> complete as required. (size not less than 1800mm length x 300mm breath x 1700mm height). (switches <b>Make: L&amp;T</b>)</p> <p><b>A. Incoming</b></p> <p>a. 400A TPN/415V/50HZ SDFU with DIN type HRC fuses....1nos.</p> <p>b. Multi function digital VAF meter along with CTs. (Digital) make HPL.</p> <p>c. Phase indication lamps arrangement (LED type) with toggle switches and control fuses etc., –1set.</p> <p>d. Aluminium busbar size 80mm x 6mm.</p> <p><b>B. Outgoing</b></p> <p>a. 200 A TPN/415V/50HZ SDFU with DIN type HRC fuses....2nos.</p> <p>b. 125 A TPN/415V/50HZ SDFU with DIN type HRC fuses....6nos.</p> <p>c. G.I. Earth bus of suitable size with earth studs at both ends ...1no .</p> <p>d. MV danger notice plate .....2no. etc., as above</p>	1 job	job		

8.	<p>Supplying and fixing of following TPN/415/50HZ Switch Disconnected Fuse Unit with din type fuse in the existing panel board /Feeder pillar as required. Make L&amp;T, GE.</p> <p>a. 125A SDFU.</p> <p>b. 200A SDFU.</p> <p>c. 315A SDFU.</p>	5nos.	Each		
		1no.	Each		
		1no.	Each		
9.	<p>Supply of following size of XLPE insulated, sheathed armoured UG aluminium conductor power cable 1.1 KV grade as required. (make: Polycab, Havells)</p> <p>a. 4 x 25 sq mm.</p>	200m	mtr		
10.	<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. Upto 35 sq. mm (clamped with 1mm thick saddle)</p>	200m	mtr		
11.	<p>Supplying and making end termination with brass compress gland and aluminum lugs for following size of PVC insulated and PVC sheathed/XLPE alu conductor cable of 1.1kv grade as required.</p> <p>a. 4 x 25 sq mm.</p>	25nos	Each		
12.	<p>Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7metre long etc. with charcoal/ coke and salt as required.</p>	2set	2set		
13.	<p>Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt &amp; spring washer spaced at 50mm)</p>	25m	mtr		
14.	<p>Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.</p>	12m	mtr		
15.	<p>Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/coke and salt as required.</p>	8set.	set		

16.	Providing and fixing 4.00mm dia copper wire on surface/ in PVC pipe / in recess for loop earthing as required.	200m	mtr		
<b>TOTAL</b>					