

**Central Mechanical Engineering Research Institute, Durgapur**  
**Electrical Engineering Services Group**  
**Schedule**

**Name of the work : Provision of three phase power distribution through MCB DB for supply of power to the Slim line/Split Air Conditioners and wall mounted fans at Auditorium at CSIR-CMERI, Durgapur.**

S.No.	Description	Qty.	Unit	Rate (Rs)	Amount (Rs)
1	Supply of 1.1 KV grade, XLPE/ PVC insulated, PVC seathed, Aluminium conductor armoured power cables conforming to IS 7098 ( Part - 1) / IS 1554 ( Part - 1) and ISI marked/KEI/Polycab/Gloster of following sizes.				
a)	3 & 1/2 core 50 sq mm armoured cable.	100	Metre		
b)	3 & 1/2 core 70 sq mm armoured cable.	180	Metre		
c)	3 & 1/2 core 185 sq mm armoured cable.	160	Metre		
2	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.				
a)	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	280	Metre		
b)	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	160	Metre		
3	Supply & making end termination with brass compressor gland and aluminium lugs and other necessary materials and equipments for following sizes of 1.1 KV PVC insulated and PVC seathed /XLPE aluminium conductor armoured cables to the equipment complete as required.				
a)	3.5 X 70 sq mm cable.	10	each		
b)	3.5 X 50 sq mm cable.	6	each		
b)	3.5 X 185 sq mm cable.	10	each		
4	Wiring for circuit/submain wiring alongwith earth wire with the following size of FR PVC insulated, copper conductor, single core cable in one surface / recessed PVC conduit as required.				
a)	4 x 4 sq.mm. + 2x 4 sq.mm earth wire	900	Metre		

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S.No.	Description	Qty.	Unit	Rate (Rs)	Amount (Rs)
b)	2 x 2.5 sq.mm. + 1x 2.5 sq.mm earth wire	300	Metre		
c)	2 x 1.5 sq.mm. + 1x 1.5 sq.mm earth wire	350	Metre		
d)	2 x 4 sq.mm. + 1x 4 sq.mm earth wire	360	Metre		
5	Supplying and fixing of 6 way (DPX 160 + 18) VTPN MCCB DB (IP43 protection) with suitable cable end box for single/three phase Outgoing with provision for Four Pole DPX 125 Amps rating, 415V, Icu = 36kA, thermal magnetic as incomer and three pole / single pole outgoing with tinned copper busbar, neutral link, earth bar, din bar, detachable gland plate, interconnection including painting, earthing, connection, testing, commissioning etc as required. Incomer - Four Pole DPX 125 MCCB of 125 Amps rating, 415V, Icu = 36kA, thermal magnetic (Model No. 420096) -1No. Outgoing - three pole MCB of 32 Amps rating, 415V, C-curve 10kA, (Model No. 408658) -3 Nos, Single pole MCB of 32 Amps rating, 240V, C-curve 10kA, - 9 Nos. Legrand or equivalent.	1	Set		
6	Supplying and fixing of 8 way (DPX 160 + 24) TPN MCCB DB (IP43 protection) with suitable cable end box for single/three phase Outgoing with provision for Four Pole DPX 160 Amps rating, 415V, Icu = 36kA thermal magnetic as incomer and three pole / single pole outgoing with tinned copper busbar, neutral link, earth bar, din bar, detachable gland plate, interconnection including painting, earthing, connection, testing, commissioning etc as required. Incomer - Four Pole DPX 160 MCCB of 160 Amps rating, 415V, Icu = 36kA, thermal magnetic (Model No. 420097) -1No. Outgoing - three pole MCB of 32 Amps rating, 415V, C-curve 10kA, (Model No. 408658) -8 Nos, Legrand or equivalent.	3	Set		

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S.No.	Description	Qty.	Unit	Rate (Rs)	Amount (Rs)
7	Supplying and fixing of 4 Pole 32 Amps, MCB , C- Curve, 10 kA with suitable metal enclosure including painting, earthing, connection, testing, commissioning etc as required. Model No. 408699 for MCB and model no. 607884 for metal enclosure of Legrand or equivalent.	18	Nos.		
8	Supplying and fixing of DP, 32 Amps, MCB , C- Curve, 10 kA with suitable metal enclosure including painting, earthing, connection, testing, commissioning etc as required. Model No. 408699 for MCB and model no. 607884 for metal enclosure of Legrand or equivalent.	12	Nos.		
9	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/submain wiring/ cable as required.	450	Metre		
10	Supply and fixing of 160A, 415 V, 50HZ, TPN Switch Fuse Unit suitable for DIN/Bolted type HRC fuse-link with sheet steel enclosure and HRC fuse conform to IEC 60947-3, IS/IEC 60947-3 with door interlock & pad lock facility including drilling hole , welding and fixing angles etc. as required all complete. L & T make (Cat. No. SK95715) or equivalent.	2	Nos.		
11	Supply and fixing of 400A, 415 V, 50HZ, TPN Switch Fuse Unit suitable for DIN/Bolted type HRC fuse-link with sheet steel enclosure and HRC fuse conform to IEC 60947-3, IS/IEC 60947-3 with door interlock & pad lock facility including drilling hole , welding and fixing angles etc. as required all complete. L & T make (Cat. No. SK95515) or equivalent.	1	Nos.		
12	Supply and fixing of 400A, 415 V, 50HZ, On load Change over switch with sheet steel enclosure , suitable cable gland box and Flip able handle conform to IEC 60947-3, IS/IEC 60947-3 with door interlock & pad lock facility including drilling hole , welding and fixing angles etc. as required all complete. L & T make (Cat. No. CO44000OSOO) or equivalent.	1	Nos.		

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16.12.2016

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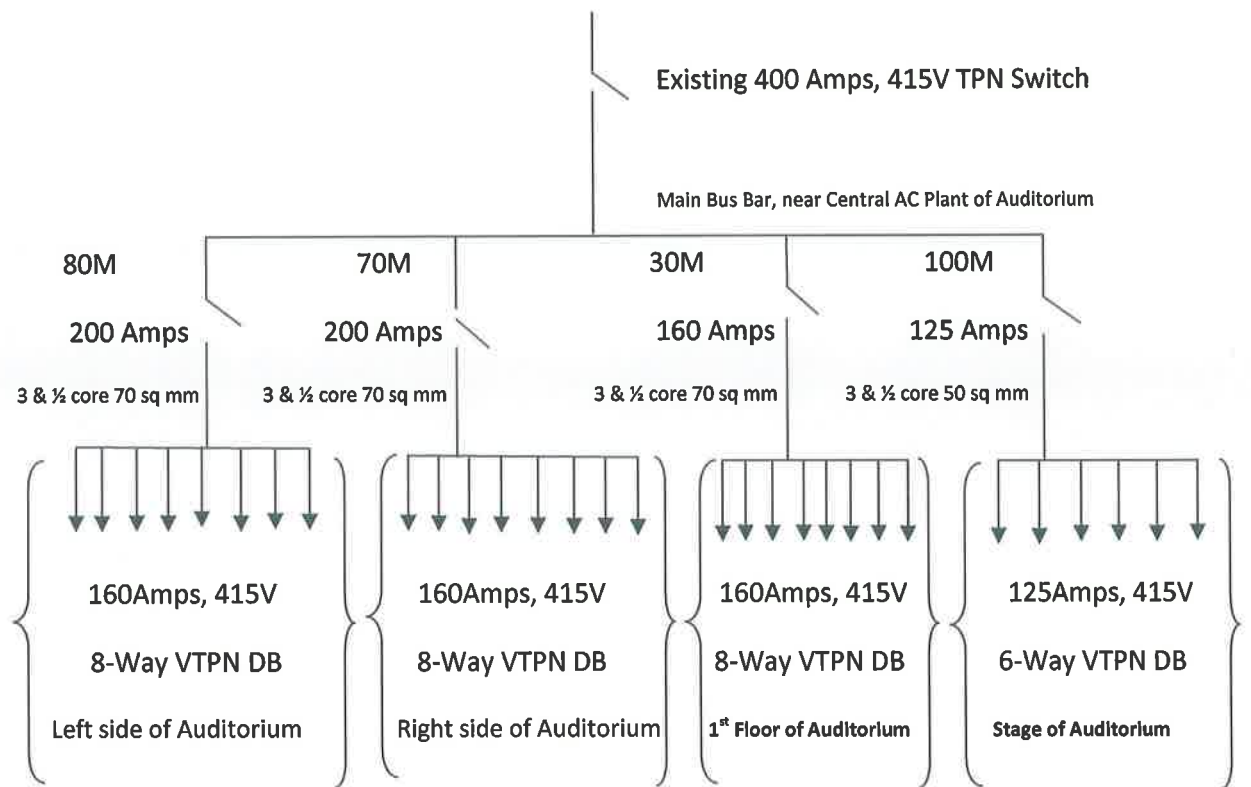
S.No.	Description	Qty.	Unit	Rate (Rs)	Amount (Rs)
13	Supplying and fixing of 8 way SPN MCB DB with metal door (IP43 protection) for single phase outgoing with provision for DP MCB 32 Amps as Incommer , neutral link, earth bar, din bar, detachable gland plate, interconnection including painting, earthing, connection, testing, commissioning etc as required. Incomer -DP MCB of 32 Amps rating, 230V, Icu= 10kA, C-Curve (Model No. 408617) -1No. Outgoing -SP MCB of 10-15 Amps rating, 230V, C-curve 10kA, (Model No. 408590)-6 Nos, Legrand or equivalent.	1	Set		
14	Supply and fixing of 18 inch/450 mm sweep, 230 Volt, 100-Watt, 1440 RPM , Wall Mounted Fan of USHA (Model -Dominaire ) or equivalent, Aerodynamically designed aluminum alloy single piece blades for high air delivery, Heavy duty motor performs well even at low voltage, Precision built oscillating mechanism with indexing option and 90° oscillation, Powder coated paint in metallic finish, protects fan from corrosion, connection, testing and commissioning , Performance conforms to IS 2997-1964 standard as	12	Set		
15	Earthing with G.I. earth pipe 4.5 mm long x 40 mm dia. Including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc (with charcoal or coke and salt) complete as required.	2	Set		
16	Dismantling/refixing all the unused electrical accessories, Switch board, cable, cable termination, SPN/TPN main switchs with SPN/TPN DB, and all SFU etc. The job inclusive of conseal the all electrical accessories at proposed area as per direction of Engg.-in-Charge.	1	Job		

**Total Amount**

*Q. An*  
*16/12/2018*

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Proposed Electrical Power Distribution for, Air Conditioning Load (80TR Slim Line) of Auditorium



*16-12-2016*