

## BILL OF QUANTITIES (Electrical)

Project Name :- RDPL, Jaipur

S. No.	Code No.	Description	Unit	Rate	Quantity	Amount
<b>Distribution Boxes</b>						
1	E061200	P&F recessed mounting heavy duty sheet steel End Box for distribution board duly phophatised powder coated complete as required.				
a	E061204	For TPN 12 way DB / all VTPN DB	Each		4	
2	E060500	P&F Recessed/ Surface mounting heavy duty horizontal type sheet steel Distribution board phophatised/ powder painted complete with suitable rating insulated copper bus bar, shorting link , neutral link, earth link and din bar,masking sheet, conforming to IS13032 & IS8623 including making internal DB terminations with copper lugs , testing etc. as required.				
	<b>E060530</b>	<b>Double door (single phase)</b>				
a	E060531	4 Way	Each		4	
b	E060533	8 Way	Each		10	
c	E060534	12 Way	Each		8	
3	E090600	SITC of quick make and quick break 3 pole current limiting MCCB having following current rating, short circuit breaking capacity at 440/415 V, 50 Hz; O/L & S/C settings and conforming to IS 60947-2 / IEC 60947-2 with front face and centralised adjustable, line load interchangeability, having positive isolation capability, provision for UVR , shunt trip , earth fault trip, push ( test ) to trip, including making connections with lugs & spreaders, etc. as required.				
b	E090613	up to 100 Amp , 25 kA, adjustable O/L & fixed S/C setting, lcs = 100 % Icu	Each		6	
4	E060100	P&F 240/415 V AC MCB with positive isolation of breaking capacity not less than 10 KA (B/ C/ D tripping characteristic) ISI marked IS 8828(1996)]/ conforming to IEC 60898 in existing board/sheets including making connections with lugs, testing etc. as required.				
a	E060112	6 A to 32 A rating SP	Each		120	
	<b>E060150</b>	<b>Triple pole &amp; neutral MCB</b>				
	E060151	6 A to 32 A rating			6	
b	E060152	40 A 63 A rating	Each		18	
5	E060400	P&F 240/415 V Residual current circuit breaker conforming to IS:12640:1988/ IEC 61008 on existing board/sheet including making connections with lugs, testing etc. as required				
	<b>E060410</b>	<b>Two pole 30 mA sensitivity</b>				
a	E060411	25 A rating	Each		6	
b	E060412	40 A rating	Each		12	
c	E060413	63A rating	Each		15	
6	E110100	P/Laying P.V.C. / XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor of IS:1554 P-I / IS :7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.				
	<b>E110106</b>	<b>25.0 Sq.mm</b>				
a	E110106	3.5 core	Mtr.		300	
7	E110200	P/Laying P.V.C. / XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with Copper conductor of IS:1554 P-I / IS :7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.				

b	E110205	10.0 Sq.mm (Armoured)			
	E110205C	4 core	Mtr.		600
8	E120400	Supplying and making end termination with heavy Copper lugs ( Pin / ring type ) duly crimped with crimping tool, PVC tape etc of following size.			
b	E120405	10.0 Sq.mm	Set		264
9	E040100	Supplying and drawing FR PVC insulated & unsheathed flexible copper conductor ISI marked (IS:694) of 1.1 kV grade and approved make in existing surface or recessed conduit/casing capping including making connections etc. as required. group-1			
a	E040108	2 x 2.5 sq. mm. + 1x1.5sqmm	Mtr.		2100
b	E040117	2 x 4.0 sq. mm. + 1 x 2.5 sq. mm.	Mtr.		900
10	E020400	S&F following sizes (dia.) of ISI marked medium duty PVC conduit along with accessories in surface / recessed using saddles, clamps, fastener as required including cutting the wall, covering conduit with Wire mesh and making good the same as required.			
a	E020405	50 mm	R. mtr.		300
11	E020400	S&F following sizes (dia.) of ISI marked medium duty PVC conduit along with accessories in surface / recessed using saddles, clamps, fastener as required including cutting the wall, covering conduit with Wire mesh and making good the same as required.			
a	E020401	20 mm	R. mtr.		1200
c	E020402	25 mm	R. mtr.		2400
<b>Sub Total (Earthing)</b>					
<b>Earthing</b>					
12	E150700	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required.			
a	E150713	25mm x 3mm G.I. ( Hot Dipped ) Strip	Mtr.		150
13	E040100	Supplying and drawing FR PVC insulated & unsheathed flexible copper conductor ISI marked (IS:694) of 1.1 kV grade and approved make in existing surface or recessed conduit/casing capping including making connections etc. as required. group-1			
d	E040126	1 x 16.0 sq.mm	Mtr.		300
<b>Sub Total (Earthing)</b>					
<b>Point Wiring &amp; Fixtures</b>					
14	E020500	Wiring of light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper conductor 1.1 kV grade and 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper earth conductor 1.1 kV grade (IS:694) of approved make in surface / recessed ISI marked medium duty PVC conduit & it's accessories, round tiles, Hot Dipped Galvanized Modular Box with earth terminal, screwless cage connectors for neutral looping in switch board & false ceiling point, 6 A Modular switch, Modular plate with grid plate, screws, making connections, testing etc. as required.			
a	E020501	Short point (up to 3 mtr.)	P. point		80
b	E020502	Medium point (up to 6 mtr.)	P. point		140
c	E020503	Long point (up to 10 mtr..)	P. point		302

15	E020700	Wiring of 3 pin 5 amp. Light plug point with 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper conductor 1.1 kV grade and 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper earth conductor 1.1 kV grade(IS:694) of approved make in surface / recessed ISI marked medium duty PVC conduit & it's accessories, Hot Dipped Galvanized M.S Modular box of 20 SWG with earth terminal, 6 A modular switch, 6 A modular socket, Modular plate with grid plate, screws, making connections, testing etc. as required.				
a	E020701	On board	P. point		154	
b	E020704	Long point (up to 10 mtr..)	P. point		40	
16	E190100	P & F strip type flourscent tube fitting fabricated from (CRCA sheet and finished with powder coating / stove enamelled paint)/(extruded non corrosive UV resist EP channel) complete with accessories (Low Loss Copper Choke, starter, starter seat) / Electronic Choke with terminal block duly prewired with copper conductor including making connection, testing etc. as required. (without tube)				
a	E190104	1 X 28 Watts with EB	Each		36	
b	E190732	Lamp 28 Watts	Each		36	
17	E191300	P & F of surface/ recess mounting CFL luminaire made from powder coated CRCA sheet with aluminium reflector assembly electrochemically brightened and anodized cross louvers, complete with accessories copper ballast, starter, holder, terminal block duly prewired with copper conductor including making connections, testing etc. as required (without lamp)				
	<b>E191310</b>	<b>Surface mounting</b>				
a	E191311	2 X PL-9/11 Watt	Each		268	
b		2 X PL-36 Watt	Each		94	
18	E191900	P & F two pin energy efficient compact flourscent lamp in existing holder/fixture as required.				
a	E191902	11 watt	Each		536	
b		36 watt	Each		188	
19	E191700	P & F 9/11/13/ Watt CFL mirror light with CRCA powder coated housing,diffuser,end covers,copper ballast,holder prewired upto terminal block including making connection testing etc. as required (without tube)	Each		30	
20	E191800	P & F energy efficient direct fit (Retrofit) composite compact flourscent lamp of energy saving labelling not less than 3 star and PF 0.8 in existing holder/ fixture as required.				
a	E191803	11/13 Watt	Each		30	
21	E200700	P & F IP-65 protected Wall mounted Bulk Head light fixture suitable for retrofit CFL / GLS lamp housing made from cast aluminium with suitably gasketed heat resistant prismatic glass cover, copper conductor including making connection testing etc. as required (without lamp)	Each			
a	E191903	1 X 13/18 Watt	Each		6	
22	E191900	P & F two pin energy efficient compact flourscent lamp in existing holder/fixture as required.				
a	E191903	13/18 watt	Each		6	
23	E170600	P & F 18 swg M.S. Recessed fan box, hexagonal/ round of size 130 mm dia, depth 75mm, 12 mm dia rod fan hook with 100 mm length extended on each side .	Each		96	
24	E170400	P & F double ball bearing capacitor start, aluminium body & blade ceiling fan with down rod up to 30 cm with 3 x 1.5 sq.mm pvc insulated flexible copper conductor making connection testing etc. as required.				
a	E170401	900 mm sweep	Each		6	
b	E170402	1050 mm sweep	Each		12	
c	E170403	1200 mm sweep	Each		25	
25	E073113	5 step fan regulator 2 Module	Each		64	
26	E171000	P&F of Heavy duty capacitor start, Double ball bearing 900/1400 RPM single phase ISI marked Exhaust fan,IS:2312 marked in existing opening including making connections testing etc. as required.				
	E171001	300 mm sweep(900/1400 RPM)	Each		18	

27	E071400	P & F IS:371 marked 6 amp surface type ceiling rose including making connection testing etc. as required.	Each		18	
28	E073100	Supplying and fixing 25amps, 240 volts, Modular power unit for AC and geyser having one no. 25 amp. switch & 1 no. 25 amp. 3 pin socket outlet & 4 module G.I. box on surface or in recess, complete with connection, testing & commissioning etc. as required. <b>Note :- Seperate modules for 1 No. 25 Amp. Switch (2 module) &amp; 1 No. 25 Amp. 3 Pin socket (2 Module) for points of split AC/geyser as per direction of engineer-in-charge shall be provided.</b>	Each		12	
29	E040800	Supplying and fixing of power plug point Modular accessories on hot dipped galvanized modular on surface or in recessed with suitable size of grid plate with cover plate including cost of modular 16 amp. Switch and socket outlet , making connection , testing , etc. as required.	Each		22	
30	E073600	P & F of Multiple socket with surge and spikes protection cartridge and minimum four nos. universal 6 A sockets, one 6 A switch and plug top including making connection etc as required.	Each		50	
<b>Sub Total (Point Wiring)</b>						
<b>Data &amp; Voice</b>						
31	E040300	Supplying and drawing PVC/ Polythene insulated and PVC sheathed unarmoured/ armoured telephone cable with 0.5 mm dia. Tinned / annealed copper conductor taped & confirming to ITD specification S/W S -113C of approved make in existing surface or recessed conduit/casing capping.				
	E040310	Unarmoured Telephone cable in existing surface or recessed conduit/casing capping.				
a	E040312	2 pair	Mtr.		1000	
b	E040314	4 pair	Mtr.		600	
32	E040700	P & F Krone module with base frame in the recess / surface made out of 16 SWG sheet steel box, front openable, having locking arrangements duly powder painted.,including dressing, ferruling and punching of telephone cable with krone tool etc. as required.				
a	E040702	20 Pairs	Each		4	
33	E050100	P & F 18 SWG Sheet steel boxes duly finished with two coats of red oxide and with earthing terminal of following sizes (nominal size) on surface or in recessed as required. (For Telephone Point)				
a	E050101	75mm x 75mm x 60mm	Each		32	
34	E071900	P & F ISI marked flush type single line telephone jack including making connection testing etc. as required.	Each		32	
35	E230100	Supply , Drawing and Testing of 4 pair, 24 AWG UTP Cat 6 Cable as per latest ammendments of TIA /EIA 568 B.2-1 Specifications in existing MS/PVC Conduits including making connections to Information outlets and Patch Panels with ferruling at both ends for identification with necessary tools for punching, stripping, crimping and testing required.	Mtr.		800	
<b>Sub Total (Data &amp; Voice)</b>						
<b>Cable &amp; Termination</b>						
36	E130100	P/Laying P.V.C. / XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor of IS:1554 P-I / IS :7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.				
	E110110	95.0 Sq.mm				
	E110110D	3.5 core	Mtr.		500	
37	E110114	240.0 Sq.mm				
	E110114D	3.5 core	Mtr.		80	
38	E130100	P & Laying XLPE insulated IS:7098/II/85 of Group1 and approved make H.T.cable for working voltage 11 K.V.Earthed direct in ground including excavation of 30cmx100cm size trench, 25cm layer of river sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection testing etc.as required of size.				
		3 core 240.0 Sq.mm	Mtr.		80	
39		Laying P.V.C. / XLPE insulated & P.V.C. sheathed cable of 1.1 KV grade with aluminium conductor of IS:1554 P-I / IS :7098 P - I of Group 1 of approved make in ground as per IS:1255 including excavation of 30cmx75cm size trench, 25 cm thick under layer of sand, IInd class bricks covering, refilling earth, compaction of earth, making necessary connection, testing etc. as required of size.				

	E110115	300.0 Sq.mm				
	E110115D	3.5 core	Mtr.		150	
40	E120100	Supplying and making one end termination with heavy duty single compression brass gland SIBG type, heavy duty aluminium lugs duly crimped with crimping tool, PVC tape etc for following size of Armoured PVC insulated & PVC sheathed/ XLPE aluminium conductor cable of 1100 volt grade as required of size.				
	E120134	3.5 x 300.0 sq.mm	Set		613	
		<b>Sub Total (Data &amp; Voice)</b>				
		<b>Grand Total</b>				