

BOQ of Electrical & Allied works for SBI SECTOR-8,DWARKA,NEW DELHI.

S.No.	DESCRIPTION OF WORKS	UNIT	QTY	RATE	AMOUNT
1	Wiring for light point/ fan point/ wall fan point/ exhaust fan/ light sockets etc. with 1.5 sq.mm. PVC insulated 1100 V Grade copper conductor (FRLS) wires & 1.5 sq.mm. copper earth wire in concealed/ surface using 16 SWG MS conduits, accessories such as bends, tees, saddles, draw boxes, mounting boxes, inner plates, cover plates, ceiling rose etc (wherever required) and chromium plates brass screws/ rowel plug etc. The circuit wiring starting from DB to point control box/ switch box using 2 X 2.5 sq.mm PVC insulated 1100 V grade multi- stranded copper conductor wire & 2.5 sq.mm. PVC insulated earth wire (color code to be used). (Flexible conduit/ elbow not allowed). The conduit to be laid in ceiling with proper clamps/ wall/ floor and filling the chase with cement mortar and finishing the same in original form/ wooden partition/ above false ceiling with proper clamps etc. all complete.				
	(Wherever required as per standard specifications).				
	i) Each circuit shall have independent earth wire.				
	ii) Each point shall be earthed.				
	iii) Circuit wiring is to be included in point wiring rates.				
i	One light points controlled by one 6 amp. Modular switch	Nos.	7.00		
ii	Two light points controlled by one 6 amp. Modular switch	Nos.	18.00		
iii	Three light points controlled by one 6 amp. Modular switch	Nos.	5.00		
iv	Four light points controlled by one 6 amp. Modular switch	Nos.	6.00		
v	Five light points controlled by one 6 amp. Modular switch	Nos.	5.00		
vi	One call bell point with ceiling rose/ 6amp. 3 pin socket controlled by one 6 amp. Push Modular switch. With call bell	Nos.	1.00		
vii	One wall fan/ exhaust fan point controlled by one 6 amp. Modular switch. The switch should be at switchboard level	Nos.	10.00		
viii	One 5 pin socket controlled by one 6 amp. Modular switch complete assembly includes plate box etc.				
a	Dependent	Nos.	5.00		
ix	One ceiling fan point with step type regulator	Nos.	1.00		

x	Same as serial no 1 but using 2*2.5 + 1*2.5 Sqmm Copper Conductor FRLS wires from DB to first 6A, 5 Pin modular socket controlled by one 6A switch and looped to the nearest second point with same 2*2.5 + 1*2.5 Sqmm copper conductor wires FRLS insulated 1100V grade.				
a	Primary	Nos.	5.00		
b	Secondary	Nos.	9.00		
xi	Same as serial no 1 but using 2*2.5 + 1*2.5 Sqmm Copper Conductor FRLS wires from DB to first 16 Amp MCB two Nos. , for Glow sign Board.				
a	Primary Point	Nos.	2.00		
2	POWER POINTS				
	Same as serial no.1, but wiring for 16 Amp, 6-pin sockets by using 2*4 sq.mm. PVC insulated 1100 V grade copper conductor wire with independent 1* 4.0 sq.mm earth wire from D.B. to first point 1 st socket and 1 st to 2 nd , socket with 2*2.5 sq.mm. and 1*2.5 earth wire including providing and fixing of 16 Amp, 6 -pin socket with 16 Amp. Switch. (Modular type switch/ socket/ plate etc. complete assembly).				
a)	Primary point	Nos.	4.00		
b)	Secondary point	Nos.	4.00		
3(a)	Same as serial no.1, but wiring for A/C socket by using 2*4 sq.mm. PVC insulated 1100 V grade copper conductor wire and earthing with 1*4.0 sq.mm. PVC insulated 1100 V grade copper conductor wire with modular type AC box(tiny trip type) with socket complete in all respects controlled by 25/32 A SP MCB to be provided near indoor unit. The point starts from DB to stabilizer to the point near the indoor unit including ter	Nos.	4.00		
3(b)	Same as serial no.1, but wiring for A/C socket by using 2*6 sq.mm. PVC insulated 1100 V grade copper conductor wire and earthing with 1*6.0 sq.mm. PVC insulated 1100 V grade copper conductor wire of weather proof type 2 way SPN DB complete in all respects controlled by with 32 Amp (10 KA) MCB to be provided near outdoor unit. The point starts from DB to the point near the outdoor unit. Item to also include termination lid between MCB and outdoor unit.	Nos.	2.00		

D. DISTRIBUTION BOARD					
	Supplying, installing, testing & commissioning of surface/ recessed mountings, Double door 415 volts TPN MCB distribution board of steel steel, 1.6mm thick dust phosphatized and painted, inclusive of 100 amps, tinned copper busbars, earthbar, common neutral link, din bar for mounting of MCB's detachable gland/ knock out plate & with built in loose wire boxl, and superior make terminal connectors for all incoming and outgoing circuits duly prewired with adequate size of PVC insulated copper wires between the bus bars and the MCB's as well as the incomer and upto the terminal connectors/ neutral link and ready for installation of following ways as required.				
	Use 'B' curve MCB's for lighting & small power circuits, 'C' curve for motor duty i.e. for pumps, AC motors, window and split AC's etc. & 'D' curve for UPS DB's i.e. for computers/ PC's circuit. Main incomer & outgoing circuit MCB's shall be selected accordingly i.e. type B,C & D. Contractor to select the MCB's accordingly as per the nature of the circuit/ load.				
	Each DB shall have separate neutral links of rating not less than 100A for each phase. The main incoming neutral link shall be in addition to three outgoing neutral links and shall be of 125 A				
	UPS DB's shall have a dedicated Earthing link fixed on insulated supports, which will be in addition to body earth link.				
	All internal inter connecting wiring with in the DB's shall be PVC insulated flexible copper conductor wires of adequate capacity as per the current rating.				
	Inside each DB, a DB chart is to be fixed.				
a	6-way TPN DB (LIGHT DB & 6 A raw point)	No.	1.00		
	Incomer:-				
	1 No. 40 Amp TPN (10 KA) MCB with 40 A DP RCCB (100 MA) each phase				
	Outgoing:-				
	12 Nos.10/20 Amp (10 KA) SP MCB				
b	6-way TPN DB (POWER DB)	No.	1.00		
	Incomer:-				
	1 No. 40 Amp TPN (10 KA) MCB with 40 A DP RCCB (100 MA) each phase				
	Outgoing:-				
	12 Nos.10/20 Amp (10 KA) SP MCB				
c	8-way SPN DB (UPS INPUT)	No.	1.00		
	Incomer:-				

	1 No. 63 Amp TPN				
	Outgoing:-				
	2 Nos.40 Amp DP MCB				
d	4-way V-TPN DB (AC)	No.	1.00		
	Incomer:-				
	1 No. 40 Amp TPN 4 Pole (16KA) MCCB				
	Outgoing:-				
	2 Nos. 32 Amp (10 KA) TP MCB				
	6 Nos. 32 Amp (10 KA) SP MCB				
e	2-way SPN DB with 40 A DP MCB (For UPS Input / output)	No.	2.00		
f	12-way SPN DB (For UPS OUTPUT)	No.	1.00		
	Incomer:-				
	1 No. 25 Amp DP (10 KA) MCB with 25 A DP RCCB (100 MA)				
	Outgoing:-				
	8 Nos.6/10/16 Amp (10 KA) SP MCB				
g	8-way SPN DB (For Elobby)	No.	2.00		
	Incomer:-				
	1 No. 25 Amp DP (10 KA) MCB with 25 A DP RCCB (100 MA)				
	Outgoing:-				
	4 Nos.6/10/16 Amp (10 KA) SP MCB				
E	(LIGHT FITTINGS & ACCESSORIES)				
	Supplying, installation with hanging support, testing and commissioning of following light fixtures with electronic Ballasts, Tubes, lamps, all fixing materials including connecting wires etc. all complete as per the directions of Engineer-in-charge (All LED Light Fixures should be covered with minimum 3 Years onsite replacement warranty)				
i	FULL GLOW 2 X 2 LED 36 W slim Smart Panel of make As specified in tender document or approved by SBI/ Architect.	Nos.	23.00		
ii	Supplying, fixing, testing and commissioning of 15/18 W LED commercial type down lighter of make As specified in tender document or approved by SBI/ Architect.	Nos.	43.00		
iii	Supplying, fixing, testing and commissioning of 20 W LED T 8 fitting make As specified in tender document or approved by SBI/ Architect.	Nos.	1.00		
iv	LED Strip for cove lighting 15 W per 5 M with driver and necessary installation supporting fittings of Led strip light (5 mtr.) make as specified in tender document or approved by SBI/ Architect	Nos.	40.00		
v	Supplying, fixing, testing and commissioning of 3/5 W LED commercial type down lighter of make As specified in tender document or approved by SBI/ Architect.	Nos.	25.00		

G.	MAIN PANEL AND METER BOARD				
1	supply, installation, testing and commissionings of cubicle type floor/wall mounted L.T. Metal D.B of reputed make with extendible rotary handle and extended connecting links				
	1 No. 125 Amps,TPN MCCB (25 KA) with standard enclosure as per manufacturer specification or as approved by the architect/Bank's Engineer	Nos.	1.00		
2	Designing, fabrication, supply, installation, testing and commissionings of front operated cubicle type compartmentalised, front access, free standing on 75MM "I" MS channel, dust and vermin proof (IP 42 degree protection) panel suitable for use at 415V, 3 phase, 4-wire 50Hz system suitable for fault level of required value symmetrical at 415V fabricated from 2 mm thick CRCA MS sheets with hinged, gasketted (Metal based neoprene) locable doors having structural reinforcement including 3 mm thick gland plates on top and bottom, lifting hooks, GI earth strip of required size with 2 nos earth terminals, 2 nos 230V AC operated 250 mm X 250 mm size axial fans for exhaust of heat with On-Off toggle switches including 2 coated primer and 2 power coated paint finish of approved shade over metal surface cleaned and treated with seven tank process complete with interconnections etc as per specifications as required.main panel board of approved make				
	Type of Approval as instructed by the SBI/ Architect). All live accessible parts shall be shrouded and all equipment shall be finger touch proof. The busbars insulation shall be with heat shrinkable sleeves SMC/ DMC shrouds and busbar supports shall be used. Padlocking facility shall be provided on all outgoing feeders doors and switch handles shall be locable in OFF position				
	Suitable arrangement shall be made for termination of multiple incoming cables.				
	All kA values indicated shall be Ics breaking capacity				
	GA drawings shall be got approved by Architect / SBI				
a.	Floor panel shall consists of : -				
	INCOMER FROM MAIN LINE				
	1 No. 125 Amps,TPN MCCB (25 KA) with extendible rotary handle each thermal over current, instantaneous, Short circuit release.Earth fault.				
	BUSBARS				

	150 amps TPN pole busbar chamber of suitable length with copper busbars. All busbars and interconnections shall be of suitable size copper strips.				
	INDICATING PANEL				
	Digital flush type class-1.0 accuracy multifunction meter showing V, A, PF etc. with 3 Nos. current transformers of 125/5A ratio, 10 VA Class-1.0 metering. - 1 sets				
	Red/Blue/Yellow three phase indicating lamps with SP MCB backup protection.				
	OUTGOINGS:-				
	2 Nos 40A TPN MCCB (16 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. For capacitor Bank AND AC VTPN,				
	INCOMER FROM MAIN PANEL BUS BAR				
	1no. 100 Amp 4P On Load Change over switch with 1 No. 100 Amps,TPN MCCB (25 KA) with extendible rotary handle each thermal over current, instantaneous, Short circuit release Earth fault.				
	BUSBARS				
	125 amps TPN pole busbar chamber of suitable length with copper busbars. All busbars and interconnections shall be of suitable size copper strips.				
	INDICATING PANEL				
	Digital flush type class-1.0 accuracy multifunction meter showing V, A, PF etc. with 3 Nos. current transformers of 100/5A ratio, 10 VA Class-1.0 metering. - 1 sets				
	Red/Blue/Yellow three phase indicating lamps with SP MCB backup protection.				
	OUTGOINGS:-				
	3 Nos 63A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For PDB,UPS, & SPARE)				
	1 Nos 40A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For LDB & SPARE)				
	1 Nos 40A DP MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For SIGNAGE)				
	The electrical panel as described above and specifications complete.	Set	1.00		

c	Supplying, installation, testing & commissioning of 15KVAR, APFC Panel autooperation and power factor should be nearing unity complete as required including all contactors, relays, inducting units etc. as required at site". Capacitor make: ABB/ Siemens/ Neptune/SELEC	Set	1.00		
	6 nos. of capacitor duty contactors				
	1 Nos. 5 KVAR MPP type heavy duty capacitor banks along with 1 Nos. 16A TP MCB of 10 KA service breaking capacity with heavy duty solid detachable neutral link				
	4 Nos. 2 KVAR MPP type heavy duty capacitor banks along with 4 Nos. 10A TP MCB of 10 KA service breaking capacity with heavy duty solid detachable neutral link				
	2 Nos. 1 KVAR MPP type heavy duty capacitor banks along with 2 Nos. 10A TP MCB of 10 KA service breaking capacity with heavy duty solid detachable neutral link				
H	PUBLIC ADDRESS SYSTEM				
1	Supply and laying Wiring of 1.5 sq mm twin core shielded type of speaker cable with Providing and fixing in position the following FRLS PVC conduits including all accessories concealed/exposed in F.Ceiling/Wall complete as required including 1.6/2.0 mm thick PVC junction or pull boxes with 3mm thick perspex sheet cover plate complete with 1.6 mm dia G.I. pull wires in the length of conduit. including all accessories.	RM	75.00		
2	Supply, installation, testing and commissioning of following Philips (BOSCH) make Music Accessories / Equipments.				
a.	Ceiling Speaker Unit 6 Watts	Nos.	5.00		
b	Power Amplifier, min 70 Watts with output transformer etc. complete. Plena Range/ Ahuja or as approved by the Bank capable of taking Inputs from USB Also.	Nos.	1.00		
	TOTAL FOR ELECTRICAL WORKS				
Note:- The rates quoted includes all other taxes , duties , loading, unloading , transportation, other expenses etc to site. only GST will be paid Extra					