BOQ FOR THE PROPOSED WORKS OF RENOVATION/INTERIOR/FURNISHING OF BRANCH FOR STATE BANK OF INDIA

BRANCH DETAIL:

DALY COLLEGE BRANCH, MUSAKHEDI, INDORE (M.P.) (RBO2)

PART-III: ELECTRICAL WORKS

I.No.	Description of items	Unit	Qty	in	INR
	·		,	Rate Rs	Amount Rs
(A)	ELECTRICAL WIRING WORK				
	Note: Use of Flexible conduits & Elbows in Circuit wiring is not allowed except in exceptional site conditions with the				
	approval of Bank's Engineer / Architect and All wiring laying				
	in the MS/PVC conduit strickle follow IE(Indian Electricity)				
	rules, IS code, follow in all items of project/ work execution.				
	Proper ferrules, lux, thimble, gland termination to be done				
	in all cabling & wiring from both load/source end. Conduit				
	carrying submain will not carry circuit/point wiring. Similarly				
	conduit carrying circuit wiring will not carry submain/point				
	wiring. Conduit carrying point wiring will not carry				
	submain/circuit wiring. All Electrical works				
	(Cabling/wiring/panel etc) to be carried out as per				
	layout/General Arrangement (GA)Drawing attached only.				
1	ELECTRICAL WIRING				
	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				
	(whereever 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 flling 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.				
а	One light points controlled by one 6 amp. Modular switch.	Nos.	31		
b	Two to Four light points controlled by one 6 amp. Modular	Nos	21		
	switch. One call bell point with ceiling rose/ 6amp. 3 pin socket	Nos	1		
I	controlled by one 6 amp. Push Modular switch. With call bell	1103			
	some one of one of amp. I don Ploudide Switch. With tall bell				
d	Celing fan point with one nos 6 amp switch and 2 module	Nos.	5		
	electronic regulator including wiring & ceiling rose				
6	One 5 pin socket controlled by one 6 amp. Modular switch	Nos	9		
l	complete assembly includes plate box etc. on same light	1100			
	switchhoard				
2	6 AMP. POINTS ON SEPARATE BOARD :				

T PI-	Description of items	IIm!t	Otre		TND
I.No.	Description of items	Unit	Qty		INR Amount Bo
<u> </u>	Complete corial no. 1 but write 2*2.5 x 4*2.5 C	<u> </u>	\vdash	Rate Rs	Amount Rs
a	Same as serial no 1 but using 2*2.5 + 1*2.5 Sqmm Copper	' l	I I	1	
] ,	Conductor FRLS wires from DB to first 6A, 5 Pin modular	' l	1		
ĺ ,	socket controlled by one 6A switch and looped to the nearest	' I	1	1	
1 ,	second point with same 2*2.5 + 1*2.5 Sqmm copper	' I	1		
[,	conductor wires FRLS insulated 1100V grade (max 3 points	' l	I I	1	
<u> </u>	per circuit).	<u> </u>	<u> </u>	1	
i)	Primary Point	Nos	12		
	Secondary Point looped	Nos		1	
	Power Wiring (6 / 16 AMP. POWER POINTS)	1105	1		
	Same as serial no.1, but wiring for 16 Amp, 6-pin sockets by		†	1	
1	using 2*4 sq.mm. PVC insulated 1100 V grade copper	' I	1	1	
1	conductor wire with independent 1* 4.0 sq.mm earth wire	' I	1	1	
	from D.B. to first point 1st socket and 1st to 2nd, socket	' l	1		
1		' I	1		
1	with 2*2.5 sq.mm. and 1*2.5 earth wire including providing	' I	1		
1 ,	and fixing of 16 Amp, 6 –pin socket with 16 Amp. Switch.	' l	I I	1	
1	(Modular type switch/ socket/ plate etc. complete assembly)	' l	1		
1	max 2 points per circuit.	' I	1		
	Primary Point	NI	13	·	
	Primary Point	Nos			
	Secondary Point looped	Nos	6		
4	AC/Geyser Point (Single Phase)		<u> </u>	1	
]	Same as serial no.1, but wiring for A/C socket by using 2*4	Nos	4		
]	sq.mm. PVC insulated 1100 V grade copper conductor wire	' l	1		
[·	and earthing with 1*4.0 sq.mm. PVC insulated 1100 V grade	' l	1	1	
[·	copper conductor wire with modular type AC box(tiny trip	' i	1	1	
[·	type) with socket complete in all respects controlled by	' l	1	1	
1	25/32 A SP MCB to be provided near indoor unit. The point	' I	1		
1	starts from DB to stabilizer to the point near the indoor unit	'	Į į	1	
1 ,	including top.	' l	I I	1	
L		ˈ i	<u> </u>	¹	
5	AC Point (Three Phase)		<u> </u>		
1	Same as serial no.1, but wiring for A/C socket by using 4*6	Nos	3		
ĺ ,	sq.mm. PVC insulated 1100 V grade copper conductor wire	' I	1	1	
ĺ ,	and earthing with 1*6.0 sq.mm. PVC insulated 1100 V grade	' I	1	1	
ĺ ,	copper conductor wire of weather proof type 4 way SPN DB	' I	1	1	
1 ,	complete in all respects controlled by with 40 Amp TPN (10)	' I	1		
] ,	KA) MCB to be provided near outdoor unit. The point starts	' I	1		
] ,	1	' I	1		
] ,	from DB to the point near the outdoor unit. (includes wires	' l	1		
] ,	for terminal connection of outdoor unit from TPN)	' l	1		
ļ			<u> </u>		
6	SPECIAL POINTS: (For Computers)			1	
] ,	Wiring with 2x2.5 sq.mm. + 1x2.5 sq.mm. PVC insulated	Nos	11	1	
1	1100 V grade multi stranded copper conductor wires in 2	' l	1	1	
1	mm thick PVC conduit from UPS DB to computer point. Each	' l	1	1	
1	point to have 3 nos. 6 amps. 5 pin modular type sockets,	' l	1	1	
1	one 6 amps modular swtich with all accessories, inner/ outer	' l	1	1	
] ,	plates, metal box etc. and to be fixed on wooden partitions/	' l	1	1	
] ,	by grouting on wall etc. as per requirement at site. The	' l	1	1	
] ,	switch should be fixed above the top of counter with	' l	1	1	
1 .	indicator and sockets under the counter	' l	1	1	
		' l	1		
] ,	b) Same as above but looped from the above 1st point to	' l	1		
	2nd , point and 2nd point to 3rd point. (Maximum 3 points	' I	1	1	
<u> </u>	in a circuit)	l	L		
i)	Primary Point	Nos	12	'	
	Secondary Point looped	Nos	6		
	CONDUITING FOR TELEPHONE, COMPUTER &		T	·	
	CONDUITING, WIRING FOR T.V. SYSTEM.	<u> </u>	<u> </u>		
7	TELEPHONE POINT		Ī		
				•	

I.No.	Description of items	Unit	Qty	in	INR
L			C-1	Rate Rs	Amount Rs
а	Wiring for VOICE from Jack Panel in data rack to computer workstation with Cat-6 voice cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type. This work includes supply and laying of CAT-6 cable in PVC conduits throughout the lenght, from the I/O hub to the point.	Nos	12		
	Supplying, laying, effecting terminations, testing and commissioning of 0.51 mm dia Cu. Conductor, twisted, colour coded with polythene capor barrier, telephone cables in the existing tray or in conduit including providing &fixing conduit pipe or cable tray as required from building tag block to the floor as required.				
	Supplying & fixing 20 pair krone tag block with enclosure.	Nos			
	P/L 10 Pair of PVC insulated PVC sheathed multi core jelly filled armored telephone.	Mtr	86		
8	COMPUTER NETWORKING				
а	Wiring for computer networking from Jack Panel in data rack to computer workstation with Cat-6 computer cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type, This work includes supply and laying of CAT-6 cable in PVC conduits throughout the length, from the I/O hub to the point.	Nos	24		
b	Supplying and fixing 9 U (Rack with glass door, opening in the front power panel 1 (horizontal), cable manager 1 lock & key).	Nos	1		
С	Supply, Installation, Testing & Commissioning of 16 port lack Panel.	Nos	2		
d	Providing and fixing Patch Panels 8 port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)	Nos	4		
е	Providing and fixing of flowing factory fabricated Patch cords. (DBPS Mounting Cord) (UTP/CAT 6 complete with connector on both side.)				
i)	Supplying and fixing Patch Cord-2 Meter- (DBPS Mounting Cord)	Nos.	24		
	Supplying and fixing Patch Cord-1 Meter- TV Point	Nos	24		
a	Supply and fixing of 1.6 mm thick G.I. Box along with RG 6	Nos	1		
b	T.V Co axial socket with Cover Plate. Supply, drawing, connecting, testing and commissioning of T.V Coaxial cable RG 6 in existing conduit.	R.Mtr	40		
	CABLES AND DISTRIBUTION BOARDS				
10	CABLES, MAINS & SUBMAINS Supplying all materials and laying/ pulling 1100 volts grade PVC insulated copper conductor wires (FRLS) in MS conduit with all fixing accessories after cutting the floor, wall and the like etc. and replastering the floor level to original. Conduit must be 30 mm below the floor finish level.				
i	3.5 X 70 Sq.mm XLPE. Al. armoured Cable (AC VTPN, BUS BARS & A.C. DB)/Main cable	Mtr	20		

I.No.	Description of items	Unit	Qty	in	INR
	-			Rate Rs	Amount Rs
ii	Supplying, laying, testing & commissioning of 4 C X 10 sq.mm. at 1100 volts grade PVC insulated copper conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification from <i>Main board to UPS Room</i>	Mtr	80		
III	Supplying, laying, testing & commissioning of 4 C X 25 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification <i>Pane to (POWER/UPS) DB</i>	Mtr	60		
iv	Supplying, laying, testing & commissioning of 4 C X 16 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification (<i>Light DB</i>).	Mtr	40		
v	Supplying, laying, testing & commissioning of 4 C x 50 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification <i>(Mains)</i> .	Mtr	30		
11	DISTRIBUTION BOARDS				
	Note:-The Panel shall be approved by The Bank Authority before Placing the Panel order, otherwise it will not considered				
	Supplying, installing, testing & commissiong 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 125.4				
	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.		 		
а	6-way TPN DB (LIGHT DB)	Set	1 1	•	

I.No.	. Description of items	Unit	Otv	in INR		
I T.NO.		Unit	Qty	Rate Rs	Amount Rs	
	1 No. 32 Amp TPN (10 KA) MCB with 40 A DP RCCB (100 MA) each			rate RS	Aniount KS	
	phase					
	Outgoing:-					
-	10-12 Nos.6/10/25 Amp (10 KA) SP MCB					
-	10 12 100.0/10/20 / timp (10 10 t) 01 Mid2					
b	4-way TPN DB (POWER DB)	Set	2			
-	Incomer:-	361				
	1 No. 63 Amp TPN (10 KA) MCB					
	Outgoing:-					
	10 Nos.16 Amp (10 KA) SP MCB					
	TO NOS. TO AITIP (TO KA) OF MICE					
	4-way V-TPN DB (LIGHT)	0.1				
С		Set	1			
	Incomer:-					
	1 No. 80 Amp 4 Pole (16 KA) MCCB					
	Outgoing:-					
	4No. 40 Amp (16 KA) TP MCB					
	5 Nos. 25 Amp (10 KA) SP MCB					
d	4-way TPN DB UPS ROOM	Set	1			
	Incomer:-					
	1 No. 63 Amp TPN (10 KA) MCB with 40 A DP RCCB (100 MA) each					
	phase					
	Outgoing:-					
	2Nos. 40 Amp (10 KA) DP MCB, For UPS outgoings tto individual					
	SDB					
	40 CDN DD (F UDO Cb DD)	0 .				
е	12-way SPN DB (For UPS Sub DB)	Set	2			
	Incomer:-					
	1 No. 40 Amp DP (10 KA) MCB with 25 A DP RCCB (100 MA)					
	Outgoing:-					
	8-10 Nos.6/10Amp (10 KA) SP MCB					
f	KIT KAT 200 AMP.	Set	1			
	Providing and fixing of Kit Kat Rewirable Porcelian fuse carrier &					
	base with wooden frame of 200 amp/415 Volt near meter box					
(D)	LICHT FITTINGS FANS CALL BELL					
	LIGHT FITTINGS, FANS, CALL BELL LIGHT FITTINGS & ACCESSORIES					
12	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).					
	LED LUMINARES:- 2' x2' (FULL GLOW TYPE)	Nos	22			
	LED light fittings (600 X600mm) dimension suitable for grid/gypsum	1403				
	ceiling complete with its electrionic driver as required per instruction					
	of Bank's Model No are as under:-					
	PHILIPS:- RC380B G2 LED 35S-6500 PSU OD WH LED					
13	(FULLGLOW)					
	WIPRO:- CRCO1ORO 38 HP57					
	HAVELLS:- LHECDIL7IL1W036 (Edge- Lit)					
	CG:- LCTAR3-40-CDL					
<u> </u>						

I.No.	Description of items	Unit	Qty	in I	NR
		J.114	~-1	Rate Rs	Amount Rs
14	LED DOWNLIGHTER (Recessed): 15 Watt, recessed mounted circular down lighter, 6" dimension with complete its electronic driver are as under:- PHILIPS:- GREENLED-DN193B LED-12S-6500 PSU WIPRO:- IRIS LED LD 71-121-XXX-50-XX HAVELLS:- LHEBJNP ZPZ 1W 015(ENDURA LOW DEPTH) CG:- LC DD-15-CDL,	Nos	6		
15	LED DOWNLIGHTER (Surface Mounted): 15 Watt, recessed mounted circular down lighter, 6" dimension with complete its electronic driver are as under:- PHILIPS:- GREENLED-DN193B LED-12S-6500 PSU WIPRO:- IRIS LED LD 71-121-XXX-50-XX HAVELLS:- LHEBJNP ZPZ 1W 015(ENDURA LOW DEPTH) CG:- LC DD-15-CDL,	Nos	6		
16	LED Spot Light, 3 Watt, 2/3" (Inches) size as per site requirment. PHILIPS, WIPRO, HAVELLS, CG	Nos	13		
17	LED 18 watt Tube Light 1200mm with all accessories.make As specified in tender document or approved by bank	Nos	6		
18	LED 9 watt Tube Light 600mm with all accessories.make As specified in tender document or approved by bank	Nos	3		
19	LED COVE / STRIP LIGHT WITH ITS ELECTRONIC DRIVER(BLUE COLOUR):- Supply, installation, testing and commissioning of bright LED strip light with its electronic driver complete as required. PHILIPS, WIPRO, HAVELLS, CG	Mtr	55		
20	BLDC (Brushless Direct Current) FANS FIVE STAR RATING Single phase heavy duty grease filled double ball bearing, aerodynamically designed heavy gauge aluminium blades, copper wounded and impregnated silicon stamping motors etc 1200 mm sweep, brilliant white CG/ USHA/ ORIENT/ HAVELLS				
i)	Ceiling Fan 1200mm dia	Nos	5		
ii)	Oscillating wall fan (Metallic Body) Sweep 400/450 mm , RPM 1300	Nos	6		
21	EXHAUST FAN:- Single phase, 300mm sweep, 900 rpm, metallic exhaust fan of the following single phase Exhaust fan continuously rated, capacitor start and run type, totally enclosed and ruggedly built, pre lubricated double ball bearing, copper wounded, A & E class insulation, dynamically balanced, below 40 db sound level etc, front cover with grill/gravity louver for protection purpose with 12 mm plywood complete in all respect make as under: CG/USHA/ORIENT/HAVELLS/ALMONARD/ALSTOM	Nos	3		
22	CALL BELL: Electronic Bell with battery backup, simple dingdong type, each unit to have a different sound.	Nos	1		
23	"S" TYPE M.S. FAN HOOKS:- Supplying & Fixing "S" Type Fan Hooks in Ceiling of R.C.C. Slab by Cutting, Chiseling & Making Good all the Damages with 1:4 Cement Sand Mortar wherever required, Painting, Cleaning the Site etc., as per Instructions of the Architect	Nos	5		

I.No.	Description of items	Unit	Qty	in INR			
			£.1	Rate Rs	Amount Rs		
	STEEL DOWN RODS:- Supply & Fixing of M.S. Down Rods up to 1.00Mt. length, wherever required, with necessary Ball Sockets, Anchor Fasteners etc., complete as per Instructions of the Architect.	Nos	5				
	Providing & fixing of "Digital Clock" /Digital Panel indicating Time, Day, Date, Temperature at outside of big size,(Ajanta - OLC- 1070) as suitable over the facade as advised by the Bank with standard power back up. Make:- Ajanta, Titan	Nos	1				
	EARTHING, MAIN PANEL, METER BOARD						
13	EARTHING SYSTEM						
	Supply, Installation, Testing and Commissioning of Maintenace Free Earthing system made up of copper-bonded rod of 10 feet length, 23 mm dia. (Minimum copper bonding shall be 0.25mm) along with Rod-to-Conductor connectors, Earth enhancement material, Pit Cover and other accessories as required and as per specification and other applicable codes (include chamber for earthing, Earthing certificate to be submitted along with the bill).	Nos	2				
	Supply, Installation, Testing and Commissioning of Maintenace Free Earthing system made up of GI rod of 10 feet length, 17.2 mm dia. along with Rod-to-Conductor connectors, Earth enhancement material, Pit Cover and other accessories as required and as per specification and other applicable codes (include chamber for earthing, Earthing certificate to be submitted along with the bill).	Nos	1				
	Providing and fixing of Copper/ GI strips in surface or in recess for loop earthing etc. as required.						
	Copper Strip 25 mm x 3 mm with proper clamps	Mtr.	10				
	G.I.Strip 25 X 5 mm Providing and fixing 2 X 8 SWG dia. Cu earth wire in PVC	Mtr Mtr.	40 30				
	conduit on surface or in recess for loop earthing along with the existing surface/ recess cable as required. (Dedicated Earthing for UPS output DB only)	I ∀I ŬF.	30				
14	MAIN PANEL AND METER BOARD						
	Designing, fabrication, supply, installation, testing and commissionings of front operated cubicle type compartmentalised, front access, free standing on 75MM "[" 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 2mm thick CRCA MS sheets with hinged, gaskettted (Metal based neoprene) locable doors having structural reinforcement including 3mm 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 250mm X 250mm size axial fans for exhaust of heat with On-Off toggle switches including 2 coated primer and 2 power coated paint fnish 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 (KRYPTON POWER CONTROLS/NEPTUNE/TRICOLITE/AMPTECH Or should be CPRI Approved.						

I.No.	Description of items	Unit	Qty	in INR	
1		Jiiit		Rate Rs	
	All live accessible parts shall be shrouded and all equipment		+	Rate Rs	Amount No
	shall be finger touch proof. The busbars insulation shall be				
1	withheat 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				
1	locable in OFF position.				
<u> </u>	·				
	Suitable arrangement shall be made for termination of				
<u> </u>	multiple incoming cables. All kA values indicated shall be Ics breaking capacity		+	+	<u> </u>
<u> </u>	GA drawings shall be got approved by SBI		+	+	
	Fabrication, supply, installation, testing and commissionings		+	+	<u> </u>
a	of cubicle type floor/wall mounted L.T. panel made out of 2				
] ,					
	mm thick CRCA sheet including connection, inter-connection				
	alongwith 4 strip aluminium busbar as per CPWD				
	specifications,(Part IV-Sub-station) etc. as required.(Meter Board)				
	Incoming :-		+	+	<u> </u>
 	i) 1no. 125 Amp 4P MCCB (25 KA) thermal over current,		+	+	<u> </u>
1	instantaneous, Short circuit realease, Earth fault.				
<u> </u>	,		+	_	1
1	ii) Busbar :-200 Amps 4P aluminum conductor bus bar				
	(BPTM type Heat-shrinkable busbar insulation) supported by				
	DMC / FRP insulators Space shall be provide for the BSES Meter		+	+	
—	Meter board shall be lockable.		+	+	<u> </u>
	Complete panel described as above.		+	+	<u> </u>
 	complete patier described as above.		+	+	
	Floor panel shall consists of :		+	+	
b.	Floor panel shall consists of : -		+	_	·
<u> </u>	INCOMER		+		ı -
1	1no. 125 Amp 4P On Load Change over switch with 1 No.				
1	125 Amps,TPN MCCB (25 KA) with extendeble rotary handle				
	each thermal over current, instantaneous, Short circuit				
	TO MOSEO ESEED ESHIP		1		
	BUSBARS		1		i
	125 amps TPN pole busbar chamber of suitable length with copper		 		
1	busbars. All busbars and interconnections shall be of suitable size				
L	copper strips.				<u></u> _
	INDICATING PANEL				
1	Digital flush type class-1.0 accuracy multifunction meter				
[,	showing V, A, PF etc. with 3 Nos. current transformers of				
1 ,	100/5A ratio, 10 VA Class-1.0 metering 1 sets				
 	Red/Green/Amber ON/OFF/TRIP indicating lamps with 2A SP		+	+	
] ,	MCB backup protection.				
	1 set of three phase indicating lamps along with 2A SP MCB		1		
L	backup protection.				<u> </u>
1	Restricted Earth fault relay with 3 Nos. current transformers		1		, -
1 ,	of 160/5 ratio, 15 VA Class 5P 10 (Numeric Relay not				
<u> </u>	required)		-		
] ,	Undervoltage, Overvoltage & phase reversal relay for				
[,	persisted voltage of 105-180% & 20-95% of rated voltage.				
	(Numeric Relay not required)		 		
	OUTGOINGS:-		†	+	
 	3 Nos 63A TPN MCCB (16 kA) for Power, Electrical & AC terminals		+	+	<u> </u>
] ,	suitable to receive cable on one side and wire connection to Bus				
1 ,	bars. For capacitor Bank AND AC VTPN,				
<u> </u>	'		+	_	
1 .	2 Nos 63A TPN MCB (10 kA) terminals suitable to receive				
] ,	cable on one side and wire connection to Bus bars. (For				
	ואוא וואי)				

Note:- The rates quoted includes all other taxes , duties , loading, unloading , transportation, other expenses etc to site. only GST will be paid Extra

I.No.	Description of items	Unit	Qty	in	INR
				Rate Rs	Amount Rs
	1 Nos 40A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For LDB)				
	2 Nos 40A DP MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars.				
	The electrical panel as described above and specifications complete.	Set	1		
	Supplying, installation, testing & commissioning of 12.5 KVAR, APFC Panel autooperation and power factor should be nearing unity complete as required inluding all contactors, relays, indivating units etc. as required at site". Capacitor make: L&T/ ABB/ Siemens/ Neptune	set	1		
	TOTAL OF ELECTRICAL WORKS			Rs	

IN WORDS Rs.