

# TENDER DOCUMENT

## ELECTRICAL WORKS

### AMADALAVALASA (1012) BRANCH

TENDER DOCUMENT ISSUED TO

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• **SPECIAL CONDITIONS OF CONTRACT**

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and the rates and amounts stated in the schedule of quantities and / or the schedule of rates and amounts which rates and amounts shall expect as otherwise provided cover all his obligations under the contract and all matters and things necessary for the proper completion of the work.

The Contractor shall provide at his own cost all materials (except such materials if any, as may in accordance with the contract be supplied by the employer) machinery, plant tools, appliances, implements, ladders, cordage, tackle, scaffolding, in fact everything necessary or proper for the proper execution of work, whether the same may or may not be particularly shown or inferred there from and if the contractor finds any discrepancy in the drawings, or between the drawings, schedule of quantities and specifications he shall immediately and in writing refer to the Bank who shall decide which is to be followed

The Contractor shall indemnify the Employer against all claims in respect of patent rights and shall defend all actions arising from such claims and shall himself pay all royalties, license fee, damage, cost and charges of all and every sort that may legitimately be incurred in respect thereof.

The employer is entitled to deduct all taxes and rates as per existing laws and rules from any moneys due or that may become due to the Contractor. The contractor shall indemnify the Employer from and against all claims, demands, proceedings, damages cost and expenses which may be brought or made against the Employer or to which if may be put by reason of the contractor not conforming to or complying with any of the provisions or requirements of any Act or sections, Central or State, Rules, Regulations, Bye-laws of local authorities Panchayat, Collector of any other companies relating to or in water, light or amenities at the site

The costs of the tests and of the materials and labour and equipment involved in the existing operations shall be borne by the contractor.

Work not to be sublet: The whole of the works included in the contract shall be executed by the contractor who shall not directly or indirectly transfer, assign or mutilate the contract or any part thereof or interest therein without the written consent of the employer and no undertaking shall relieve the contractor from the full and entire responsibility of the contract or from active superintendence of the works during their progress.

EMPLOYER CONTRACTOR

**Responsibility for safety of building:**

The contractor shall be responsible the safety of the works (including the materials, temporary buildings and plants) until they are taken over by the Employer and they shall stand at their risk and be in the sole charge of the contractor who shall be responsible for and must with all possible speed make good all damage from whatever cause.

**Insurance of the works** : The contractor shall within 7 days from the date of commencement of the works at his cost and keep them insured until one month after the works and taken over by the employer or three months after the date of completion whichever is earlier, against loss or damage by fire and usual risks other than fire against which insures generally provide cover in a CONTRACTOR'S ALL RISK POLICY, with Names of the Employer and Contractor (the name of the former being placed first in the policy), for the full amount of the contract. Such policy shall cover the property of the employer only and Consultant and surveyor's fees for assessing the claim and in connection with his services generally in reinstatement subcontractor or employee. The contractor shall deposit the policy and receipts for the premium paid with the Bank within a week of the date of commencement of the work unless otherwise instructed by the Bank on his behalf may be due or that may become due to the contractor.

The Contractor shall as soon as the claim under the Policy is settled, or the work reinstated by the insures should they elect to do so proceed with all due diligence with the completion of the works in the same manner as though the fine or other such risk had not occurred and in all respects under the same conditions of contract.

The contractor, in case of fire in the building or reinstatement after fire or other such usual risk shall be entitled to such extension of time for completion as decided by the Bank.

EMPLOYER CONTRACTOR

**APPENDIX TO CONDITIONS OF CONTRACT**

1. Name of the Work : ELECTRICAL & AC Works for AMADALAVALASA (01012) BRANCH

2. Estimated Cost : Rs. 8,46,903-00
3. Earnest Money Deposit ; Rs.8,500-00
4. Date of Commencement : Within three days from the date of acceptance of tender/date of handing over of the site.
5. Period of completion : 30 Days
6. Value of work to be taken for issue of interim certificate for payment : Rs.8,46,903-00
7. Retention money/Security Deposit : 5% of the bill amount including the EMD subject to a maximum of 5% of the final bill amount
8. Defect Liability period : 6 months from the date of completion
9. Refund of security deposit : After the expiry of defect liability period
10. Liquidated damages : ½% per week subject to maximum of 5% of the value of work done
11. Period of honouring final certificate : 45 days for payment
12. Deduction of income tax and S.T works : As per Central / State Government rules.

Contract Act etc.,

13. Date of Issue of tenders : **Opening date 23<sup>RD</sup> MAY 2017**

**Closing date 31<sup>ST</sup> MAY 2017 upto 5.00 PM**

14. Date of opening of tenders. : **at 05.30 PM**

15. For clarification and other details : **SHRI V VENKATESWARA RAO (RISK & COMPLIANCE)**

**Region IV, RBO, Srikakulam.**

**Mobile No. 9948661155**

**SHRI HARSHAVARDHAN, Manager (Electrical)**

**Administrative Office, VISAKHAPATNAM**

**Mobile No. 8885609576**

- **Preambles :**

1. The rates shall be inclusive of all axes, cost of materials, labour, scaffolding ladders, lifting of the materials etc.,
2. Bank will not take any responsibility to provide any material including water/electricity. However, contractor may use the available water/power supply without causing any inconvenience to the Bank functioning.
3. The contractor is expected to inspect the site before quoting the rates.
4. I.T & W.C.T as applicable will be deducted at source as per the rates prevalent at the time of payment of bill.
5. The work shall be completed within 30 days
6. All the debris shall be removed and transported to remote place outside the premises
7. Payment will be released only after completion of the work to the satisfaction of the Bank. However, interim bills will be considered subject to ceiling as mentioned in the appendix.
8. Defect liability period shall be 6 months from the date of completion of the work 5% of the bill amount will be with held as Security Deposit (including EMD) and will be released only after defects liability period completion (The Security deposit does not carry any interest).
9. The Contractor has to undertake repairs / rectifying the defects whatsoever during the defects liability period.

10. If the work is not completed in the specified time the contractor will be levied liquidated damages @  $\frac{1}{2}\%$  per week subject to a maximum of 5% of the contract amount.

11. The work has to be carried out in such a way that minimum inconvenience to the day-to-day-working of the branch.

BOQ FOR ELECTRICAL WORKS IN SBI AMADALAVALASA BRANCH					
No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	<b><u>DISTRIBUTION BOARDS</u></b>				-
	Supply installation and Commissioning of the following Switch Boards with required combination of MCBs.All MCB'S shall have breaking capacity of 10KA				-
1.01	Supply installation & Commissioning of handle operated 125A TPN REWIRABLE SWITCH FUSE UNIT with neutral link of suitable capacity & with all connections and hardware, in a suitable <b>fabricated</b> enclosure connecting the incomer cable from the pole of the APEPDCL to the incomer MCCB of VTPN-1, mounted on wall near the METER.	1	No		
1.02	3 phase 415V wall mount MCCB distribution Panel Board of IP43 as per IS 8623; with 150A Copper busbar for each phase & Neutral, 2 earth bars & cable ties for cable management, fully insulated busbar & neutral bar, door earthing, corner sheilds, masking sheet, revesible metal doors, pan assembly with Cable chamber,Phase indication LED bulbs for each phase; Digital Voltmeter with phase selector switch; Digital Ammeter, CT for each phase with phase selector switch; Incomer:125A FP MCCB,36kA, <b>with thermal magnetic release &amp; integreated earth leakage protection</b> Outgoing: 32A TP MCB-1 No for APFC PANEL 32A DP MCB'S - 7 No's for cassette AC, Split AC 100A FP MCCB - 1 No Location of DB : UPS Room	1	No		
1.03	12 way ETPN IP43 DB as per IS 8623 suitable for Flush & surface mounting; with 100A Copper busbar,with 2 neutral bars, 2 earth bars & cable ties for cable management,fully insulated busbar & neutral bar, door earthing, corner sheilds, masking sheet, revesible metal door, Pan assembly with Incomer from COS: 100A FP ISOLATOR & Outgoing; 6/10/16A SP MCB 24 Nos. 40/A SP MCB 2 No. for UPS 25A SP MCB-2 Nos. for BM/Server AC`s	1	No		
1.04	Supply and fixing of 63A FPMCB on a suitable metal box concealed in wall near COS.  For eCorner, ETPN	2	No		

2	<b><u>BRANCH UPS DB'S</u></b>				
2.01	Supply and fixing of 40A DPMCB on a suitable metal box concealed in wall near UPS for input power supply to UPS.	2	No		
2.02	2 + 4 way MCB single door UPS output DB ; Incomer :40A DP MCB - 1 No's &Outgoing : 20 A SP MCB 4 Nos. (fire alarm,spare & UPS sub DB'S-4) located at UPS room	2	No		
2.03	2 + 6 way MCB single door DB for UPS sockets Incomer :20A DP MCB &Outgoing : 6/10 A SP MCB 6 Nos located at counter & server room.	4	No		
3	<b><u>AC-POINTS &amp; WIRING</u></b>				
3.01	Supply and fixing of 20A DPMCB on a suitable metal box concealed in wall for power supply to 1tonn A/C units including all interconnections as required near the proposed AC locations at 4.5 ft from the floor level.(Legrand/Siemens/L&T)(Ac for SERVER,BM,CO)	3	No		
3.02	Supply and fixing of 25A DPMCB on a suitable metal box concealed in wall for power supply to 2 tonn Ac's including all interconnections as required near the proposed AC locations at 4.5 ft from the floor level.(Legrand/Siemens/L&T)	6	No		
3.03	AC Point wiring from VTPN to AC Points:Supply,laying & wiring with 2 runs of 4 Sq.mm 1100V grade PVC insulated Copper conductor multistrand wires along with one run of 2.5 Sq.mm copper earth wire run in suitable size 2 mm thick PVC CONDUIT run concealed on wall/ Ceiling with proper termination at both ends as required for the 1tonn/2tonn split/cassete AC's. Location of AC points shall be as per the drawing.sufficient length of the wires should be left after AC Point & shall be terminated using 3pole connectors for connecting the units.(Minimum 5mtrs wire after AC point to be considered)	9	Pts		
4	<b><u>ON LOAD CHANGE OVER SWITCH</u></b>				
4.01	Supply installation testing & commissioning of 125A,415V,50HZ FP ON LOAD CHANGE OVER SWITCH, front handle operated of approved make in suitable <b>fabricated</b> enclosure with provision for the service cable termination as required.	1	No		
5	<b><u>APEC PANEL</u></b>				
5.01	supply and installation of 25A TP MCB in a suitable metal box enclosure fixed on wall near CAPACITOR PANEL and Supply and Wiring with 3 runs of 4 Sq.mm 1100V grade PVC insulated Copper conductor multistrand wires along with one run of 2.5mm copper earth wire run in suitable size 2 mm thick PVC CONDUIT run concealed on wall/ Ceiling etc as required from VTPN-1 to CAPACITOR PANEL input DB. & from capacitor panel input DB to capacitor panel.	1	No		



5.02	Supply, installation , testing and commissioning of 10 KVAR APFC panel with suitable APFC relay of approved make, with following combination of capacitors (6+3+1)KVAR and with individual capacitor grade MCB controls .	1	No		
5.03	Note : All Capacitors shall be Delta connected and rated for 440V and of APP type, The Capacitors shall be provided in the Panel itself with proper ventilation arrangements.Panel to be installed at suitable location.Input to the panel should be taken from VTPN-1				
6	<b><u>SUB-MAIN WIRING</u></b>				
	Wiring has to be done only with <b>ISI marked</b> wires/cables of approved make.				
6.01	Supply and laying of 3.5 core <b>70</b> sq.mm 1100V grade PVC insulated aluminium conductor armoured cable along with 2 runs of 8SWG GI earth wire run on wall/ Ceiling as required. (From Incoming supply to SFU - Main DB)	70	mtr		
6.02	Supply and laying of <b>3.5</b> core 25 sq.mm 1100V grade PVC insulated <b>COPPER</b> conductor armoured cable along with 2 runs of 8SWG GI earth wire run on wall/ Ceiling as required. (From Main DB to COS to VTPN )	15	mtr		
6.03	Supply and Wiring with 4 runs of 16 Sq.mm 1100V grade PVC insulated Copper conductor multistrand wires along with one run of 2.5mm copper earth wire run in suitable size 2 mm thick PVC CONDUIT run concealed on wall/ Ceiling etc as required. From VTPN To ETPN To ECORNER	100	mtr		
6.04	Supply and Wiring with 2 runs of 6 Sq.mm 1100V grade PVC insulated Copper conductor multistrand wires along with one run of 2.5mm copper earth wire run in suitable size 2 mm thick PVC CONDUIT run concealed on wall/ Ceiling etc as required. From ETPN To 1Ph UPS;UPS unit To UPS O/P DB;	100	mtr		
6.05	Supply and Wiring with 2 runs of <b>4</b> Sq.mm 1100V grade PVC insulated Copper conductor multistrand wires along with one run of 2.5mm copper earth wire run in suitable size 2 mm thick PVC CONDUIT run concealed on wall/ Ceiling etc as required. (From UPS O/P DB To UPS SUB DB'S)	150	mtr		
6.06	Supplying and laying 3 runs of <b>2.5</b> Sq.mm 1100V grade PVC insulated unarmoured multistrand copper conductor cables along with one run of 12SWG GI earth wire in PVC pipes run on wall/ Ceiling etc as required. (for sign board )	30	mtr		
6.07	Termination of the above cable as required with suitable glands and lugs	8	sets		
7	<b><u>MODULAR SOCKETS:</u></b>				

7.01	Supply and fixing of 4nos. 6A sockets with 1 no 16A switch fixed on a suitable module metal box and white front plate (Modular type) including all interconnections as required with UPS power supply (Switch shall be fixed above the table with suitable modular front plate/box and sockets shall be fixed below the counters)	19	No		
7.02	Supply and fixing of 2nos. 6A sockets with 1 no 16A switch fixed on a suitable module metal box and white front plate (Modular type) including all interconnections as required with UPS power supply (for the SERVER) socket for the hub must be fixed as per the location of HUB inside the room.	3	No		
7.03	Supply and fixing of 1no. 16A sockets with 1 no 16A switch fixed on a suitable module metal box and white front plate (Modular type) including all interconnections as required (UPS SOCKETS IN HALL for ATM machines)	1	No		
7.04	Supply and fixing of 2nos. 6A sockets with 1 no 16A switch fixed on a suitable module metal box and white front plate (Modular type) including all interconnections as required with Rawpower supply(Switch shall be fixed above the table with suitable modular front plate/box and sockets shall be fixed below the counters)	19	No		
7.05	Supply and fixing of 1 nos. 6A socket with 1 no 6A switch fixed on a 3 module metal box and white front plate (Modular type) including all interconnections as required with UPS power supply (for TOKEN DISPLAY / TV)	4	No		
7.06	Supply and fixing of 1nos. 16A socket with 1 no 16A switch fixed on a 3 module metal box and white front plate (Modular type) including all interconnections as required with Raw power supply (outside safe room,Record room,Stationary room,locker room)	3	No		
7.07	Providing 2 meter length of flexible cable 3core 2.5sqmm multi core copper one end connected to plug top 15A and the other connected to the SB inside and a suitable hook arrangement as required (for safe room,Record room,Stationary room,locker room) for hanging the cable	3	No		
8	<b><u>LIGHT &amp; FAN POINT WIRING</u></b>				
8.01	Point wiring with 1.5sqmm 650V grade multistranded PVC insulated copper wire in MS/PVC PIPE for lights, fans including supply & fixing of 5 amp modular switch in concealed MS switch box,front plate, 3 plate ceiling rose, and concealed circuit wiring with 3 Nos (P,N,E) 2.5sqmm. and all interconnections as required.	64	pts		
8.02	same as above but for Extending/Looping the existing point in the hall as required for counters,hall,officer room from the LDB/PDB	15	pts		
8.03	Supply and installation of 6A modular socket with a 6A switch in the above modular switch boards.	10	No		

8.04	Same as item 6.1 but for call bell points including providing new buzzer for the Branch Manager cabin as required	1	No		
9	<b><u>UPS &amp; RAW POWER WIRING:</u></b>				
9.01	Cutting the floor to the required depth 2" and width 6" for burying the conduits for the UPS/raw power socket wiring and plastering the floor surface.	15	mtr		
9.02	Supplying and laying Medium grade PVC pipe in the above ducts for the LAN/telephone cabling	15	mtr		
9.03	Supply and wiring with 3runs of 2.5 sq.mm 1100 V grade PVC insulated multi strand copper conductor wires conforming to IS 694 (with latest amendments) in suitable size PVC CONDUIT of 2mm thick concealed in the above ducts in the floor and supply of all fixing materials and accessories, interconnections complete as required for the all UPS power sockets (for counters & officer tables).	27	sets		
9.04	Supply and wiring with 3runs of 2.5 sq.mm 1100 V grade PVC insulated multi strand copper conductor wires conforming to IS 694 (with latest amendments) in suitable size PVC CONDUIT of 2mm thick concealed in wall/floor and supply of all fixing materials and accessories, interconnections complete as required for the raw power sockets.	10	sets		
9.05	Same as above but Extension/looping with 3runs of 1.5 sq.mm 1100 V grade PVC insulated multi strand copper conductor wires conforming to IS 694 (with latest amendments) in suitable size PVC CONDUIT from the raw power primary sockets	9	sets		
10	<b><u>TELEPHONE POINTS &amp; WIRING</u></b>				
10.01	Supply and fixing of modular RJ11 telephone sockets with suitable mounting box (Modular type) including all interconnections as required. (Bm,officers,counter,reception,field officer,server room)	13	No		
10.02	Telephone Point wiring from krone box to RJ11:Supplying and laying of 2 pair 0.5 mm copper telephone wire in Modi make PVC casing capping / pipe concealed in ceiling/wall for the telephone points with termination at both ends.	13	pts		
10.03	Supplying and fixing a 10 pair krone connector in a suitable metal box concealed in wall.	2	job		
11	<b><u>FIXTURES/FANS</u></b>				
11.01	Supply and Installation of Direct/Indirect recess mounted luminaire Green square RC 170,Philps LED fixture (OR) Equivalent models in other approved makes with all inter connections and fixing arrangement as required.	15	No		
11.02	Supply and Installation of 1X15W LED downlighter fixtures 1200 lm ,4000K, recess mounted type of Philips or other approved make with all interconnections and fixing arrangement as required	28	No		

11.03	In the above mentioned downlights,there should be one downlight on UPS supply,in CO room,BM room,in public area & one near single window counters,ECORNER/ATM				
11.04	Supply and Installation of 1X28W T5 fixtures SURFACE type with all interconnections (Philips Vector or equivalent) and fixing arrangement as required	11	No		
11.05	Supply and Installation of 11W CFL Bulb & fixture with all interconnections of approved makes and fixing arrangements as required in Wash rooms.	3	No		
11.07	Supply and fixing of exhaust fan 40W metal mody with metal blades of 9" of approved make.	3	No		
11.08	Supply and installation of 100w 4/5 step type electronic fan regulator in the modular switch boards as required	5	No		
11.09	Supply and fixing of hi flow model 70W ceiling fan with sweep 1200 mm CG make with all connections and anchor fasteners ,fan hooks, down rods etc as required	5	No		
11.1	Supply and Fixing of wall mounted fans sweep 400 mm 50W Hi flow model CG make or equivalent (BM,counters,RMME, Public Space, co, )	18	No		
11.11	Wiring for the wall mounting fans from the nearest switch board with 1.5sqmm 650V grade multistranded PVC insulated copper wire in MS/PVC PIPE and all interconnections as required including the supply and fixing of 6A modular socket 3" below the false ceiling and 6A switch in the switchboard as required.	18	No		
12	<b><u>Earthing:</u></b>				
12.01	Providing Standard Copper Plate Earth Station with 600 X 600 X 3.15mm thick copper plate including construction of brick pedestal, providing meshed funnel, CI cover completely as per IS 3043-1987 or latest revision including suitable copper strip to be fixed in the UPS room for distribution.	1	No		
12.02	Providing Standard GI pipe Earth Station including construction of brick pedestal, providing meshed funnel, CI cover completely as per IS 3043-1987 or latest revision including suitable copper strip to be fixed in the UPS room for distribution.	1	No		
12.03	Supply and laying of 8SWG Cu insulated Wire in 20mm dia rigid pvc conduit for Raw power DB earthing from the existing earth pits.	60	mtr		
12.04	Supply and laying of 8SWG gI insulated Wire in 20mm dia rigid pvc conduit for ups DB earthing from the existing earth pits.	60	mtr		

	Contractor has to visit the site before quoting. Contractor has to properly label all the DB'S.No deviation from the tender is allowed, however as per site condition any minor deviation is allowed only after approval from the Engineer in charge.During inspection Contractor has to furnish catalogues of all the items used .Warranty certificates from OEM's has to be handed over to Branch Manager.	Please confirm			
	Execution of ceiling fans in place of wall fans on counters is left to the discretion of the Branch manager				
12.05	Removal and refixing of lights and fans		No		
12.06	Buy back of old unused electrical Items	1	LS		
	Total value of Electrical works				

#### APPROVED BRANDS

1	WIRES	LT/ RR CABLE/FINOLEX/HAVELLS/POLYCAB
2	MCCB	ABB/LT/SIEMENS/GE/MDS/CG
3	TPN SFU	ABB/GE/LT/CG
4	CHANGEOVER SWITCH	L&T/HPL/C&S
5	CABLES	CCI/UNIVERSAL/POLYCAB/HAVELLS/RALLISON
6	KITKAT	GECO/ANCHOR/KUNDAN
7	MS CONDUITS	GUPTA/BHARAT
8	PVC CONDUITS	PRECISION/SUDHAKAR
9	METAL CLAD SOCKETS	MDS SLEEK/SIEMENS/HAVELLS
10	LIGHT FIXTURE	PHILIPS/WIPRO/CG/BAJAJ/GE
11	CFL FIXTURES	PHILIPS/CG/GE/WIPRO/BAJAJ
12	CAPACITORS	L&T/ CROMPTON/ NEPTUNE DUCATI/ ASIAN
13	CEILING/WALL FANS	CROMPTON/ BAJAJ
14	CABLE GLANDS	SUNIL/HMI/BRACO/COMET
15	CABLE LUGS	DOWELL/3D
16	HRC FUSES/BASE	GE/ OR APPROVED MAKE
17	INDICATING METERS	AE/IMP/MECO/ENERCON
18	RELAYS	GE/TELEMECANIQUE/PROK DEVICES/
19	CT'S RESIN-CAST	KAPPA/IMP/AE/KALPA
20	SELECTOR SWITCHES	L&T/SIEMENS/KAYCEE
21	INDUSTRIAL EXHAUST FANS	CROMPTON/ GEC/ARMONALD / BAJAJ
22	CEILING/EXHAUST FANS	CROMPTON / BAJAJ
23	PVC CONDUITS	MODI/SUDHAKAR/VIP/PRECISION/ATUL
24	BUS BAR TAPING BOX	SIEMENS/SCHNEIDER/ABB
25	M S CONDUITS	BHARAT / ZINDAL
26	CASING / CAPPING	CLASSIC/ MODI
27	cables for run of mains	rr/polycab/finolex

Important: Please Tick (/) the make of materials considered in the Tender.