Subject: Temporary power connection for lab space projects.

Key words: Temporary power connection, lab space.

- 1. This internal memo is issued for standardising temporary power connection for lab space projects.
- 2. From the electric meter draw a cable of 25 to 50 sqmm to a VTPN. In case of open site install VTPN inside an electrical fibre box. Fix to an MS stand that is fixed into the ground with CC. Use 18mm cement board to fix the VTPN inside the electrical fibre box. The fibre box must be lockable.

Date: 31-10-2023

- 3. Once an RCC slab is casted shift /install VTPN at the ground floor level of the building.
- 4. From the VTPN draw separate cables to a 3 phase distribution board on each floor -16 sqmm 3.5 core armoured cable may be used.
- 5. On each floor install an industrial DB on a movable stand. Connect with 15 to 30 mtr long copper flexible cable 4 core- 4 sqmm.
- 6. Ensure that proper connection is given with lugs, glands, MCBs (3 or 4P), etc. Use electrical ties to fasten cable to stand, wall, floor, etc.
- 7. Provide industrial plugs/sockets to contractors they must connect their equipment using the same. DO NOT permit loose/open connections.
- 8. Consult MEP team in case of clarification.
- 9. Pumps must be connected to the VTPN either directly or through another distribution board (smaller capacity 4 way DB can be used).
- 10. Site lighting connection must be from VTPN.
- 11. Stands for lighting are available at SSLLP (Fig no. 20 of standard drawings). These stands must be used with 50 or 100W LED flood lights. DO NOT use pipes/ballies for providing temporary lighting. Use 2 sqmm aluminium service wire for connecting these lights.
 - 12. List of items to be used along with photographs are given under.

| Sl. | Description | Details of use | SKU no. | Appx. |
|-----|------------------------------|---|--|---------------------|
| No. | of item Distribution | Distribution box ensures that | ELEC9595-Electrical-DB TPN | Cost in Rs. 1,876/- |
| 1. | Box | electrical supply is distributed in the building | -3phase 4way-No's | 1,070/ |
| 2. | VTPN | Distribution box ensures that electrical supply is distributed in the building | ELEC8543-Electrical-VTPN 4pole 8 way-No's | 12,078/- |
| 3. | MCCB | When load current exceeds the limit of a miniature circuit breaker | ELEC7850-Electrical-MCCB-63A-No's | 3,592/- |
| 4. | Industrial DB Box | Circuits while providing a protective fuse or circuit breaker for each circuit in a common enclosure. | ELEC2829-Electrical- Industrial DB Box(4way)-No's | 2,891/- |
| 5. | Isolater | To connect an electrical component with 440V and rated with a 3 phase | ELEC8878-Electrical-Isolater- 4pole 40A-No's | 531/- |
| 6. | M/F Industrial socket & plug | High voltage and high current electrical power distribution purposes in industries | ELEC8362-Electrical-M/F Industrial socket & plug -16A 3pin | 165/- |
| 7. | Aluminum Armored cable | Wiring power grids including overhead power transmission lines, local power distribution lines | ELEC9471-Electrical- Aluminum Armored cable- 4core 25sqmm-Mtrs | 188/-per mtr |
| 8. | Aluminum Armored | Wiring power grids including overhead power transmission lines, | ELEC6940-Electrical- Aluminum Armored cable- | 154/-per mtr |

| | cable | local power distribution lines | 4core -16sqmm-Mtrs | |
|-----|----------------------------------|---|--|---|
| 9. | Flexible copper cable | Wiring power grids including overhead power transmission lines, local power distribution lines | ELEC4412-Electrical-Flexible copper cable 1.5sqmm-2core-Mtrs | 38/-per mtr |
| 10. | Flexible copper cable | Wiring power grids including overhead power transmission lines, local power distribution lines | ELEC6344-Electrical-Flexible copper cable 2.5sqmm-4core-Mtrs | 112/-per mtr |
| 11. | Flexible copper cable | Wiring power grids including overhead power transmission lines, local power distribution lines | ELEC2332-Electrical- Flexible copper cable 1sqmm-2core-Mtrs | 29/-per mtr |
| 12 | Flexible copper cable | Wiring power grids including overhead power transmission lines, local power distribution lines | ELEC8990-Electrical-Copper flexible cable - 4core-4sqmm-Mtrs | 172/per mtr |
| 13 | Al service wire | Wiring power grids including overhead power transmission lines, local power distribution lines | ELEC1392-Electrical-Al service wire 4mm south king-90mtrs-Bundle | 1475/-per bundle |
| 14 | Al service wire | Wiring power grids including overhead power transmission lines, local power distribution lines | ELEC8024-Electrical-Al service wire 2mm south king-90mtrs-Bundle | 2419/-per bundle |
| 15 | MS Stand with Industrial | To fix industrial DB | MS Stand with Industrial DB Box-No's | - |
| 16 | Fiber Box | It is used for protect DB from rain | ELEC2312-Electrical-Fiber Box-GSJB4537-450x350x225- No's | 2,301/- |
| 17 | Copper lugs | Large gauge applications for power draw or grounding | ELEC1689-Electrical-Copper lugs-pin type -2.5sqmm-No's | 1.8/- |
| 18 | Copper lugs | Large gauge applications for power draw or grounding | ELEC8807-Electrical-Copper lugs-pin type 16sqmm-No's | 6/- |
| 19 | RCCB | Ensuring protection against electric shock caused by indirect contacts. | ELEC5333-Electrical-RCCB-4 pole-40A 300mAh-All-No's | 2,531/- |
| 20 | Double compressio n cable glands | Armoured & UN-armoured cables, providing environmental seal for inner & outer sheath of cables | ELEC9867-Electrical-Double compression cable glands - 25mm-No's | 157/- |
| 21 | Cable Ties | Holding items together, primarily electrical cables and wires | ELEC4005-Electrical-Cable Ties 150mm-Pkts | 89/-per packet(100 pcs per packet) |
| 22 | Aluminium lugs | Join cables and electrical equipment | ELEC3840-Electrical-Aluminium lugs-Ring Type-120SqmmNo's | 11/-each |
| 23 | Aluminium lugs | Join cables and electrical equipment | ELEC9111-Electrical-Aluminium lugs-Ring type-240Sqmm-Nos. | 33/-each |
| 24 | GI Base saddle | GI Saddle with base used for holding pipes& other components. Since they are rust resistance optimum finish and construction. | ELEC8660-Electrical-GI Base saddle 25mm-Boxes | 354/-per box(72pcs per box) |
| 25 | MCB | For the safety and efficient function of electric machines & use for industrial / domestic purpose, To check & protect the connection | ELEC7266-Electrical-MCB16amps-No's | 65/- |

| 26 | LED Flood | Improving your workplace and | ELEC6666-Electrical-LED Flood | 1,605/- |
|----|-------------|---------------------------------------|-------------------------------|---------|
| | Light | business security | Light 6500K-Wipro-D913065- | |
| | | | 50W-Nos. | |
| 27 | LED Tube | Improving your workplace and | ELEC1988-Electrical-LED Tube | 224/- |
| | Light | business security | Light 6500K-Wipro-D532065- | |
| | | | 1200mmx20W-Nos. | |
| 28 | Change Over | Transition from the main source of | ELEC1825-Electrcal-Change | 5,614/- |
| | Switch | electrical supply to the generator or | Over Switch Manual -63A 4P- | , |
| | Manual | an alternate source | Nos. | |
| | | | | |

Soham Modi



ATypical Picture Showing MS Stand with Industrial DB Box As Installed



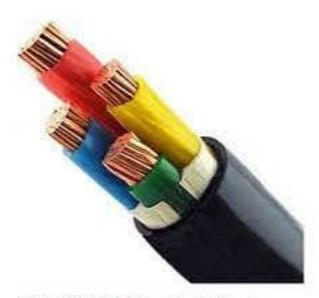
ELEC8543-Electrical-VTPN 4pole 8 way-No's



ELEC4412-Electrical-Flexible copper cable 1.5sqmm-2core-Mtrs



ELEC8990-Electrical-Copper flexible cable - 4core-4sqmm-Mtrs



ELEC9471-Electrical-Aluminum Armored cable-4core 25sqmm-



ELEC1988-Electrical-LED Tube Light 6500K-Wipro-D532065-1200mmx20W-Nos.



ELEC1392-Electrical-Al service wire 4mm south king-90mtrs-Bundle



ELEC6940-Electrical-Aluminum Armored cable-4core -16sqmm-



hugs-50sqmm-No's ELEC9069-Electrical- Aluminium



ELEC8660-Electrical -GI Base saddle 25mm-Boxes



ELEC4005-Cable Ties 150mm-Pkts



ELEC1825-Electrcal-Change Over Switch Manual -63A 4P-Nos.



ELEC1689-Electrical-Copper lugs-pin type -2.5sqmm-No's





ELEC9595-Electrical-DB TPN -3phase 4way-No's



ELEC2312-Electrical-Fiber Box-GSJB4537-450x350x225-No's



ELEC6666-Electrical-LED Flood Light 6500K-Wipro-D913065-50W-Nos.



ELEC9867-Electrical-Double compression glands-25mm-No's





ELEC8878-Electrical-Isolater-4pole 40A-No's



ELEC7266-Electrical-MCB-16Amps-No's



ELEC7850-Electrical-MCCB-63A-No's



ELEC8362-Electrical-M/F Industrial socket & plug -16A 3pin-No's



ELEC5333-Electrical-RCCB-4 pole-40A 300mAh-All-No's