

1.0 LOW VOLTAGE SWITCHGEAR

1.1 Scope of Works

The work under this section consists of manufacturing, fabricating, supplying, testing and installation of all material and services of the complete Low Voltage LV Distribution Panels as specified herein, shown on the Single Line Drawings and stated in the Bill of Quantities.

The Contractor shall discuss the electrical layout with the Engineer and co-ordinate at site with other services for exact location and position of the each LV Distribution Panel.

The Low Voltage Distribution Panel with accessories shall also comply with the General specifications for Electrical Works, section - 01 and with other relevant provisions of the Tender Document.

The Low Voltage Distribution Panel shall be sheet steel fabricated suitable for floor standing /surface mounted / recessed totally enclosed, dust and damp proof. It shall be complete in all respect with material and accessories, factory assembled, tested and finished according to the Specifications and to the standard requirements.

The Low Voltage Distribution Panel shall be front operation type and shall:

- have a rated service short circuit breaking capacity, as per IEC 60947-2 unless stated otherwise on the drawings / in the BOQ.
- be suitable for 400 Volts, 3 phase 4 wire, 50 Hz system.
- be designed for flush mounting of all instruments on the front side.
- have incoming and outgoing cable termination arrangement, terminal block/line up terminals.
- be provided with stainless steel name plate on the front side of door and wiring diagram on inside of door.
- have all incoming and outgoing connections from top or bottom according to site requirements or as approved on shop drawings.
- have door grounded by flexible braided copper strip.
- have wiring diagram in the pocket inside the door of Distribution Panel.
- All the components used in the Distribution panel shall be type tested.

1.2 Applicable Standards / Codes

The latest editions of the following standards and codes shall be applicable for the materials specified within the scope for this section:

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| IEC 51 | - | Direct setting electrical measuring instruments |
| IEC 73 | - | Colours for indicator lights and push buttons |
| IEC 947-2 | - | Low voltage switchgear and control gear |
| IEC 439-1 | - | Low Voltage Switchgear and Control gear Assemblies. |
| BS 387 1 | - | Miniature & Moulded Case Circuit Breakers |
| BS 88 | - | HRC fuses |
| BS 89/90 | - | Ammeters and Voltmeters |
| BS 3938 | - | Low voltage current transformers |
| BS 1432 | - | Bus Bars |