

rigid and satisfactory manner. Exposed boxes shall be secured by at least 2 dowels

Junction Boxes for Power & Control Cables for Pumps

- A. A GRP enclosure of minimum 5.0 mm thickness measuring 1000 mm (Height) x 1000 mm (Width) x 300 mm (Depth) on suitable RCC foundation shall be provided near the wet well to serve as junction box for the power and control cables for pumps / other equipment for isolation of power and controls/ease of maintenance. The enclosure shall be manufactured from UV resistant material and shall be IP class 67, the enclosure shall be vertically divided in three portions, upper portion of 200 mm with separate door for installation of emergency switches for pumps, middle portion of 600 mm for isolation of power and controls, lower portion of 200 mm with front separate opening for accommodations of cables and glands. The enclosure shall be divided horizontally into two portion, one portion for termination of power cables and other for control cables. Suitable sizes of terminals as per load of pumps and other power loads shall be provided and fixed for cables from MCC and from pumps etc. An earth bus bar of suitable cross-section at the bottom of enclosure shall be provided and shall be earthed with two independent PVC insulated earth conductor of 70 sq mm dia connected with the main earth busbar of Motor Control Centre. If the distance between MCC and junction box is more than 30 meters, two independent earth electrodes shall be provided instead of earth continuity conductor of 70 sq mm from MCC.
- B. All the outgoing earth connections to pumps, munchers etc. shall be connected to this earth bus bar.
- C. Terminals for all cores of control cables including spare cores shall also be provided and terminated on the terminals.
- D. Termination for power and control cables shall be done at the bottom through suitable sizes and type of cable glands. Individual gland plates of suitable size as per gland size shall be provided at the bottom of enclosure. Connection to the terminals shall be through cable lugs.
- E. The enclosure shall have three doors one for each portion with suitable locking arrangement, In the middle a handle with cylindrical lock open able with Master Key shall be provided.