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| **Title:** | Modern Electrical Design and Installation of Equipment of High Rise Building Using Proposed Busbar Trunking and Fault Analysis System for the Perspective of Bangladesh | | |
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| **Abstract:** |  |
| In this research work, for establishing a modern electrical design and installation of equipment of high rise building two new appliances have been proposed. The first one is usage of busbar trunking (BBT) system for main distribution line  instead of conventional wiring system to provide much higher protection, easier installation process, reduce cost, time, space, and maintenance management. The second one is continuous fault analysis and monitoring using SICAM Q100 device which is the updated process to make sure more safety for monitoring  power quality to acquire, visualize, analyze, and transmit measured electrical variables such as AC current, AC voltage, frequency, power, harmonics, etc. The measured variables can be output to a computer or control center via communication interfaces or shown on a display. Total electrical drawing has  been drawn in AutoCAD. An entire substation for the high-rise building has been designed, according calculated load of the building. For protection of the building proper rated MCB and MCCB has been installed according to the load. To avoid fire hazard, fire detection and alarm system with immediate water  supply has been installed in this building. Entire electrical connection has been designed based on Bangladesh National Building Code- 2014 (BNBC). | |