

DUBAI ELECTRICITY & WATER AUTHORITY REGULATIONS FOR ELECTRICAL INSTALLATIONS

SECTION-1 GENERAL REQUIREMENTS

1.1 SCOPE

The regulations apply to the requirements of design, erection, inspection and testing of all electrical installations within premises and any additions, alterations to the existing buildings and installations therein, in the Emirate of Dubai. The premises covers the land and all facilities including buildings belonging to it.

Installations, wherein construction of high voltage substation/s is required, shall be referred to DEWA at the preliminary design stage for incorporating any specific requirements other than referred under section 11 of this regulation.

The regulations are not intended to take the place of a detailed specification or to instruct untrained persons or to provide for every circumstance. Where a difficult or special situation arises which is not covered or allowed for in the regulations, DEWA may be sought to obtain specific advice.

1.2 ELECTRIC SUPPLY

The nominal electric supply voltage from DEWA (IEC 60038) is 230 / 400V \pm 10%, 50 HZ, 3-phase, 4-wire with separate neutral and protective conductor (generally metallic armour of the DEWA service cable). The neutral is solidly earthed at DEWA's substations and shall not be earthed elsewhere in the consumers' electrical installations. The design fault level within the substation is 40 kA (fault duration 1-sec), except for fuse protected equipment / circuit.

All equipment, apparatus, materials and accessories used in the electrical installations shall be designed and rated for operation on this electric supply. Appropriate protective devices against over voltages, fluctuations, transients & harmonics, loss of one or more phases and any unforeseen interruptions shall be provided in all consumer installations as deemed essential, in addition to overload, short-circuit and earth leakage protective devices.

1.3 AMBIENT CONDITIONS

All equipment, apparatus, materials and accessories used in the electrical installations shall be suitable for the purpose intended and capable of operating with satisfactory performance in the climatic conditions of Emirate of Dubai which are as follows