

cables and shall co-ordinate with ADDC for the survey of power supply, preparation of estimates, installation work including installation of kWh meter, release of power supply etc.

- C. The payment for power supply including inspection, services charges, testing and kWh meter shall be made by the contractor, all costs shall be deemed in the contractor rates in the B.O.Q

1.3.6 Derating Factor

The Contractor shall ensure that all electrical equipment operates satisfactorily under Abu Dhabi climatic conditions i.e. 50°C, 100% humidity and at ambient temperatures up to +85°C inside the panels. The equipment, cables and wires shall be derated by the appropriate factors given in the latest issue of I.E.E. regulation, UK or given by manufacturer of the equipment.

1.3.7 Electric Motors

- A. Motors shall comply with the appropriate part of BS 4999 and BS 5000 or equivalents. Motors for use in all categories of potentially explosive atmospheres, as defined in BS 5345 or equivalent, shall have the appropriate BASEEFA/CENELEC or other similar National Testing Organisation Certification. Copies of the Certificates shall be submitted.
- B. Unless otherwise required by the Contract, motors shall be suitable for use on a 400V (+10% and -6%) 3 phase, 50Hz , or where specified -230V, 1 phase, 50 Hz electricity supply system.
- C. Motors shall be of low loss, energy efficient, high efficiency - IE2 as per IEC 60034-30, squirrel cage induction type.
- D. Vibration levels of the installed motor, in the coupled state, shall not exceed the vibration levels laid down in the manufacturer's standard documentation - Vrms .
- E. All motors shall be capable of starting 10 times per hour or maximum available in the market. The stalled motor current shall not exceed 6 times full load current.
- F. Where motors are driving a pump fitted with a flywheel, then mechanical protection shall be provided through a sheer pin arrangement built into the flywheel.
- G. The maximum continuous rating (MCR) of each motor shall be as set out in Table 1-7 and shall be rated and designed to suit the climatic data stated in the general section of this specification. This reserve power requirement shall be added to the