

8.7.8	Transient and surge protection equipment	26
8.7.9	Busbars.....	26
8.7.10	Assembly ventilation.....	27
8.7.11	Circuit breakers (CBs).....	27
8.7.12	Earth leakage circuit breakers	27
8.7.13	Isolating switches.....	28
8.7.14	Motor controllers.....	28
8.7.15	Soft starters	29
8.7.16	Frequency converter motor controllers	34
8.7.17	Motor valve controllers	36
8.7.18	Control panels for local functions	36
8.7.19	Labelling and marking	38
8.8	Instrumentation	38
8.8.1	General	38
8.8.2	Signalling and Protection Circuits	38
8.8.3	Instrumentation	39
8.8.4	Oxygen measurement system.....	39
8.8.5	ORP measurement system.....	39
8.8.6	Ammonia & Nitrate Ion Selective Probe	40
8.8.7	Suspended Solids & Turbidity Measurement System.....	40
8.8.8	pH Measurement System	40
8.8.9	Automatic sampling device.....	41
8.8.10	Ultrasonic Level Measurement	41
8.8.11	Radar Level Measurement	41
8.8.12	Hydrostatic Level Measurement	42
8.8.13	Secondary Clarifier Level Measurement.....	42
8.8.14	Level switches.....	43
8.8.15	Pressure Transmitter.....	43
8.8.16	Flow Measurement.....	43
8.8.17	Temperature transmitter	45
8.8.18	Explosive Atmosphere Detector	45
8.9	Electrical Installations	46
8.9.1	Lighting.....	46
8.9.2	Outdoor lighting equipment	47
8.9.3	Emergency lighting	48
8.9.4	Socket outlet stations.....	48
8.9.5	Uninterruptible power supply (UPS).....	49