

conventions and shall be shown in the Instruction manual.

2.7 The following components shall be provided on the Panel housing fuse alarm system.

1. Power ON Indication.
2. Buzzer Acknowledge push button.
3. 'Test' push button.
4. Common Flashing 'LED' Indication
5. 'LED' Indications.
6. Buzzer.

### 3. COMPONENTS

#### 3.1 Printed circuit Cards and Electronic Components :

3.1.1 The temperature rise above ambient shall not exceed 50° C or 20° C less than the specified by the manufactures whichever is less of any semiconductor component used in circuit.

3.1.2 Glass epoxy, copper clad laminates shall only be used for printed circuit control cards. The thickness of laminates shall not be less than 1.6 mm and the thickness of the copper foil shall not be less than 35 microns (corresponding to a weight of 305 grams per square meter).

3.1.3 Solid state, Industrial grade components shall only be employed for mounting on the printed circuit cards. Plug in connectors shall be of good quality like Euro/CPU type with plated contacts.

3.1.4 The printed circuit cards shall be specifically designed to suit the circuitry used and no extra wires shall be used for interconnection of components on the PC cards. Soldering of components shall be neatly done.

3.1.5 After mounting and soldering of all the components & testing, the printed circuit cards shall be coated with transparent epoxy paint to provide environmental protection.

#### 3.2 Switches & Terminals :

3.2.1 All wiring from Relay racks to Fuse Alarm System cabinet must be terminated on connectors soldered on motherboard PCB mounted inside rear of rack with descriptions.

3.2.2 All current carrying terminals shall be of brass and shall be plated for protection against corrosion.

### 4 Performance Requirement

1.1 The system design shall be such that it should be only supervisory / monitoring circuit. Failure of any component should not interrupt the supply to load by any means. For monitoring the fuses, wires shall be taken from respective fuses. The design shall be such to operate the system with N + 2 wires. In each set Green LED shall glow for healthy Main fuse & healthy Standby fuse. Similarly Red LED shall indicate failure of Main fuse & Standby fuse.

4.2 On the failure of main fuse a spare fuse should come in circuit automatically before dropping of signaling relay. A facility should be provided such that for each failure of fuse

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