
26 24 00 Switchboards, Panelboards, Breakers, Surge Suppression

1. Panelboard Summary

- 1.1. The assignment of panel names is managed using a table recording information related to all panels used throughout a building.
- 1.2. The table is normally created when a building is built and updated when changes occur. The provision of this data is the responsibility of the contractor executing the work.
- 1.3. The completed table shall be included in the operation and maintenance manual.

2. Panelboards – Power Distribution Type

- 2.1. Power distribution panels shall be type CDP utilizing molded case circuit breakers. All panels shall be three phase, four wire, solid neutral, copper bus, 600/347V or 208/120V as required. Interrupting capacity shall be calculated and specified for each case.
- 2.2. Fused panels are only to be used if it can be shown that coordination cannot be achieved or if the interrupting capacity of the available breakers is insufficient for the available fault current.
- 2.3. Distribution panels and breakers must be of Canadian manufacture or with parts readily available in Kingston.
- 2.4. Approved manufacturers are: Schneider (Square D), Siemens, Eaton (Cutler-Hammer).
- 2.5. Coordinate with PPS Engineering to install infrared window on major distribution panel enclosure to allow thermal inspection on bus/cable connections.

3. Panelboards - Breaker Type

- 3.1. Branch circuit panelboards shall use bolt-on breakers and have lockable panel doors.
- 3.2. All panels shall be three phase, four wire, solid neutral, copper bus, 600/347V or 208/120V as required.
- 3.3. Equipment panels for student laboratories shall be provided with a main disconnect.
- 3.4. Panels in general areas shall be sized to accommodate at least 15% additional circuits. Those in lab areas shall be sized to take at least 50% more than the original number of circuits.
- 3.5. Panelboards and breakers must be of Canadian manufacture or with parts readily available in Kingston.

DIVISION 26 00 00

Electrical



3.6. Approved manufacturers are: Schneider (Square D), Siemens, Eaton (Cutler-Hammer).

4. **Molded-Case Circuit Breakers**

4.1. Molded-case breakers shall be bolt-on type.

4.2. Include 10% spare breakers, normally 1P-15A.

5. **Fuses**

5.1. Fuses shall be CSA certified HRC1-J (Class J) time delay type.

6. **Branch Circuit Loading**

6.1. Normally the maximum number of receptacles per 15 amp circuit shall be four.

6.2. Service receptacles shall be fed separate from other receptacles (i.e. corridor receptacles intended for floor polishers will not be on the same circuit as office receptacles).