

UL 845

Motor Control Centers

DETAILS

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- SCOPE

1 Scope

1.1 Products covered

1.1.1 This standard applies to motor control centers to be used in accordance with the U.S. *National Electrical Code*, ANSI/NFPA 70, the *Canadian Electrical Code, Part 1*, CSA C22.1, and the *Mexican Electrical Installations (Utility)*, NOM-001-SEDE.

1.1.2 These requirements cover motor control centers for use on circuits having available short-circuit currents not more than 200 000 A rms symmetrical or 200 000 A dc.

1.1.3 This standard applies to single- and three-phase 50 and 60 Hz and dc motor control centers rated not more than 600 V ac or 1 000 V dc.

1.1.4 Requirements for fire pump controllers are as provided in Annex c, item 11.

1.2 Products not covered

These requirements do not cover switchboards or panelboards intended for the control of electric light and power circuits, nor do they cover an individual unit for this purpose. Such units, however, that consist of manually or automatically operated switches, branch-circuit or service-circuit circuit-breakers, overcurrent-protective devices, or the like may be used within a motor control center.

1.3 Equipment

1.3.1 A motor control center can contain, but is not limited to, any combination of equipment such as the following:

- a) full-voltage reversing or non-reversing combination motor control units;
- b) full-voltage multispeed combination motor control units;
- c) reduced-voltage part-winding, wye-delta or auto-transformer combination motor control units;

- d) solid-state industrial controllers, such as adjustable-speed drives, programmable controllers, protective relays, and the like;
- e) lighting or distribution panelboards;
- f) feeder-tap units;
- g) incoming-line equipment, such as main lugs, fusible switch, isolation switch, or circuit-breaker;
- h) control or lighting transformers;
- i) special equipment assemblies;
- j) combination contactor units.

1.3.2 The foregoing equipment can contain, but is not limited to, such items as pushbuttons, selector switches, indicating lights, control transformers, control circuit fuses, and auxiliary devices incorporated as an integral part of the units.

1.4 Units of measurement

The first values given are SI (metric) units. Alternate measurements shown in parentheses are US customary units, which sometimes are not strict conversions.