Motor Protection Circuit Breaker and Motor Circuit Protector Specifications

Bulletin Number 140M

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Summary of Changes

This publication updates current rating information beginning on page 22.

Additional Resources

These documents contain additional information concerning related products from Rockwell Automation.

| Resource | Description |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Use of Motor Protection Circuit Breakers with Variable- Frequency Drives, publication <u>140M-AT002</u> | Provides application information about using 140M devices with variable-frequency drives. |
| Industrial Automation Wiring and Grounding Guidelines, publication <u>1770-4.1</u> | Provides general guidelines for installing a Rockwell Automation industrial system. |
| Product Certifications website, http://www.ab.com | Provides declarations of conformity, certificates, and other certification details. |

You can view or download publications at <u>http://www.rockwellautomation.com/literature/</u>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.





Notes:



Overview

Motor Protection Circuit Breakers may provide the following protective and control functions.

- Disconnect for Motor Branch Circuit
- Branch-Circuit, Short-Circuit Protection (Magnetic Protection)
- Overload Protection (Thermal Protection)
- Switching (Manual)

In North America, electrical codes require that an individual Motor Branch Circuit be protected by a UL/CSA Listed Fuse, Circuit Breaker or Self-Protected Combination Motor Controller.

140M-C, D, and F Frames

The 140M-C, D, and F frame Motor Protection Circuit Breakers may have two cULus Listings - as Manual, Self-Protected Combination Motor Controllers and as Manual Motor Controllers (with optional approvals for Motor Disconnect and Group Installation). Cat. No. 140M-D8V* can also be applied at the output of a variable frequency drive (VFD) in multi-motor applications.

When UL/CSA listed as Manual, Self-Protected Combination Motor Controllers, the 140M Motor Protection Circuit Breakers provide all of the necessary NEC/CEC requirements for the protection and control of individual Motor Branch Circuits without additional protective devices.

At some higher voltages and currents (particularly at 600V), a few of the 140M-C, D, and F frame devices are only UL/CSA Listed as Manual Motor Controllers (with optional approvals for Motor Disconnect and Group Installation). In NEC/CEC Group Installations, these devices must be applied per the appropriate rules which require the use of an upstream Branch-Circuit, Short-Circuit Protective Device (BCPD).

Standards Compliance and Certifications

| Standards Compliance | Certifications | |
|----------------------------|------------------------------------------------------------------------------|--|
| IEC/EN60947-1,-2,-4-1,-5-1 | CE Marked | |
| IEC/EN60204-1 | CCC | |
| CSA,C22.2 No.14 | CSA Certified | |
| UL508 | cULus Listed (File No. E54612, NLRV(7); E205542, NKJH(7); E197878, DIVQ(7);) | |
| | ATEX | |