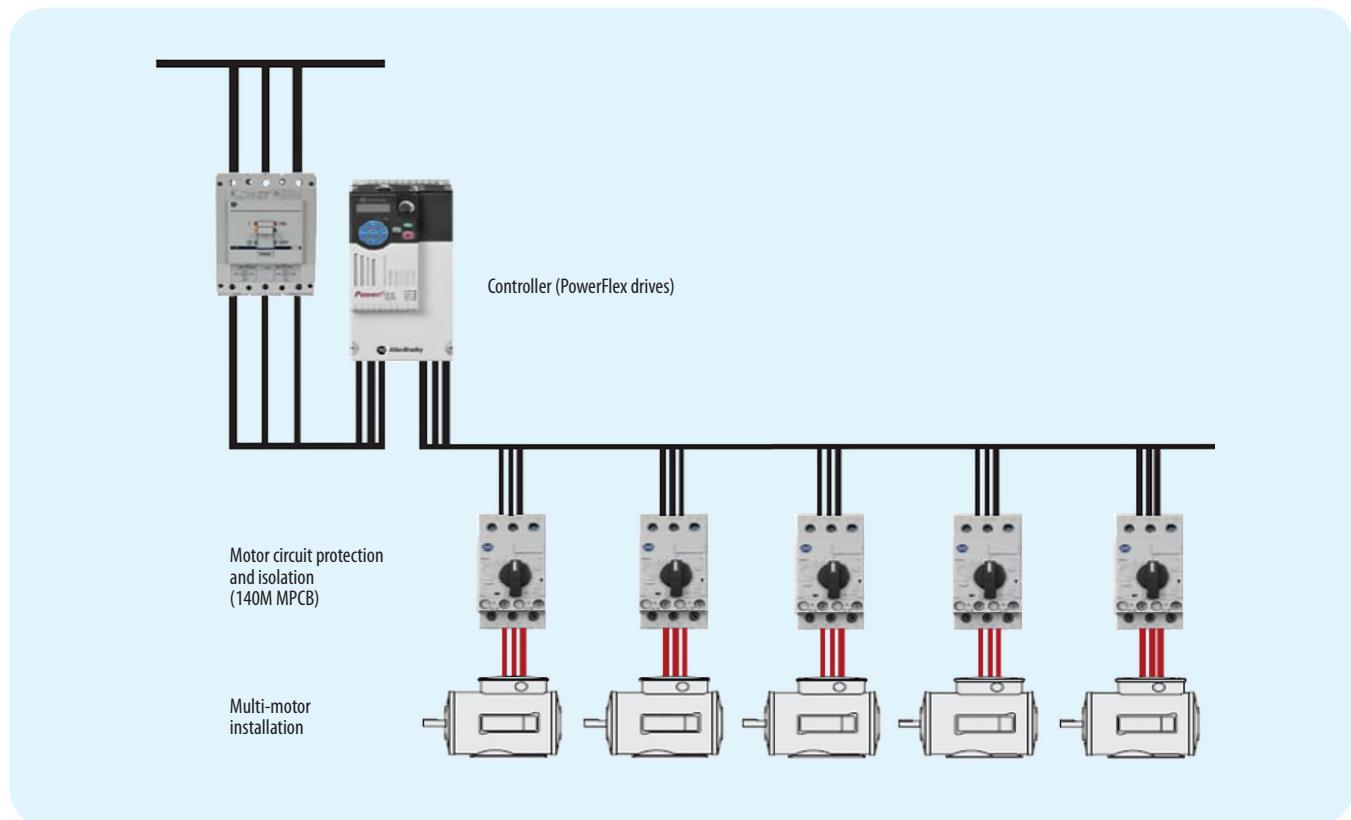


# 140M Motor Protection Circuit Breaker for Multiple Motor Installation with Drives



**Allen-Bradley**



## Features and Benefits

- Individual overload protection in multiple motor applications as required by NEC §430, part III
- PWM frequency  $\leq 4$  kHz
- Variable frequency drive output frequency  $\leq 400$  Hz
- Fixed magnetic trip
- Motor overload protection, Trip Class 10
- Current limiting
- Nominal max rated voltage IEC: 500V; UL: 480V
- Interrupting rating @ 480V & 400V: up to 65 kA

## Overview

Bulletin 140M-D8V motor protection circuit breakers (MPCB) are suitable for application at the output of variable frequency drives in multi-motor installations.

140M-D8V 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)

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## Ratings

| Rated Operational Current ( $I_e$ )<br>[A] | Motor Current Adjustment Range<br>[A] | Nominal Magnetic Trip Current<br>[A] | Max. Short Circuit Current [kA] |                       | Max 3-phase Hp Ratings* |      |      |      | Max. kW, 3-phase – AC-3* |          |      |      | Cat. No.     |
|--|---------------------------------------|--------------------------------------|---------------------------------|-----------------------|-------------------------|------|------|------|--------------------------|----------|------|------|--------------|
|  |                                       |                                      | 400V<br>( $I_{cu}$ )            | 480V<br>(group motor) | 200V                    | 230V | 460V | 575V | 230V                     | 400/415V | 500V | 690V |              |
|  |                                       |                                      | D-Frame                         |                       |                         |      |      |      |                          |          |      |      |              |
| 1.6  | 1.0...1.6                             | 82                                   | 65                              | 65                    | 0.25                    | 0.33 | 1    | -    | 0.25                     | 0.55     | 0.75 | -    | 140M-D8V-B16 |
| 2.5  | 1.6...2.5                             | 82                                   | 65                              | 65                    | 0.5                     | 0.75 | 1.5  | -    | 0.37                     | 0.75     | 1.1  | -    | 140M-D8V-B25 |
| 4  | 2.5...4.0                             | 82                                   | 65                              | 65                    | 1                       | 1    | 3    | -    | 0.75                     | 1.5      | 2.2  | -    | 140M-D8V-B40 |
| 6.3  | 4.0...6.3                             | 82                                   | 65                              | 65                    | 1.5                     | 2    | 5    | -    | 1.5                      | 2.2      | 3    | -    | 140M-D8V-B63 |
| 10   | 6.3...10                              | 130                                  | 65                              | 65                    | 3                       | 3    | 7.5  | -    | 2.2                      | 4        | 6.3  | -    | 140M-D8V-C10 |
| 16   | 10...16                               | 208                                  | 65                              | 65                    | 5                       | 5    | 10   | -    | 4                        | 7.5      | 10   | -    | 140M-D8V-C16 |
| 20   | 14.5...20                             | 260                                  | 65                              | 65                    | 5                       | 7.5  | 15   | -    | 5.5                      | 10       | 11   | -    | 140M-D8V-C20 |
| 25   | 18...25                               | 325                                  | 65                              | 30                    | 7.5                     | 7.5  | 20   | -    | 5.5                      | 11       | 15   | -    | 140M-D8V-C25 |
| 29   | 24...29                               | 406                                  | 50                              | 30                    | 7.5                     | 10   | 20   | -    | 7.5                      | 13       | 18.5 | -    | 140M-D8V-C29 |
| 32   | 27...32                               | 448                                  | 50                              | 30                    | 7.5                     | 10   | 25   | -    | 7.5                      | 15       | 20   | -    | 140M-D8V-C32 |

\* Horsepower/kW ratings shown are for reference. The final selection of the MPCB is determined by actual motor full load current.

## Accessories

For additional accessories suitable for 140M-D, technical data and dimensions please visit [www.ab.com](http://www.ab.com)

|   | Description  | Cat. No.   |
|---|--|--|
|   | <b>Compact Busbar Feeder Terminal</b><br>• For supply of busbars<br>• Meets IEC and UL spacing requirements  | 140M-C-WTEN  |
|  | <b>Compact Busbar Feeder Terminal</b><br>• For supply of busbars<br>• Meets IEC spacing requirements   | 140M-C-WTN   |
|  | <b>Three-phase Compact Busbar 45mm Spacing</b><br>• For 32 A motor protection circuit breakers – 64 A maximum continuous current<br>• 45 mm spacing  | 2 connections<br>3 connections<br>4 connections<br>5 connections |
|  | <b>Three-phase Compact Busbar 54 mm Spacing</b><br>• For 32 A motor protection circuit breakers – 64 A maximum continuous current<br>• 54 mm spacing for use with side-mount auxiliary contact | 2 connections<br>3 connections<br>4 connections<br>5 connections |
|  | <b>Terminal Cover</b><br>• Covers unused busbar terminals<br>• IP2X finger protection  | 140M-C-WSN   |
|  | <b>Spacing Adapter</b><br>• Required for self-protected combination motor controller (Type E) applications   | 140M-C-TE1   |
|  | <b>Lockable Twist Knob</b><br>• For one padlock 4...6 mm (1/4 in.) dia. shackle  | Black<br>Red/Yellow  |
|   |  | 140M-C-KN1<br>140M-C-KRY1  |

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