

Quick motor starter selection

This guide covers selecting components for the most popular versions of the **two- and three-component motor starter**. There are many more main device features, sizes and accessory options available in the technical documentation. Grey shading denotes most popular catalogs.

STEP 1
Choose Circuit Breaker
and Optional Connection Module

STEP 2
Select Contactor
(24-60V AC and DC
Coil Voltage Shown)

| Rated Operational Current | Thermal Trip Adjustment Range | Motor Protection Circuit Breaker | Optional Connecting Module Catalog | Contactor Selection |
|---------------------------|-------------------------------|----------------------------------|------------------------------------|---------------------|
| | | | | |
| 0.16A | 0.1...0.16A | 140MT-C3E-A16 | 140MT-C-PE16 | 100-E09EJ10 |
| 0.25A | 0.16...25A | 140MT-C3E-A25 | 140MT-C-PE16 | 100-E09EJ10 |
| 0.4A | 0.25...0.40A | 140MT-C3E-A40 | 140MT-C-PE16 | 100-E09EJ10 |
| 0.63A | 0.40...0.63A | 140MT-C3E-A63 | 140MT-C-PE16 | 100-E09EJ10 |
| 1A | 0.63...1A | 140MT-C3E-B10 | 140MT-C-PE16 | 100-E09EJ10 |
| 1.6A | 1...1.6A | 140MT-C3E-B16 | 140MT-C-PE16 | 100-E09EJ10 |
| 2.5A | 1.6...2.5A | 140MT-C3E-B25 | 140MT-C-PE16 | 100-E09KJ10 |
| 4A | 2.5...4A | 140MT-C3E-B40 | 140MT-C-PE16 | 100-E09EJ10 |
| 6.3A | 4...6.3A | 140MT-C3E-B63 | 140MT-C-PE16 | 100-E09EJ10 |
| 10A | 6.3...10A | 140MT-C3E-C10 | 140MT-C-PE16 | 100-E12EJ10 |
| 16A | 10...16A | 140MT-C3E-C16 | 140MT-C-PE16 | 100-E16EJ10 |
| 20A | 14.5...20A | 140MT-C3E-C20 | 140MT-C-PE38 | 100-E26EJ00 |
| 25A | 18...25A | 140MT-C3E-C25 | 140MT-C-PE38 | 100-E26EJ00 |
| 29A | 23...29A | 140MT-C3E-C29 | 140MT-C-PE38 | 100-E38EJ00 |
| 32A | 26.5...32A | 140MT-C3E-C32 | 140MT-C-PE38 | 100-E38EJ00 |
| 36A | 30...36A | 140MT-D9E-C36 | 140MT-D-PE38 | 100-E38EJ00 |
| 40A | 34...40A | 140MT-D9E-C40 | - | 100-E40KJ00 |

2-Component Motor Starter Selection

STEP 1
Choose Circuit Breaker

STEP 2
Select Contactor

| Rated Operational Current | Motor Circuit Protector | Contactor Selection |
|---------------------------|-------------------------|---------------------|
| | | |
| 0.16A | 140MT-D9N-A16 | 100-E09EJ10 |
| 0.25A | 140MT-D9N-A25 | 100-E09EJ10 |
| 0.4A | 140MT-D9N-A40 | 100-E09EJ10 |
| 0.63A | 140MT-D9N-A63 | 100-E09EJ10 |
| 1A | 140MT-D9N-B10 | 100-E09EJ10 |
| 1.6A | 140MT-D9N-B16 | 100-E09EJ10 |
| 2.5A | 140MT-D9N-B25 | 100-E09EJ10 |
| 4A | 140MT-D9N-B40 | 100-E09EJ10 |
| 6.3A | 140MT-D9N-B63 | 100-E09EJ10 |
| 10A | 140MT-D9N-C10 | 100-E12EJ10 |
| 16A | 140MT-D9N-C16 | 100-E16EJ10 |
| 20A | 140MT-D9N-C20 | 100-E26EJ00 |
| 25A | 140MT-D9N-C25 | 100-E26EJ00 |
| 29A | 140MT-D9N-C29 | 100-E38EJ00 |
| 32A | 140MT-D9N-C32 | 100-E38EJ00 |
| 36A | 140MT-D9N-C36 | 100-E38EJ00 |
| 40A | 140MT-D9N-C40 | 100-E40KJ00 |

3-Component Motor Starter Selection

STEP 3
Select Motor Overload Relay

| Thermal Trip Adjustment Range | Direct Mount Motor Overload Catalog | Mounts To |
|-------------------------------|-------------------------------------|---------------------------------------|
| | | |
| 0.1...0.5A | 193-1EFADF | 100-E09⊗ to 100-E16⊗ Contactors |
| 0.2...1.0A | 193-1EFBFB | |
| 1.0...5.0A | 193-1EFCF | |
| 3.2...16A | 193-1EFDFF | |
| 5.4...27A | 193-1EFEFF | |
| Thermal Trip Adjustment Range | Direct Mount Motor Overload Catalog | Mounts To |
| | | |
| 1.0...5.0A | 193-1EFCG | 100-E26⊗ to 100-E38⊗ Contactors |
| 5.4...27A | 193-1EFEG | |
| 11...55A | 193-1EFFG | |
| Thermal Trip Adjustment Range | Direct Mount Motor Overload Catalog | Mounts To |
| | | |
| 13.2...66A | 193-1EFQH | 100-E40⊗ to 100-E65⊗ Contactors |

Contactor modifications

Example Contactor String: 100-E09 **EJ** **10**

| Replace "EJ" with* | Coil Voltage |
|--------------------|--------------------------------|
| EJ | Energy Saving 24-60V AC and DC |
| KJ | 24-60V AC and DC |
| KY | 48-130V AC and DC |
| KD | 100-250V AC and DC |
| KN | 250-500V AC and DC |
| E0 | 12-20V DC |
| Replace "10" with* | Auxiliary Contacts |
| 10 | 1 N.O. |
| 01 | 1 N.C. |
| 00 | 0 N.O. 0 N.C. |

*When contactor size is 100-E09 to 100-E16, Select 10 or 01. When contactor is 100-E26 to 100-E96, select 00.

Contactor Catalog String is for contactors with control voltage of 24-60V DC and AC. To modify control voltage or auxiliary configuration reference tables above. More coil voltage and auxiliary options outlined in the technical documentation.

Catalogs of most common accessories

Many more accessories available in Technical Documentation

Contactor Accessory

| Description | Catalog String |
|--|----------------|
| Front Mounting Auxiliary Contact Block. 2 N.O. - 2 N.C. | 100-EFA22 |
| Side Mounting Auxiliary Contact Block. 1 N.O. - 1 N.C. | 100-ESA11 |
| Front Mounting Auxiliary Contact Block. 1 N.O. | 100-EFA10 |
| Front Mounting Auxiliary Contact Block. 4 N.O. | 100-EFA40 |
| Mechanical & Electrical Interlock for 100-E09 to 100-E38 | 100-EMCA02 |

Circuit Breaker Accessory

| Description | Catalog String |
|--|----------------|
| Front Mount Auxiliary Contact. 1 N.O. - 1 N.C. | 140MT-C-AFA11 |
| UL Type E Spacing Adapter | 140MT-C-TE |
| Extension Shaft for use with 140MT-C-DN66 | 140MT-C-DS |
| Feeder Terminal for Compact Busbar | 140MT-C-WTEN |
| Compact Busbar for 2 Connections | 140MT-C-W452 |

Technical documentation

- Bulletin 140MT** – Motor Protection Circuit Breakers Technical Documentation – 140-TD005
https://literature.rockwellautomation.com/idc/groups/literature/documents/td/140-td005_-en-p.pdf
- Bulletin 100** – IEC Contactors Technical Documentation – 100-TD013
https://literature.rockwellautomation.com/idc/groups/literature/documents/td/100-td013_-en-p.pdf
- Bulletin 193-1(E100)** – Motor Protection Overloads Technical Documentation – 193-TD0013D
https://literature.rockwellautomation.com/idc/groups/literature/documents/td/193-td013_-en-p.pdf