



CENTERLINE® 2100 Motor Control Centers

**Inverse Time Circuit Breakers in Combination NEMA
Starter, Soft Starter (SMC) and Variable Frequency AC
Drive Units**



K-Frame Thermal Magnetic Circuit Breakers

Application

Circuit breaker application is valid for the following CENTERLINE 2100 MCC products:

- Bulletin 2107 Full Voltage Reversing Combination Starters
- Bulletin 2113 Full Voltage Non-Reversing Combination Starters
- Bulletin 2123 Two Speed Non-Reversing Combination Starters
- Bulletin 2127 Two Speed Reversing Combination Starters
- Bulletin 2155 Combination Soft Starter Controllers
- Bulletin 2163 Variable Frequency AC Combination Drive Units
- Bulletin 2165 Variable Frequency AC Combination Drives with Manual Isolated Drive Bypass
- Bulletin 2173 Reduced Voltage Autotransformer Combination Starters

The information in this publication applies to Allen-Bradley and Cutler-Hammer inverse time, thermal magnetic or solid-state circuit breakers, when they are used in NEMA (size 1 through size 6) combination starter, soft starter controller, and variable frequency AC drive units.

The information in this publication does not apply to instantaneous trip motor circuit protectors. For combination starter units, soft starter controller units, and variable frequency AC drive units with instantaneous trip motor circuit protectors, refer to Publication 2100-TD001x-EN-P, *Instantaneous Trip Motor Circuit Protectors (MCP) in Combination NEMA Starter, Soft Starter (SMC) and Variable Frequency AC Drive Units*.

Circuit Breaker Operation

Inverse time circuit breakers are designed to trip at 100% to 125% of their continuous current rating. They are also designed to trip, on an inverse-time basis, at overcurrents up to the magnetic or electronic trip current setting of the circuit breaker. The circuit breaker manufacturer sets the continuous current ratings for the thermal magnetic circuit breakers. The continuous current rating of circuit breakers with solid-state trip mechanisms depends on the installed rating plug.

Allen-Bradley I-frame circuit breakers have a non-adjustable, instantaneous magnetic trip mechanism, which is set by the circuit breaker manufacturer. All other frame sizes have an adjustable instantaneous trip mechanism, which can be set to a desired current value. Refer to Tables 1-24 (pages 4-29) for the instantaneous trip ranges and settings.

Circuit Breaker Size and Adjustment

Rockwell Automation has made engineering evaluations for the protective device (circuit breaker) selection, sizing, and setting range based on the protection rules/requirements and motor criteria as stipulated in NEC, CEC, NEMA, UL, and CSA Standards, e.g. motor full load currents (FLC), X/R ratios, locked rotor currents, nominal utilization voltages, etc. Should the motor application have criteria that deviates from those stated in the aforementioned standards, higher FLC and/or motor inrush currents (greater than 1300% of the nominal FLC) may be experienced, e.g. special motors, non off standard NEMA motors, energy efficient motors, Design B energy efficient, Design E motors, IEC N motors, etc.

For frame sizes larger than 150 amps, determine the desired instantaneous trip current, using the National Electrical Code (NEC) or Canadian Electrical Code (CEC), and the instructions provided with the combination starter unit. Refer to the tables on pages 4-29 and choose the trip setting which has the desired trip current value. Make certain that the circuit breaker operating handle is in the **OFF/O** position. Depress each trip setting dial with a screwdriver, and turn clockwise to the determined setting. If there is more than one dial on the circuit breaker, all should be set to the same value.

Push-To-Trip Mechanism

The push-to-trip mechanism provides a manual means for tripping the circuit breaker. Use a small screwdriver to depress the red button on the circuit breaker cover. When the button is pushed, a plunger rotates the trip bar and causes the breaker to trip.

Horsepower and Kilowatt Ratings

The horsepower and kilowatt ratings for combination starter units, soft starter controller units, and variable frequency AC drive units listed in the tables on pages 4 - 29 were determined from full load currents as specified in the NEC/CEC.

Acceptable performance should occur when the motor full load current is within 15% of the value which corresponds to the horsepower or kilowatt ratings and voltages listed in the NEC/CEC. Consult your local Rockwell Automation sales office or distributor if the motor full load current is not within these limits.

ATTENTION

ATTENTION: The horsepower and kilowatt ratings and corresponding trip settings in Table 1 are only valid when the combination starter units are equipped with an Allen-Bradley solid-state or electronic overload relay or a Bulletin 592 eutectic alloy overload relay with correctly sized heater elements.

When correctly selected, this combination of circuit breaker and overload relay protects against short circuit and ground fault damage, and provides coordinated overcurrent protection in the motor branch circuit for continuous-duty rated motors, as defined in the NEC and CEC.

The circuit breaker which has tripped may indicate the interruption of a high fault current. To ensure protection against fire and/or shock hazard, examine the current carrying parts of the combination starter units, soft starter controller units, and variable frequency AC drive units and replace if damaged. (Refer to NEMA Standards Publication Number ICS 2.2, *Maintenance of Motor Controllers After a Fault Condition*, and NEMA Standard Publication Number ICS 2, Parts ICS 2-302.

Table 1 Combination 2107, 2113, 2123, 2127, and 2173 Starter Units - I-Frame Thermal Magnetic Circuit Breakers (Non-Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | NEMA Starter Size | Horsepower Ratings | | | | | Magnetic Trip Range (Amperes) | | Medium Interrupting Capacity Suffix Letter "CB" | High Interrupting Capacity Suffix Letter "CM" | Medium Interrupting Capacity with Current Limiter Suffix Letter "CD" |
|---|-------------------|--------------------|-----------|------------|--------------|--------------|-------------------------------|---------------|---|---|--|
| | | 200V | 230V | 380 - 415V | 460V | 575V | Min. | Max. | | | |
| 15 | 1 | 0.125 - 1.5 | 0.125 - 2 | 0.125 - 3 | 0.125 - 3 | 0.125 - 5 | 500 | 800 | 140U-I3C3-C15 | 140U-I6C3-C15 | 140U-I3C3-C15 140U-I-CLC70 |
| 20 | 1 | 2 | 3 | 5 | 5 | 7.5 | | 1000 | 140U-I3C3-C20 | 140U-I6C3-C20 | 140U-I3C3-C20 140U-I-CLC70 |
| 30 | 1 | 3 | 5 | 7.5 - 10 | 7.5 - 10 | 10 | | | 140U-I3C3-C30 | 140U-I6C3-C30 | 140U-I3C3-C30 140U-I-CLC70 |
| 40 | 1 2 | 5 — | — — | — — | — — | 15 15 | | | 140U-I3C3-C40 | 140U-I6C3-C40 | 140U-I3C3-C40 140U-I-CLC70 |
| 50 | 1 2 | 7.5 — | 7.5 10 | — 15 | — 15 - 20 | — 20 - 25 | 600 | 140U-I3C3-C50 | 140U-I6C3-C50 | 140U-I3C3-C50 140U-I-CLC70 | |
| 60 | 2 3 | 10 — | — — | 20 — | 25 — | 30 — | | 140U-I3C3-C60 | 140U-I6C3-C60 | 140U-I3C3-C60 140U-I-CLC70 | |
| 70 | 2 3 | — — | 15 — | 25 — | — 30 | — 40 | | 140U-I3C3-C70 | 140U-I6C3-C70 | 140U-I3C3-C70 140U-I-CLC70 | |
| 100 | 3 | 15 | — | 30 | 40 | 50 | | 700 | 1400 | 140U-I3C3-D10 | 140U-I6C3-D10 |
| 125 | 3 | 20 | 20 | 40 | 50 | — | 800 | 1600 | 140U-I3C3-D12-S | 140U-I6C3-D12-S | 140U-I3C3-D12-S 140U-I-CLD15 |
| 150 | 3 | 25 | 25 - 30 | 50 | — | — | | | 140U-I3C3-D15-S | 140U-I6C3-D15-S | 140U-I3C3-D15-S 140U-I-CLD15 |

Table 2 Combination 2107, 2113, 2123, 2127 and 2173 Starter Units - JD-Frame and K-Frame Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | NEMA Starter Size | Horsepower Ratings | | | | | Magnetic Trip Setting (Amperes) | | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | High Interrupting Capacity Suffix Letter "CM" |
|---|-------------------|--------------------|---------|------------|-----------|-----------|---------------------------------|------|------|------|------|------|------|------|------|---|---|
| | | 200V | 230V | 380 - 415V | 460V | 575V | 5X | — | — | — | 7.5X | — | — | — | 10X | | |
| 125 | 4 | — | — | — | 60 | 60 - 75 | 625 | 700 | 780 | 860 | 940 | 1020 | 1050 | 1170 | 1250 | 140U-JD3D3-D12 | 140U-JD6D3-D12 |
| 150 | 4 | 30 | 40 | 60 - 75 | 75 | 100 | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | 140U-JD6D3-D15 |
| 175 | 4 5 | 40 — | 50 — | — — | 100 — | — 125 | 875 | 980 | 1090 | 1200 | 1310 | 1420 | 1530 | 1640 | 1750 | 140U-JD3D3-D17 | 140U-JD6D3-D17 |
| 250 | 5 | 50 - 60 | 60 - 75 | 100 - 125 | 125 - 150 | 150 - 200 | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | 140U-JD3D3-D25 | 140U-JD6D3-D25 |
| 300 | 5 | 75 | — | 150 | — | — | 1500 | 1690 | 1875 | 2065 | 2250 | 2440 | 2630 | 2815 | 3000 | 140U-K3D3-D30 | 140U-K6D3-D30 |
| 400 ⁽¹⁾ | 5 | — | 100 | — | 200 | — | 2000 | 2250 | 2500 | 2750 | 3000 | 3250 | 3500 | 3750 | 4000 | 140U-K3D3-D40 | 140U-K6D3-D40 |

(1) For 460V, 125 Hp or 150 Hp specified with circuit breaker suffix "CTH" or "CMH," use the line for 400A, 460V, 200 HP.

Table 3 Combination 2113 and 2173 Starter Units - LD, HLD Solid-State Circuit Breakers (Adjustable Electronic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | NEMA Starter Size | Horsepower Ratings | | | | | Electronic Trip Setting (Amperes) | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|-------------------|--------------------|-----------|------------|-----------|-----------|-----------------------------------|------|------|------|------|------|------|------------------------------|---|------------------------------|---|--|
| | | 200V | 230V | 380 - 415V | 460V | 575V | 2X | 3X | 4X | 5X | 6X | 7X | 8X | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | |
| 500 | 6 | 100 | — | 200 | — | 250 - 300 | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | LDB3600FT33W 6LES500T | 25103-406-01 25107-447-04 | HLDB3600FT33W 6LES500T | 25103-406-02 25107-447-04 | |
| 600 | 6 | 125 - 150 | 125 - 150 | 250 - 300 | 250 - 350 | 350 - 400 | 1200 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | LDB3600FT33W 6LES600T | 25103-406-01 25107-447-05 | HLDB3600FT33W 6LES600T | 24103-406-02 25107-447-05 | |

Table 4 Combination 2113 and 2173 Starter Units - MDL, HMDL Solid-State Circuit Breakers (Adjustable Electronic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | NEMA Starter Size | Horsepower Ratings | | | | | Electronic Trip Setting (Amperes) | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|-------------------|--------------------|------|------------|------|------|-----------------------------------|------|------|------|------|------|------|------------------------------|---|------------------------------|---|--|
| | | 200V | 230V | 380 - 415V | 460V | 575V | 2X | 3X | 4X | 5X | 6X | 7X | 8X | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | |
| 800 | 6 | — | 200 | — | 400 | — | 1600 | 2400 | 3200 | 4000 | 4800 | 5600 | 6400 | MDLB3800T33W 8MES800T | 25103-462-01 25107-456-05 | HMDLB3800T33W 8MES800T | 25103-462-02 25107-456-05 | |

Table 5 Combination 2155G SMC Dialog Plus Soft Starter Units - I-Frame, Thermal Magnetic Circuit Breakers (Non-Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) <small>(The horsepower and kW ratings shown are nominal. The limiting factor in the application and use of the SMC Dialog Plus Soft Starter Unit is the output ampere rating.)</small> | | | | | Magnetic Trip Range (Amperes) | | Medium Interrupting Capacity Suffix Letter "CB" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|---|---------|--------------|----------|-------|-------------------------------|------|---|--|---|--|
| | | 220V | 230V | 380 - 415V | 460V | 575V | Min. | Max. | Allen-Bradley Catalog Number | | Allen-Bradley Catalog Number | |
| 15 | 24 | (0.75 - 1.5) | 1 - 2 | (0.75 - 2.2) | 1 - 3 | 1 - 5 | 500 | 800 | 140U-I3C3-C15 | | 140U-I6C3-C15 | |
| 20 | 24 | (2.2) | 3 | (3.7) | 5 | 7.5 | | 1000 | 140U-I3C3-C20 | | 140U-I6C3-C20 | |
| 30 | 24 | (3.7) | 5 | (5.5 - 7.5) | 7.5 - 10 | 10 | | | 140U-I3C3-C30 | | 140U-I6C3-C30 | |
| 40 | 24 | — | — | — | — | 15 | | | 140U-I3C3-C40 | | 140U-I6C3-C40 | |
| 50 | 24 | (5.5) | 7.5 | (11) | 15 | 20 | 600 | 1200 | 140U-I3C3-C50 | | 140U-I6C3-C50 | |
| | 35 | — | 10 | — | 20 | 25 | | | 140U-I3C3-C60 | | 140U-I6C3-C60 | |
| 60 | 35 | (7.5) | — | (15) | 25 | 30 | | | 140U-I3C3-C70 | | 140U-I6C3-C70 | |
| 70 | 54 | (11) | 15 | (18.5 - 22) | 30 | 40 | 700 | 1400 | 140U-I3C3-D10 | | 140U-I6C3-D10 | |
| 100 | 54 | (15) | — | — | 40 | 50 | | | 140U-I3C3-D12-S | | 140U-I6C3-D12-S | |
| 125 | 54 | — | 20 | — | — | — | 800 | 1600 | 140U-I3C3-D15-S | | 140U-I6C3-D15-S | |
| | 97 | (18.5) | — | (30) | 50 | — | | | 140U-I3C3-D15-S | | 140U-I6C3-D15-S | |
| 150 | 97 | (22) | 25 - 30 | (37) | — | — | | | 140U-I3C3-D15-S | | 140U-I6C3-D15-S | |

Table 6 Combination 2155G SMC Dialog Plus Soft Starter Units - JD-Frame, K-Frame Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) <small>(The horsepower and kW ratings shown are nominal. The limiting factor in the application of the SMC Dialog Plus soft start unit is the output ampere rating.)</small> | | | | | Magnetic Trip Setting (Amperes) | | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|---|------|------------|-----------|---------|---------------------------------|------|------|------|------|------|------|------|------|---|--|---|--|
| | | 220 - 230V | 230V | 380 - 415V | 460V | 575V | 5X | — | — | — | 7.5X | — | — | — | 10X | Allen-Bradley Catalog Number | | Allen-Bradley Catalog Number | |
| 125 | 97 | — | — | — | 60 | 60 - 75 | 625 | 700 | 780 | 860 | 940 | 1020 | 1050 | 1170 | 1250 | 140U-JD3D3-D12 | | 140U-JD6D3-D12 | |
| 150 | 97 | — | — | (45) | 75 | — | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | | 140U-JD6D3-D15 | |
| | 135 | — | 40 | — | — | 100 | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | | 140U-JD6D3-D15 | |
| 175 | 135 | — | 50 | — | 100 | 125 | 875 | 980 | 1090 | 1200 | 1310 | 1420 | 1530 | 1640 | 1750 | 140U-JD3D3-D17 | | 140U-JD6D3-D17 | |
| 250 | 135 | (30-37) | — | (55) | — | — | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | 140U-JD3D3-D25 | | 140U-JD6D3-D25 | |
| | 180 | — | 60 | (75) | 125 - 150 | 150 | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | 140U-JD3D3-D25 | | 140U-JD6D3-D25 | |
| 300 | 180 | (45) | — | (90) | — | — | 1500 | 1690 | 1875 | 2065 | 2250 | 2440 | 2630 | 2815 | 3000 | 140U-K3D3-D30 | | 140U-K6D3-D30 | |
| | 240 | — | 75 | — | — | 200 | 1500 | 1690 | 1875 | 2065 | 2250 | 2440 | 2630 | 2815 | 3000 | 140U-K3D3-D30 | | 140U-K6D3-D30 | |
| 400 | 240 | (55) | — | (110) | 200 | 250 | 2000 | 2250 | 2500 | 2750 | 3000 | 3250 | 3500 | 3750 | 4000 | 140U-K3D3-D40 | | 140U-K6D3-D40 | |
| 400 | 240 | (75) ⁽¹⁾ | — | — | — | — | — | — | — | — | — | — | — | — | — | — | | — | |

(1) Thermal-Magnetic trip breakers are not available for this rating. Refer to publication 2100-TD001x-EN-P for instantaneous trip motor circuit protectors.

Table 7 Combination 2155G SMC Dialog Plus Soft Starter Units - LD, HLD Solid-State Circuit Breakers (Adjustable Electronic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) <small>(The horsepower and kW ratings shown are nominal. The limiting factor in the application and use of the SMC Dialog Plus soft starter unit is the output ampere rating.)</small> | | | | | Electronic Trip Setting (Amperes) | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | Medium Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|---|-----------|-------------|-----------|-----------|-----------------------------------|------|------|------|------|------|------|------------------------------|---|------------------------------|---|--|
| | | 220 - 230V | 230V | 380 - 415V | 460V | 575V | 2X | 3X | 4X | 5X | 6X | 7X | 8X | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | |
| 500 | 360 | (90) | 100 | (132 - 160) | — | 300 | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | LDB3600FT33W 6LES500T | 25103-406-01 25107-447-04 | HLDB3600FT33W 6LES500T | 25103-406-02 25107-447-04 | |
| 600 | 360 | (110) | 125 - 150 | (185) | 250 - 300 | 350 | 1200 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | LDB3600FT33W 6LES600T | 25103-406-01 25107-447-05 | HLDB3600FT33W 6LES600T | 25103-406-02 25107-447-05 | |
| 600 | 500 | — | — | (200) | 350 | 400 - 450 | | | | | | | | | | | | |

Table 8 Combination 2155G SMC Soft Starter Units - MDL, HMDL Solid-State Circuit Breakers (Adjustable Electronic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) (The horsepower and kW ratings shown are nominal. The limiting factor in the application and use of the SMC Dialog Plus soft starter unit is the output ampere rating.) | | | | | Magnetic Trip Setting (Amperes) | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | Medium Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|--|------|-------------|------|------|---------------------------------|------|------|------|------|------|------|------------------------------|---|------------------------------|---|--|
| | | 220 - 230V | 230V | 380 - 415V | 460V | 575V | 2X | 3X | 4X | 5X | 6X | 7X | 8X | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | |
| 800 | 500 | (132 - 150) | 200 | (220 - 250) | 400 | 500 | 1600 | 2400 | 3600 | 4000 | 4800 | 5600 | 6400 | MDLB3800T33W 8MES800T | 25103-462-01 25107-456-05 | HMDLB3800T33W 8MES800T | 25103-462-02 25107-456-05 | |

Table 9 Combination 2155H SMC-3 Soft Starter Units - I-Frame Thermal Magnetic Circuit Breakers (Non-Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Horsepower Ratings (Nominal Kilowatt Rating) (The horsepower and kW ratings shown are nominal. The limiting factor in the application and use of the SMC-3 soft starter unit is the output ampere rating.) | | | | | Magnetic Trip Range (Amperes) | | Medium Interrupting Capacity Suffix Letter "CB" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|---|----------|--------------|-----------|----------|-------------------------------|------|---|--|---|--|
| | | 220 - 230V | 230V | 380 - 415V | 460V | 575V | Min. | Max. | Allen-Bradley Catalog Number | | Allen-Bradley Catalog Number | |
| 15 | 3 | (0.25 - 0.55) | 0.5 | (0.37 - 1.1) | 0.5 - 1.5 | 0.75 - 2 | 500 | 800 | 140U-I3C3-C15 | | 140U-I6C3-C15 | |
| 15 | 9 | (0.75 - 1.5) | 0.75 - 2 | (1.5 - 2.2) | 2 - 3 | 3 - 5 | | | 140U-I3C3-C15 | | 140U-I6C3-C15 | |
| 20 | 9 | (2.2) | — | (3.7) | 5 | 7.5 | | | 140U-I3C3-C20 | | 140U-I6C3-C20 | |
| 20 | 19 | — | 3 | — | — | — | | | 140U-I3C3-C20 | | 140U-I6C3-C20 | |
| 30 | 19 | (3.7) | 5 | (5.5 - 7.5) | 7.5 - 10 | 10 | 600 | 1200 | 140U-I3C3-C30 | | 140U-I6C3-C30 | |
| 40 | 19 | — | — | — | — | 15 | | | 140U-I3C3-C40 | | 140U-I6C3-C40 | |
| 50 | 25 | (5.5) | 7.5 | (11) | 15 | 20 | | | 140U-I3C3-C50 | | 140U-I6C3-C50 | |
| 50 | 30 | — | 10 | — | 20 | 25 | | | 140U-I3C3-C50 | | 140U-I6C3-C50 | |
| 60 | 30 | (7.5) | — | (15) | — | — | 600 | 1200 | 140U-I3C3-C60 | | 140U-I6C3-C60 | |
| 60 | 37 | — | — | — | 25 | 30 | | | 140U-I3C3-C60 | | 140U-I6C3-C60 | |
| 70 | 37 | — | — | (18.5) | — | — | | | 140U-I3C3-C70 | | 140U-I6C3-C70 | |
| 70 | 43 | (11) | 15 | (22) | 30 | 40 | | | 140U-I3C3-C70 | | 140U-I6C3-C70 | |
| 100 | 60 | (15) | — | — | 40 | 50 | 600 | 1200 | 140U-I3C3-D10 | | 140U-I6C3-D10 | |
| 125 | 60 | — | 20 | (30) | — | — | 800 | 1600 | 140U-I3C3-D12-S | | 140U-I6C3-D12-S | |
| 125 | 85 | (18.5) | — | — | 50 | — | 800 | 1600 | 140U-I3C3-D12-S | | 140U-I6C3-D12-S | |
| 150 | 85 | (22) | 25 - 30 | (37) | — | — | 800 | 1600 | 140U-I3C3-D15-S | | 140U-I6C3-D15-S | |

Table 10 Combination 2155H SMC-3 Soft Starter Units - JD-Frame Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) (The horsepower and kW ratings shown here are nominal. The limiting factor in the application and use of the SMC-3 soft starter unit is the output ampere rating.) | | | | | Magnetic Trip Setting (Amperes) | | | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|---|------|------------|------|---------|---------------------------------|------|------|------|------|------|------|------|------|------------------------------|---|------------------------------|---|--|
| | | 220 - 230V | 240V | 380 - 415V | 460V | 575V | 5X | — | — | — | 7.5X | — | — | — | 10X | Allen-Bradley Catalog Number | | Allen-Bradley Catalog Number | | |
| 125 | 85 | — | — | — | 60 | 60 - 75 | 625 | 700 | 780 | 860 | 940 | 1020 | 1050 | 1170 | 1250 | 140U-JD3D3-D12 | | 140U-JD6D3-D12 | | |
| 150 | 85 | — | — | (45) | — | — | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | | 140U-JD6D3-D15 | | |
| | 108 | — | 40 | — | 75 | 100 | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | | 140U-JD6D3-D15 | | |
| 175 | 135 | — | 50 | — | 100 | 125 | 875 | 980 | 1090 | 1200 | 1310 | 1420 | 1530 | 1640 | 1750 | 140U-JD3D3-D17 | | 140U-JD6D3-D17 | | |
| 250 | 108 | (30) | — | (55) | — | — | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | 140U-JD3D3-D25 | | 140U-JD6D3-D25 | | |
| | 135 | (37) | — | — | — | — | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | 140U-JD3D3-D25 | | 140U-JD6D3-D25 | | |

Table 11 Combination 2155J SMC-Flex Soft Starter Units - I-Frame, Thermal Magnetic Circuit Breakers (Non-Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Horsepower Ratings (Nominal Kilowatt Rating) (The horsepower and kW ratings shown are nominal. The limiting factor in the application and use of the SMC-Flex soft starter unit is the output ampere rating.) | | | | | Magnetic Trip Range (Amperes) | | Medium Interrupting Capacity Suffix Letter "CB" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|--|---------|--------------|----------|----------|-------------------------------|---------------|---|---|
| | | 220 - 230V | 230V | 380 - 415V | 460V | 575V | Min. | Max. | | |
| 15 | 5 | (0.25 - 1.1) | 0.5 - 1 | (0.37 - 2.2) | 0.5 - 3 | 0.75 - 3 | 500 | 800 | 140U-I3C3-C15 | 140U-I6C3-C15 |
| | 25 | (1.5) | 1.5 - 2 | — | — | 5 | | | 140U-I3C3-C15 | 140U-I6C3-C15 |
| 20 | 25 | (2.2) | 3 | (3.7) | 5 | 7.5 | 1000 | 140U-I3C3-C20 | 140U-I6C3-C20 | |
| 30 | 25 | (3.7) | 5 | (5.5 - 7.5) | 7.5 - 10 | 10 | | 140U-I3C3-C30 | 140U-I6C3-C30 | |
| 40 | 25 | — | — | — | — | 15 | 600 | 140U-I3C3-C40 | 140U-I6C3-C40 | |
| 50 | 25 | (5.5) | 7.5 | (11) | 15 | 20 | | 140U-I3C3-C50 | 140U-I6C3-C50 | |
| | 43 | — | 10 | — | 20 | 25 | 140U-I3C3-C50 | 140U-I6C3-C50 | | |
| 60 | 43 | (7.5) | — | (15) | 25 | 30 | 1200 | 140U-I3C3-C60 | 146U-I6C3-C60 | |
| 70 | 43 | (11) | 15 | (18.5 - 22) | 30 | 40 | | 140U-I3C3-C70 | 140U-I6C3-C70 | |
| 100 | 60 | (15) | — | — | 40 | 50 | 700 | 1400 | 140U-I3C3-D10 | 140U-I6C3-D10 |
| 125 | 60 | — | 20 | (30) | — | — | 800 | 1600 | 140U-I3C3-D12-S | 140U-I6C3-D12-S |
| | 85 | (18.5) | — | — | 50 | 60 | | | 140U-I3C3-D12-S | 140U-I6C3-D12-S |
| 150 | 85 | (22) | 25 - 30 | (37) | 60 | 75 | | | 140U-I3C3-D15-S | 140U-I6C3-D15-S |

Table 12 Combination 2155J SMC-Flex Soft Starter Units - JD-Frame and K-Frame Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) (The horsepower and kW ratings shown here are nominal. The limiting factor in the application and use of the SMC-Flex soft starter unit is the output ampere rating.) | | | | | Magnetic Trip Setting (Amperes) | | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|--|---------|------------|-----------|-----------|---------------------------------|------|------|------|------|------|------|------|------|---|---|
| | | 220 - 230V | 230V | 380 - 415V | 460V | 575V | 5X | — | — | — | 7.5X | — | — | — | 10X | | |
| 150 | 108 | — | 40 | (45) | 75 | 100 | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | 140U-JD6D3-D15 |
| 175 | 135 | — | 50 | — | 100 | 125 | 875 | 980 | 1090 | 1200 | 1310 | 1420 | 1530 | 1640 | 1750 | 140U-JD3D3-D17 | 140U-JD6D3-D17 |
| 250 | 108 | (30) | — | (55) | — | — | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | 140U-JD3D3-D25 | 140U-JD6D3-D25 |
| | 135 | (37) | — | — | — | — | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | | |
| | 201 | — | 60 - 75 | (75) | 125 - 150 | 150 - 200 | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | | |
| 300 | 201 | (45) | — | (90) | — | — | 1500 | 1690 | 1875 | 2065 | 2250 | 2440 | 2630 | 2815 | 3000 | 140U-K3D3-D30 | 140U-K6D3-D30 |
| 400 | 201 | (55) | — | — | — | — | 2000 | 2250 | 2500 | 2750 | 3000 | 3250 | 3500 | 3750 | 4000 | 140U-K3D3-D40 | 140U-K6D3-D40 |
| | 251 | — | 100 | (110) | 200 | 250 | 2000 | 2250 | 2500 | 2750 | 3000 | 3250 | 3500 | 3750 | 4000 | | |

Table 13 Combination 2155J SMC-Flex Soft Starter Units - LD, HLD Solid-State Circuit Breakers (Adjustable Electronic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Ratings (Nominal Kilowatt Rating) (The horsepower and kW ratings shown here are nominal. The limiting factor in the application and use of the SMC-Flex soft starter unit is the output ampere rating.) | | | | | Electronic Trip Setting (Amperes) | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|---|------|-------------|------|-----------|-----------------------------------|------|------|------|------|------|------|------------------------------|---|------------------------------|---|--|
| | | 200V | 230V | 380 - 415V | 460V | 575V | 2X | 3X | 4X | 5X | 6X | 7X | 8X | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | |
| 500 | 251 | (75) | — | (132) | — | — | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | LDB3600FT33W | 25103-406-01 | HLDB3600FT33W | 25103-406-02 | |
| | 317 | (90) | — | (150 - 160) | — | 300 | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | 6LES500T | 25107-447-04 | 6LES500T | 25107-447-04 | |
| 600 | 317 | — | 125 | — | 250 | — | 1200 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | LDB3600FT33W | 25103-406-01 | HLDB3600FT33W | 25103-406-02 | |
| | 361 | (110) | 150 | (185) | 300 | 350 | 1200 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | 6LES600T | 25107-447-05 | 6LES600T | 25107-447-05 | |
| | 480 | — | — | (200) | 350 | 400 - 450 | 1200 | 1800 | 2400 | 3000 | 3600 | 4200 | 4800 | | | | | |

Table 14 Combination 2155J SMC-Flex Soft Starter Units - MDL, HMDL Solid-State Circuit Breakers (Adjustable Electronic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Ratings (Nominal Kilowatt Rating) <small>(The horsepower and kW ratings shown here are nominal. The limiting factor in the application and use of the SMC-Flex soft starter unit is the output ampere rating.)</small> | | | | | Electronic Trip Setting (Amperes) | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|--|------|-------------|------|------|-----------------------------------|------|------|------|------|------|------|------------------------------|---|------------------------------|---|--|
| | | 200V | 230V | 380 - 415V | 460V | 575V | 2X | 3X | 4X | 5X | 6X | 7X | 8X | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | |
| 800 | 480 | (132) | 200 | (220 - 250) | 400 | 500 | 1600 | 2400 | 3200 | 4000 | 4800 | 5600 | 6400 | MDLB3800T33W 8MES800T | 25103-462-01 25107-456-05 | HMDLB3800T33W 8MES800T | 25103-462-02 25107-456-05 | |

Table 15 Combination 2163P Bulletin 1336 PLUS II Drive Units (220 - 230V and 230V Constant Torque) - I-Frame, Thermal Magnetic Circuit Breakers (Non-Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) <small>(The horsepower and kW ratings shown are nominal. The limiting factor in the application and use of the Bulletin 1336 PLUS II drive unit is the output ampere rating.)</small> | | Magnetic Trip Range (Amperes) | | Medium Interrupting Capacity Suffix Letter "CB" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|--|-------------|-------------------------------|------|---|-----------------|---|--|
| | | 220 - 230V (50 Hz) | 230V (60Hz) | Min. | Max. | Allen-Bradley Catalog Number | | Allen-Bradley Catalog Number | |
| 15 | 2.3 | (0.37) | 0.5 | 500 | 800 | 140U-I3C3-C15 | 140U-I6C3-C15 | | |
| | 3 | (0.55) | 0.75 | | | | | | |
| | 4.5 | (0.75 - 1.1) | 1 | | | | | | |
| | 6 | (1.5) | 1.5 | | | | | | |
| | 8 | — | 2 | | | | | | |
| 20 | 12 | (2.2) | 3 | 600 | 1200 | 140U-I3C3-C20 | 140U-I6C3-C20 | | |
| 30 | 18 | (3.7) | 5 | | | 140U-I3C3-C30 | 140U-I6C3-C30 | | |
| 50 | 27 | (5.5) | 7.5 | | | 140U-I3C3-C50 | 140U-I6C3-C50 | | |
| | 34 | — | 10 | 700 | 1400 | 140U-I3C3-C60 | 140U-I6C3-C60 | | |
| 60 | 27 | (7.5) | — | | | 140U-I3C3-C70 | 140U-I6C3-C70 | | |
| 70 | 48 | (11) | 15 | | | 140U-I3C3-D10 | 140U-I6C3-D10 | | |
| 100 | 65 | (15) | — | 800 | 1600 | 140U-I3C3-D12-S | 140U-I6C3-D12-S | | |
| 125 | 65 | (18.5) | 20 | | | 140U-I3C3-D15-S | 140U-I6C3-D15-S | | |
| 150 | 77 | — | 25 | | | | | | |
| | 80 | — | 30 | | | | | | |

Table 16 Combination 2163P Bulletin 1336 PLUS II Drive Units (380 - 415V and 460V Constant Torque) - I-Frame, Thermal Magnetic Circuit Breakers (Non-Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) (The horsepower and kW ratings shown here are nominal. The limiting factor in the application and use of the Bulletin 1336 PLUS II drive unit is the output ampere rating.) | | Magnetic Trip Range (Amperes) | | Medium Interrupting Capacity Suffix Letter "CB" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|--|------|-------------------------------|------|---|---|
| | | 380 - 415V | 460V | Min. | Max. | | |
| 15 | 1.1 | (0.25) | 0.5 | 500 | 800 | 140U-I3C3-C15 | 140U-I6C3-C15 |
| | 1.6 | (0.37 - 0.55) | 0.75 | | | | |
| | 2.1 | (0.75) | 1 | | | | |
| | 2.8 | (1.1) | 1.5 | | | | |
| | 3.8 | (1.5) | 2 | | | | |
| | 5.3 | (2.2) | 3 | | | | |
| 20 | 8.4 | (3.7) | 5 | | 1000 | 140U-I3C3-C20 | 140U-I6C3-C20 |
| 30 | 13.3 | (5.5) | 7.5 | | 1000 | 140U-I3C3-C30 | 140U-I6C3-C30 |
| | 16.1 | (7.5) | 10 | | | | |
| 50 | 24 | (11) | 15 | 600 | 1200 | 140U-I3C3-C50 | 140U-I6C3-C50 |
| | 27 | — | 20 | | | | |
| 60 | 27 | (15) | — | | | 140U-I3C3-C60 | 140U-I6C3-C60 |
| | 39 | — | 25 | | | | |
| 70 | 39 | (18.5) | — | | | 140U-I3C3-C70 | 140U-I6C3-C70 |
| | 45 | (22) | 30 | | | | |
| 100 | 60 | — | 40 | 700 | 1400 | 140U-I3C3-D10 | 140U-I6C3-D10 |
| 125 | 60 | (30) | — | 800 | 1600 | 140U-I3C3-D12-S | 140U-I6C3-D12-S |
| | 75 | — | 50 | | | | |
| 150 | 75 | (37) | — | | | 140U-I3C3-D15-S | 140U-I6C3-D15-S |

Table 17 Combination 2163P Bulletin 1336 PLUS II Drive Units (220 - 230V, 230V, 380 - 415V and 460V, Constant Torque) - JD-Frame and K-Frame Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) (The horsepower and kW ratings shown here are nominal. The limiting factor in the application and use of the Bulletin 1336 PLUS II drive unit is the output ampere rating.) | | | | Magnetic Trip Setting (Amperes) | | | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|--|------|------------|-----------|---------------------------------|------|------|------|------|------|------|------|------|------------------------------|---|---|
| | | 220 - 230V | 230V | 380 - 415V | 460V | 5X | — | — | — | 7.5X | — | — | — | 10X | Allen-Bradley Catalog Number | | |
| 125 | 77 | — | — | — | 60 | 625 | 700 | 780 | 860 | 940 | 1020 | 1050 | 1170 | 1250 | 140U-JD3D3-D12 | 140U-JD6D3-D12 | |
| 150 | 77 | (22) | — | — | — | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | 140U-JD6D3-D15 | |
| | 85 | — | — | (45) | — | | | | | | | | | | | | |
| | 106 | — | — | — | 75 | | | | | | | | | | | | |
| 175 | 138 | — | — | — | 100 | 875 | 980 | 1090 | 1200 | 1310 | 1420 | 1530 | 1640 | 1750 | 140U-JD3D3-D17 | 140U-JD6D3-D17 | |
| 250 | 106 | — | — | (55) | — | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | 140U-JD3D3-D25 | 140U-JD6D3-D25 | |
| | 138 | — | — | (75) | — | | | | | | | | | | | | |
| | 173 | — | — | — | 125 - 150 | | | | | | | | | | | | |
| 400 | 173 | — | — | (90) | — | 2000 | 2250 | 2500 | 2750 | 3000 | 3250 | 3500 | 3750 | 4000 | 140U-K3D3-D40 | 140U-K6D3-D40 | |

Table 18 Combination 2163P Bulletin 1336 PLUS II Drive Units (460V, Variable Torque) - I-Frame Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (The horsepower ratings shown here are nominal. The limiting factor in the application and use of the Bulletin 1336 PLUS II drive unit is the output ampere rating.) | Magnetic Trip Range (Amperes) | | Medium Interrupting Capacity Suffix Letter "CB" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|---|-------------------------------|---------------|---|---|
| | | | 460V | Min. | | |
| 15 | 1.2 | 0.5 | 500 | 800 | 140U-I3C3-C15 | 140U-I6C3-C15 |
| | 1.7 | 0.75 | | | | |
| | 2.3 | 1 | | | | |
| | 3 | 1.5 | | | | |
| | 4 | 2 | | | | |
| | 6 | 3 | | | | |
| 20 | 9 | 5 | 1000 | 140U-I3C3-C20 | 140U-I6C3-C20 | |
| 30 | 15.4 | 7.5 - 10 | | | | 140U-I3C3-C30 |
| 50 | 22 | 15 | 600 | 1200 | 140U-I3C3-C50 | 140U-I6C3-C50 |
| | 27 | 20 | | | | |
| 60 | 34 | 25 | | | 140U-I3C3-C60 | 140U-I6C3-C60 |
| 70 | 42 | 30 | | | 140U-I3C3-C70 | 140U-I6C3-C70 |
| 100 | 65 | 40 | 700 | 1400 | 140U-I3C3-D10 | 140U-I6C3-D10 |
| 125 | 65 | 50 | 800 | 1600 | 140U-I3C3-D12-S | 140U-I6C3-D12-S |

Table 19 Combination 2163P Bulletin 1336 PLUS II Drive Units (460V, Variable Torque) - JD-Frame and K-Frame Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (The horsepower ratings shown here are nominal. The limiting factor in the application and use of the Bulletin 1336 PLUS II drive unit is the output ampere rating.) | Magnetic Trip Setting (Amperes) | | | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|---|---------------------------------|------|------|------|------|------|------|------|------|------------------------------|---|---|
| | | | 5X | — | — | — | 7.5X | — | — | — | 10X | Allen-Bradley Catalog Number | | |
| 125 | 75 | 60 | 625 | 700 | 780 | 860 | 940 | 1020 | 1050 | 1170 | 1250 | 140U-JD3D3-D12 | 140U-JD6D3-D12 | |
| 150 | 96 | 75 | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | 140U-JD6D3-D15 | |
| 175 | 120 | 100 | 875 | 980 | 1090 | 1200 | 1310 | 1420 | 1530 | 1640 | 1750 | 140U-JD3D3-D17 | 140U-JD6D3-D17 | |
| 250 | 150 | 125 | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | 140U-JD3D3-D25 | 140U-JD6D3-D25 | |
| | 180 | 150 | | | | | | | | | | | | |

Table 20 Combination 2163P Bulletin 1336 PLUS II Drive Units (575V Constant Torque) - I-Frame, Thermal Magnetic Circuit Breakers (Non-Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (The horsepower ratings shown here are nominal. The limiting factor in the application and use of the Bulletin 1336 PLUS II drive unit is the output ampere rating.) | Magnetic Trip Range (Amperes) | | Medium Interrupting Capacity Suffix Letter "CB" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|---|-------------------------------|------|---|---|
| | | | 575V | Min. | | |
| 15 | 2 | 1 | 500 | 800 | 140U-I3C3-C15 | 140U-I6C3-C15 |
| | 4 | 2 | | | | |
| | 6 | 3 | | | | |
| | 8 | 5 | | | | |
| 20 | 10 | 7.5 | 500 | 1000 | 140U-I3C3-C20 | 140U-I6C3-C20 |
| 30 | 12 | 10 | 500 | 1000 | 140U-I3C3-C30 | 140U-I6C3-C30 |
| 40 | 19 | 15 | 500 | 1000 | 140U-I3C3-C40 | 140U-I6C3-C40 |
| 50 | 24 | 20 | 600 | 1200 | 140U-I3C3-C50 | 140U-I6C3-C50 |
| | 30 | 25 | | | | |
| 60 | 35 | 30 | 600 | 1200 | 140U-I3C3-C60 | 140U-I6C3-C60 |
| 70 | 45 | 40 | 600 | 1200 | 140U-I3C3-C70 | 140U-I6C3-C70 |
| 100 | 57 | 50 | 700 | 1400 | 140U-I3C3-D10 | 140U-I6C3-D10 |
| 125 | 62 | 60 | 800 | 1600 | 140U-I3C3-D12-S | 140U-I6C3-D12-S |

Table 21 Combination 2163P Bulletin 1336 PLUS II Drive Units (575V Constant Torque) - JD-Frame Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (The horsepower ratings shown here are nominal. The limiting factor in the application and use of the Bulletin 1336 PLUS II drive unit is the output ampere rating.) | Magnetic Trip Setting (Amperes) | | | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|---|---------------------------------|-----|------|------|------|------|------|------|------|----------------|---|---|
| | | | 575V | 5X | — | — | — | 7.5X | — | — | — | 10X | | |
| 125 | 85 | 75 | 625 | 700 | 780 | 860 | 940 | 1020 | 1050 | 1170 | 1250 | 140U-JD3D3-D12 | 140U-JD6D3-D12 | |
| 150 | 109 | 100 | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | 140U-JD6D3-D15 | |
| 175 | 138 | 125 | 875 | 980 | 1090 | 1200 | 1310 | 1420 | 1530 | 1640 | 1750 | 140U-JD3D3-D17 | 140U-JD6D3-D17 | |

Table 22 Combination 2163Q PowerFlex 70 Drive Units (380 - 415, 460 and 575V) and 2165Q PowerFlex 70 Drive Units with Manual Isolated Drive Bypass (460 and 575V) - I-Frame, Thermal Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) (The horsepower and kW ratings shown here are nominal. The limiting factor in the application and use of the PowerFlex 70 drive unit is the output ampere rating.) | | | Magnetic Trip Setting (Amperes) | | Medium Interrupting Capacity Suffix Letter "CB" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|--|----------|----------|---------------------------------|------|---|---|
| | | 380 - 415V | 460V | 575V | Min. | Max. | Allen-Bradley Catalog Number | Allen-Bradley Catalog Number |
| 15 | 0.9 | — | — | 0.5 | 500 | 800 | 140U-I3C3-C15 | 140U-I6C3-C15 |
| | 1.1 | — | 0.5 | — | | | | |
| | 1.3 | (0.37) | — | — | | | | |
| | 1.7 | — | — | 0.75 - 1 | | | | |
| | 2.1 | (0.55 - 0.75) | 0.75 - 1 | — | | | | |
| | 2.2 | — | — | — | | | | |
| | 2.7 | — | — | 1.5 - 2 | | | | |
| | 3.4 | — | 1.5 - 2 | — | | | | |
| | 3.5 | (1.1 - 1.5) | — | — | | | | |
| | 3.9 | — | — | 3 | | | | |
| | 4.2 | — | — | — | | | | |
| | 5 | (2.2) | 3 | — | | | | |
| | 6.1 | — | — | 5 | | | | |
| 6.8 | — | — | — | | | | | |
| 20 | 8 | — | 5 | — | 500 | 1000 | 140U-I3C3-C20 | 140U-I6C3-C20 |
| | 8.7 | (3.7) | — | — | | | | |
| | 9 | — | — | 7.5 | | | | |
| | 9.6 | — | — | — | | | | |
| 30 | 9.6 | — | — | — | 500 | 1000 | 140U-I3C3-C30 | 140U-I6C3-C30 |
| | 11 | — | 7.5 | 10 | | | | |
| | 11.5 | (5.5) | — | — | | | | |
| | 14 | — | 10 | — | | | | |
| | 15.3 | — | — | — | | | | |
| 15.4 | (7.5) | — | — | | | | | |
| 40 | 15.3 | — | — | — | 500 | 1000 | 140U-I3C3-C40 | 140U-I6C3-C40 |
| | 17 | — | — | 15 | | | | |
| 50 | 22 | (11) | 15 | 20 | 600 | 1200 | 140U-I3C3-C50 | 140U-I6C3-C50 |
| | 27 | — | 20 | 25 | | | | |
| | 28 | — | — | — | | | | |
| 60 | 30 | (15) | — | — | 600 | 1200 | 140U-I3C3-C60 | 140U-I6C3-C60 |
| | 32 | — | — | 30 | | | 140U-I3C3-C60 | 140U-I6C3-C60 |
| | 34 | — | 25 | — | | | 140U-I3C3-C60 | 140U-I6C3-C60 |
| 70 | 37 | (18.5) | — | — | 600 | 1200 | 140U-I3C3-C70 | 140U-I6C3-C70 |
| | 40 | — | 30 | — | | | 140U-I3C3-C70 | 140U-I6C3-C70 |
| | 41 | — | — | 40 | | | 140U-I3C3-C70 | 140U-I6C3-C70 |
| 100 | 43 | (22) | — | — | 700 | 1400 | 140U-I3C3-D10 | 140U-I6C3-D10 |
| | 52 | — | 40 | 50 | | | 140U-I3C3-D10 | 140U-I6C3-D10 |
| 125 | 60 | (30) | — | — | 800 | 1600 | 140U-I3C3-D12-S | 140U-I6C3-D12-S |
| 150 | 72 | (37) | — | — | 800 | 1600 | 140U-I3C3-D15-S | 140U-I6C3-D15-S |

Table 23 Combination 2163R PowerFlex 700 Drive Units (380 - 415V, 460V and 575V) and 2165R PowerFlex Drive Units with Manual Isolated Drive Bypass (460V and 575V) - I-Frame, Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) (The horsepower and kW ratings shown here are nominal. The limiting factor in the application and use of the PowerFlex 700 drive unit is the output ampere rating.) | | | Magnetic Trip Setting (Amperes) | | | Medium Interrupting Capacity Suffix Letter "CB" | High Interrupting Capacity Suffix Letter "CM" |
|---|------------------------------|---|----------|---------|---------------------------------|------|-----------------|---|---|
| | | 380-415V | 460V | 575V | Min. | Max. | | Allen-Bradley Catalog Number | Allen-Bradley Catalog Number |
| 15 | 1.1 | — | 0.5 | — | 500 | 800 | 140U-I3C3-C15 | 140U-I6C3-C15 | |
| | 1.3 | (0.37) | — | — | | | | | |
| | 1.7 | — | — | 1 | | | | | |
| | 2.1 | (0.55 - 0.75) | 0.75 - 1 | — | | | | | |
| | 2.7 | — | — | 1.5 - 2 | | | | | |
| | 3.4 | — | 1.5 - 2 | — | | | | | |
| | 3.5 | (1.1 - 1.5) | — | — | | | | | |
| | 3.9 | — | — | 3 | | | | | |
| | 5 | (2.2) | 3 | — | | | | | |
| 6.1 | — | — | 5 | | | | | | |
| 20 | 8 | — | 5 | — | 500 | 1000 | 140U-I3C3-C20 | 140U-I6C3-C20 | |
| | 8.7 | (3.7) | — | — | | | | | |
| | 9 | — | — | 7.5 | | | | | |
| 30 | 11 | — | 7.5 | 10 | 500 | 1000 | 140U-I3C3-C30 | 140U-I6C3-C30 | |
| | 11.5 | (5.5) | — | — | | | | | |
| | 14 | — | 10 | — | | | | | |
| | 15.4 | (7.5) | — | — | | | | | |
| 40 | 17 | — | — | 15 | 500 | 1000 | 140U-I3C3-C40 | 140U-I6C3-C40 | |
| 50 | 22 | (11) | 15 | 20 | 600 | 1200 | 140U-I3C3-C50 | 140U-I6C3-C50 | |
| | 27 | — | 20 | 25 | | | | | |
| 60 | 30 | (15) | — | — | 600 | 1200 | 140U-I3C3-C60 | 140U-I6C3-C60 | |
| | 32 | — | — | 30 | | | | | |
| | 34 | — | 25 | — | | | | | |
| 70 | 37 | (18.5) | — | — | 600 | 1200 | 140U-I3C3-C70 | 140U-I6C3-C70 | |
| | 40 | — | 30 | — | | | | | |
| | 41 | — | — | 40 | | | | | |
| 100 | 43 | (22) | — | — | 700 | 1400 | 140U-I3C3-D10 | 140U-I6C3-D10 | |
| | 52 | — | 40 | 50 | | | | | |
| 125 | 56 | (30) | — | — | 800 | 1600 | 140U-I3C3-D12-S | 140U-I6C3-D12-S | |
| | 62 | — | — | 60 | | | | | |
| | 65 | — | 50 | — | | | | | |
| 150 | 72 | (37) | — | — | 800 | 1600 | 140U-I3C3-D15-S | 140U-I6C3-D15-S | |

Table 24 Combination 2163R PowerFlex 700 Drive Units (380 - 415V, 460, 575V) and 2165R PowerFlex 700 Drive Units with Manual Isolated Drive Bypass (460 and 575V) - JD-Frame, K-Frame, KHD Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Horsepower Rating (Nominal Kilowatt Rating) (The horsepower and kW ratings shown here are nominal. The limiting factor in the application and use of the LD, MLD PowerFlex 700 drive unit is the output ampere rating.) | | | Magnetic Trip Setting (Amperes) | | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | High Interrupting Capacity Suffix Letter "CM" | | | | | | | | | | | | | |
|---|------------------------------|--|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 380 - 415V | 460V | 575V | 5X | — | — | — | 7.5X | — | — | — | 10X | Allen-Bradley Catalog Number | | Allen-Bradley Catalog Number | | | | | | | | | | | | | |
| 125 | 77 | — | 60 | 75 | 625 | 700 | 780 | 860 | 940 | 1020 | 1050 | 1170 | 1250 | 140U-JD3D3-D12 | | 140U-JD6D3-D12 | | | | | | | | | | | | | |
| 150 | 96 | — | 75 | — | 750 | 840 | 935 | 1030 | 1125 | 1220 | 1315 | 1410 | 1500 | 140U-JD3D3-D15 | | 140U-JD6D3-D15 | | | | | | | | | | | | | |
| | 105 | (45) | — | — | | | | | | | | | | — | — | — | — | — | — | — | — | — | — | — | | | | | |
| 175 | 125 | — | 100 | 100 | 875 | 980 | 1090 | 1200 | 1310 | 1420 | 1530 | 1640 | 1750 | 140U-JD3D3-D17 | | 140U-JD6D3-D17 | | | | | | | | | | | | | |
| 250 | 105 | (55) | — | — | 1250 | 1405 | 1565 | 1720 | 1875 | 2030 | 2185 | 2340 | 2500 | 140U-JD3D3-D25 | | 140U-JD6D3-D25 | | | | | | | | | | | | | |
| | 125 | — | — | 125 | | | | | | | | | | | | | | — | — | — | — | — | — | — | — | — | — | — | |
| | 144 | — | — | 150 | | | | | | | | | | | | | | — | — | — | — | — | — | — | — | — | — | — | — |
| | 156 | — | 125 | — | | | | | | | | | | | | | | — | — | — | — | — | — | — | — | — | — | — | — |
| | 180 | — | 150 | — | | | | | | | | | | | | | | — | — | — | — | — | — | — | — | — | — | — | — |
| 300 | 170 | (75 - 90) | — | — | 1500 | 1690 | 1875 | 2065 | 2250 | 2440 | 2650 | 2815 | 3000 | 140U-K3D3-D30 | | 140U-K6D3-D30 | | | | | | | | | | | | | |
| 400 | 255 | (110) | 200 | — | 2000 | 2250 | 2500 | 2750 | 3000 | 3250 | 3500 | 3750 | 4000 | 140U-K3D3-D40 | | 140U-K6D3-D40 | | | | | | | | | | | | | |

Table 25 Combination 2163R PowerFlex 700 Drive Units (380 - 415V) - LD, HLD Thermal Magnetic Circuit Breakers (Adjustable Magnetic Trip)

| Circuit Breaker Continuous Current Rating (Amperes) | Unit Output Rating (Amperes) | Nominal Kilowatt Rating (The kW rating shown here is nominal. The limiting factor in the application and use of the LD, HLD PowerFlex 700 drive unit is the output ampere rating.) | | | Electronic Trip Setting (Amperes) | | | | | | | | Standard Interrupting Capacity Suffix Letter "CT" | | High Interrupting Capacity Suffix Letter "CM" | |
|---|------------------------------|---|------|------|-----------------------------------|------|------|------|------|------|------|------------------------------|---|------------------------------|---|--|
| | | 380 - 415V | 460V | 575V | 2X | 3X | 4X | 5X | 6X | 7X | 8X | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | Cutler-Hammer Catalog Number | Allen-Bradley Catalog Number | |
| 500 | 255 | (132) | — | — | 1000 | 1500 | 2000 | 2500 | 3000 | 3500 | 4000 | LDB3600FT33W 6LES500T | 25103-406-01 25107-447-04 | HLDB3600FT33W 6LES500T | 25103-406-02 25107-447-04 | |

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